



OWNER'S MANUAL

TTR250

TTR250T(C)

LIT-11626-18-24

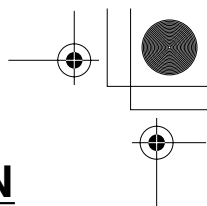
5GF-28199-16

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

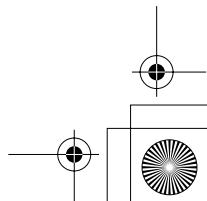
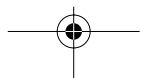
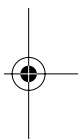


INTRODUCTION

EAU10060

TTR250 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

in this manual by the following notations:

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

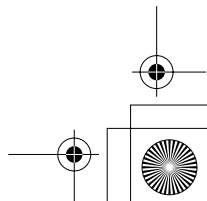
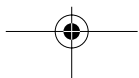
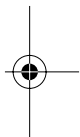
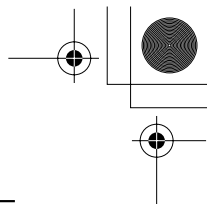
WARNING instructions could result in severe injury or death to the
a bystander or a person inspecting or repairing the machine.

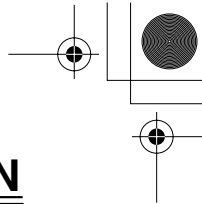
ates special precautions that must be taken to avoid damage to

ey information 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
concerning this manual, please consult your Yamaha dealer.





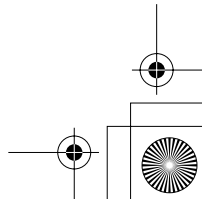
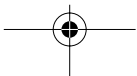
IMPORTANT MANUAL INFORMATION

EWA10010

**READ AND YOUR MOTORCYCLE: RIDING TIPS” BOOKLET CAREFULLY
THIS MACHINE. DO NOT ATTEMPT TO OPERATE THIS MACHINE UNTIL
EDGE 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.**

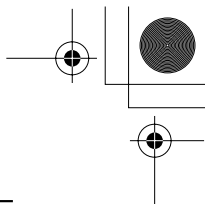
EWA10040

**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**



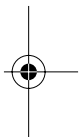
FORMATION

EAU10192

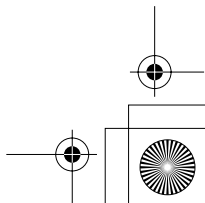
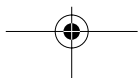


AFFIX DEALER

LABEL HERE



TTR250T
OWNER'S MANUAL
Yamaha Motor Corporation, U.S.A.
1st edition, April 2004
All rights reserved.
Printing or unauthorized use
without the written permission of
Yamaha Motor Corporation, U.S.A.
is expressly prohibited.
Printed in Japan.
P/N LIT-11626-18-24



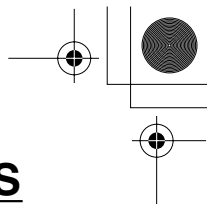
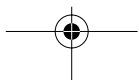
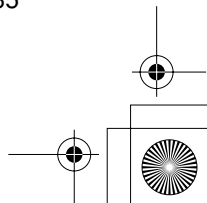
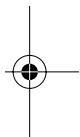
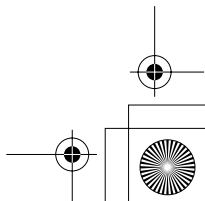
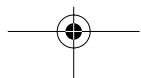
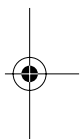
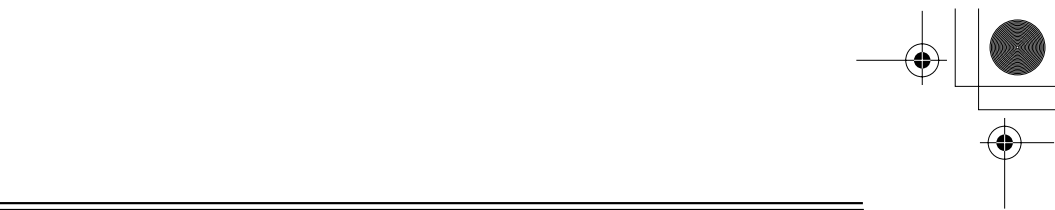


TABLE OF CONTENTS

CAUTION AND IMPORTANT POINTS	5-1
Starting and warming up a cold engine	5-1
Starting a warm engine	5-2
Starting	5-2
Engine break-in	5-3
Starting	5-4
PERIODIC MAINTENANCE AND REPAIR	6-1
Owner's tool kit	6-1
Periodic maintenance chart for the transmission control system	6-2
General maintenance and lubrication chart	6-3
Removing and installing the cowling panels	6-6
Replacing the spark plug	6-7
Replacing the oil and oil filter element	6-8
Replacing the air filter element	6-11
Replacing the spark arrester	6-13
Replacing the carburetor	6-14
Adjusting the throttle cable free play	6-14
Adjusting the valve clearance	6-14
Replacing the wheels	6-15
Accessories and replacement parts	6-17
Adjusting the clutch lever free play	6-18
Adjusting the brake lever free play	6-18
Checking the front and rear brake pads	6-19
Checking the brake fluid level	6-20
Changing the brake fluid	6-21
Drive chain slack	6-21
Lubricating the drive chain	6-23
Checking and lubricating the cables	6-23
Checking and lubricating the throttle grip and cable	6-24
Checking and lubricating the brake and clutch levers	6-24
Lubricating the brake pedal	6-24
Checking and lubricating the sidestand	6-25
Checking the front fork	6-25
Checking the steering	6-26
Checking the wheel bearings	6-26
Battery	6-27
Replacing the fuse	6-28
Replacing the headlight bulb	6-29
Replacing the taillight bulb	6-30
Supporting the machine	6-31
Front wheel	6-31
Rear wheel	6-33
Troubleshooting	6-34
Troubleshooting chart	6-35





SAFETY INFORMATION

ONS.

ding

ways 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.

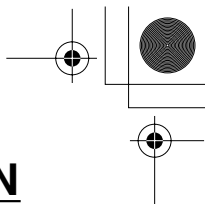
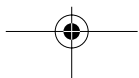
- Ride cautiously in unfamiliar areas. You may encounter hidden obstacles that could cause an accident.
- The posture of the operator is important for proper control. The operator should keep both hands on the handlebar and both feet on the operator footrests during operation to maintain control of the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

Protective apparel

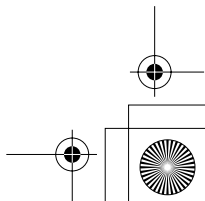
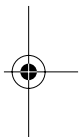
The majority of fatalities from machine accidents are the result of head injuries. The use of a safety helmet is the single most critical factor in the prevention or reduction of head injuries.

- 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 e can adversely affect stability dling if the weight distribution of hine is changed. To avoid the ty of an accident, use extreme when adding cargo or accesso- your machine. Use extra care ling a machine that has added r accessories. Here are some guidelines to follow if loading r adding accessories to your e:

l weight of the operator, acces- and cargo must not exceed the m load limit of 90 kg (198 lb). oading within this weight limit, e following in mind:

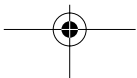
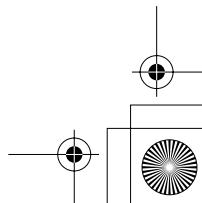
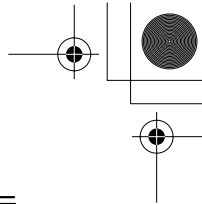
go and accessory weight uld be kept as low and close to machine as possible. Make e to distribute the weight as nly as possible on both sides of machine to minimize imbal- e or instability.

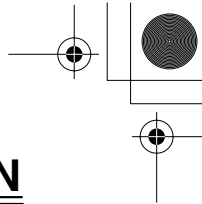
- Shifting weights can create a sud- den imbalance. Make sure that ac- cessories and cargo are securely attached to the machine before riding. Check accessory mounts and cargo restraints frequently.
- Never attach any large or heavy items to the handlebar, front fork, or front fender. These items, in- cluding 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, in- stallation and use of non-Yamaha accessories. Use extreme caution when selecting and installing any ac- cessories.

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

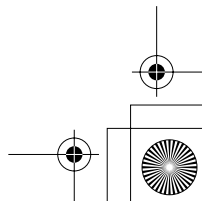
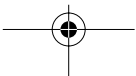
the vicinity of an open flame.

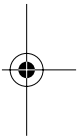
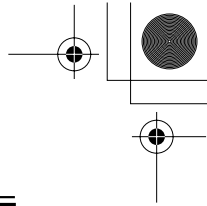
- Never start the engine or let it run for any length of time in a closed area. The exhaust fumes are poisonous and may cause loss of consciousness and death within a short time. Always operate your machine in an area that has adequate ventilation.
- Always turn the engine off before leaving the machine 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

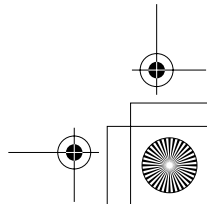
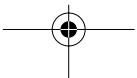


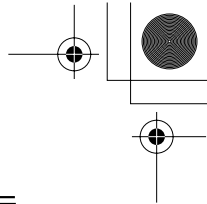
1-3





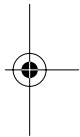
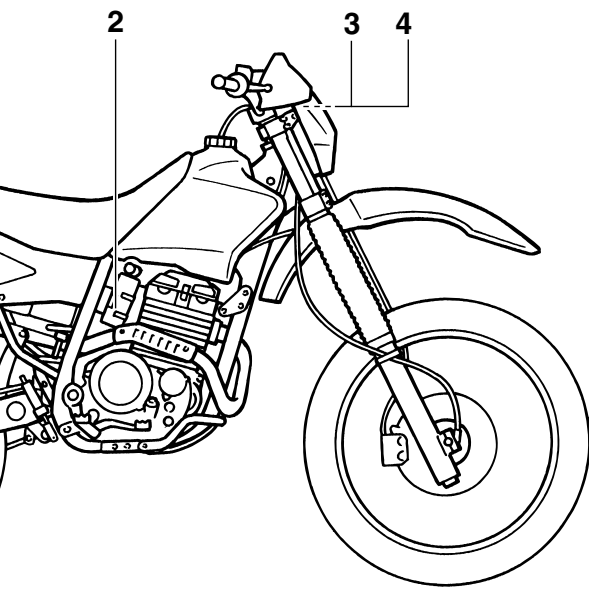
1-4



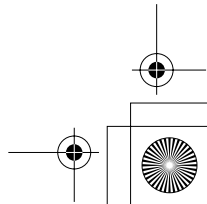
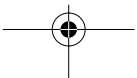


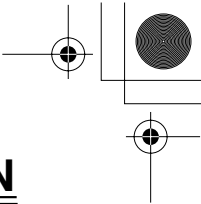
EAU10381

y before operating this vehicle.



1-6





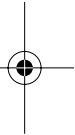
SAFETY INFORMATION

3

 **WARNING**

- **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.**

SPA-2118K-00



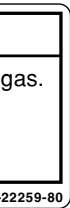
4

TIRE INFORMATION

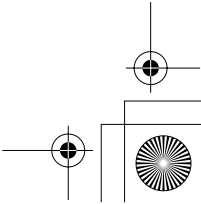
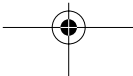
Cold tire normal pressure should be set as follows.

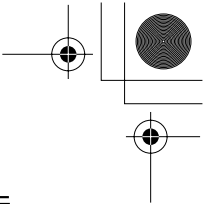
FRONT	: 100 kPa,{1.00 kgf/cm ² }, 15 psi
REAR	: 100 kPa,{1.00 kgf/cm ² }, 15 psi

3RV-21668-A0

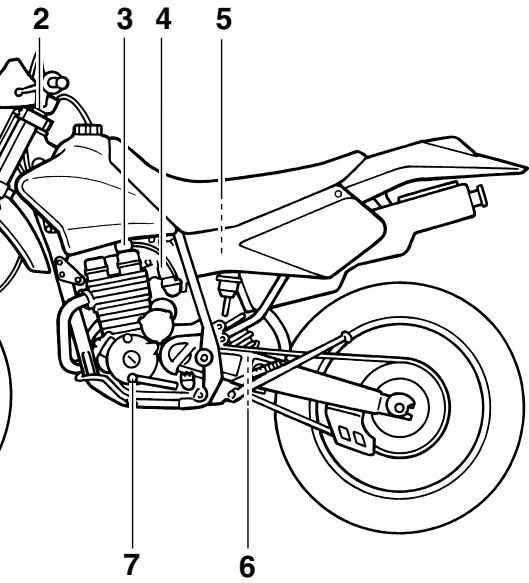


1-7





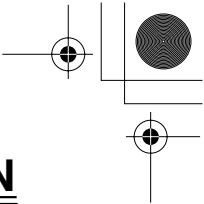
EAU10410



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

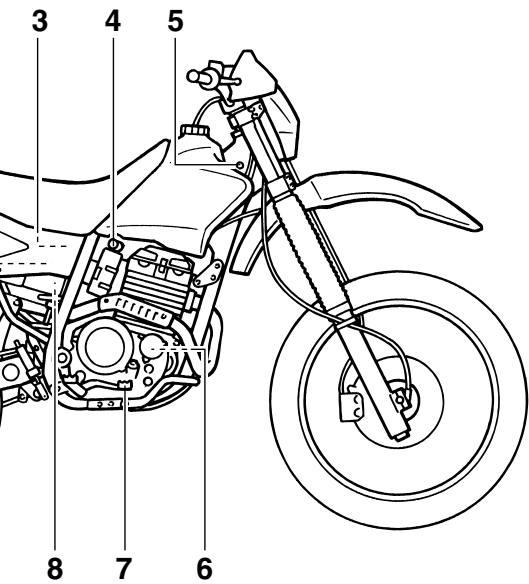
ng dial



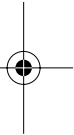


DESCRIPTION

EAU10420



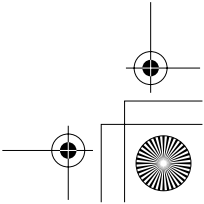
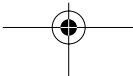
2

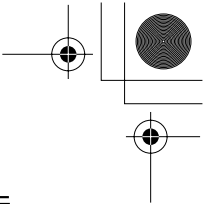


8. Shock absorber assembly spring preload adjusting nut (page 3-9)

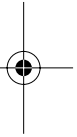
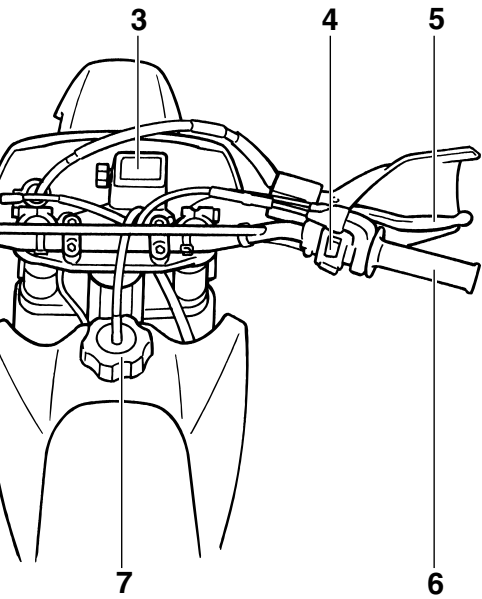
adjusting

2-2

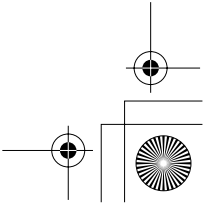
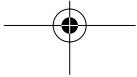




EAU10430



2-3

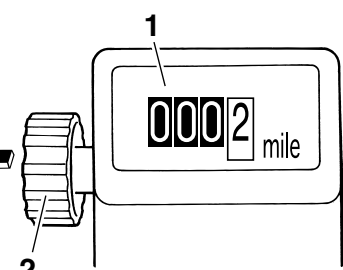


INSTRUMENT AND CONTROL FUNCTIONS

EAU11830

EAU12343

meter

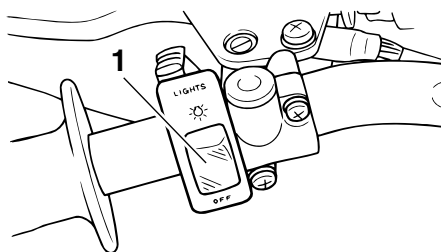


meter
meter reset knob

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.

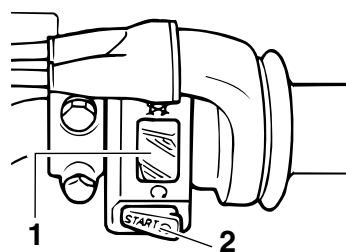
Handlebar switches

Left



1. Light switch "☀"

Right



1. Engine stop switch "☐/☒"

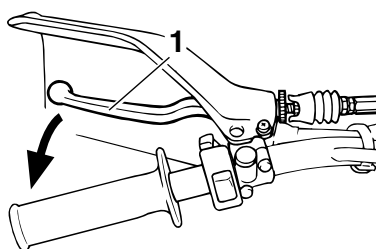
2. Start switch "START"

FUNCTIONS

rior to starting the engine.

EAU31640

Clutch lever

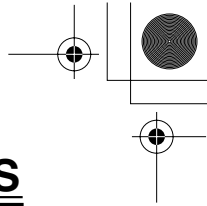


1. Clutch lever

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

The clutch lever is equipped with a clutch switch, which is part of the starting circuit cut-off system. (See page 3-11.)

INSTRUMENT AND CONTROL FUNCTIONS

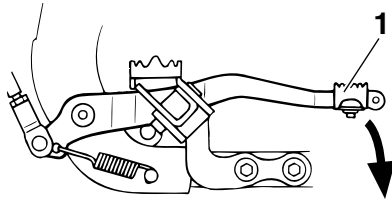
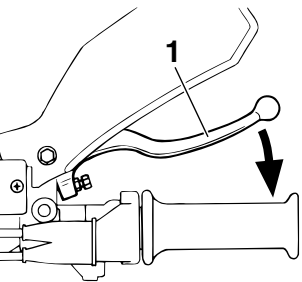


EAU12890

EAU12941

Brake lever

Brake pedal



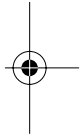
3

Brake lever

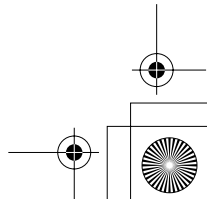
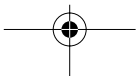
1. Brake pedal

The brake lever is located at the right handlebar grip. To apply the front brake, pull the lever toward the handlebar.

The brake pedal is on the right side of the machine. To apply the rear brake, press down on the brake pedal.



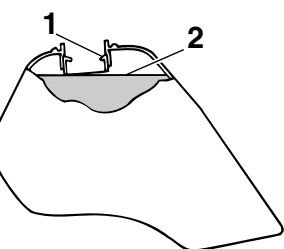
3-3



L FUNCTIONS

EAU13210

fuel may deteriorate painted surfaces or plastic parts.



EAU13300

Recommended fuel:
UNLEADED GASOLINE ONLY
Fuel tank capacity:
9.5 L (2.51 US gal) (2.09 Imp.gal)
Fuel reserve amount:
2.0 L (0.53 US gal) (0.44 Imp.gal)

ECA11400

CAUTION:

Use only unleaded gasoline. The use of leaded gasoline will cause severe damage to internal engine parts, such as the valves and piston rings, as well as to the exhaust system.

Your Yamaha engine has been designed to use regular unleaded gasoline with a pump octane number [(R+M)/2] 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

ank filler tube
level
are that there is sufficient fuel in
. Fill the fuel tank to the bottom
er tube as shown.

EWA10880

WARNING

not overfill the fuel tank, otherwise it may overflow when the fuel warms up and expands. Avoid spilling fuel on the hot engine.

ECA10070

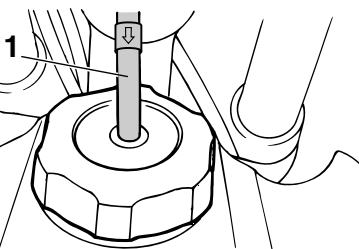
ON:
Immediately wipe off spilled fuel with a clean, dry, soft cloth, since

INSTRUMENT AND CONTROL FUNCTIONS

EAU13410

EAU13560

Fuel tank breather hose



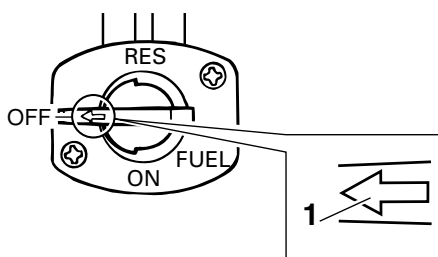
Fuel tank breather hose
Before operating the machine:
Check the fuel tank breather hose
connection.
Check the fuel tank breather hose
for cracks or damage, and replace
if damaged.
Make sure that the end of the fuel
tank breather hose is not blocked,
and clean it if necessary.

Fuel cock

The fuel cock supplies fuel from the
tank to the carburetor while filtering it al-
so.

The fuel cock has three positions:

OFF



1. Arrow mark positioned over "OFF"

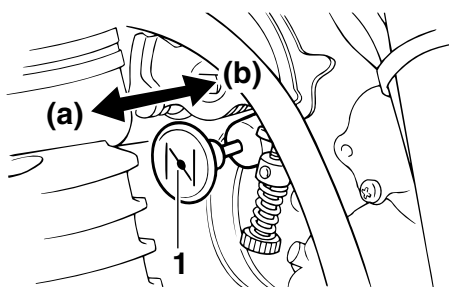
With the lever in this position, fuel will
not flow. Always return the lever to this
position when the engine is not running.

FUNCTIONS

When riding, move the lever to this position. Fill the tank at the first opportunity. Be sure to set the lever back to the original position after refueling!

Starter (choke) knob “”

EAU13600



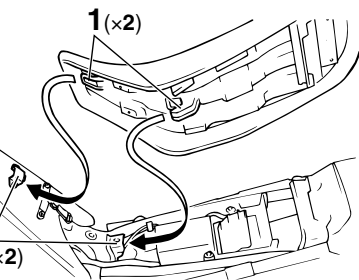
1. Starter (choke) knob “”

Starting a cold engine requires a richer air-fuel mixture, which is supplied by the starter (choke).

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

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

INSTRUMENT AND CONTROL FUNCTIONS



ction
holder

ce the seat in the original posi-
n, and then tighten the bolts.

ure that the seat is properly se-
efore riding.

Adjusting the front fork

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

EAU14671

EWA10190

WARNING

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

3

Spring rate

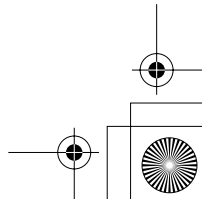
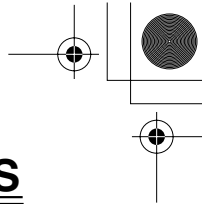
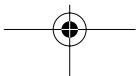
The total spring rate is adjusted by changing the air pressure as follows.

1. Lift the front wheel off the ground according to the procedure on page 6-31.

NOTE:

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

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



FUNCTIONS

g rate:

imum (soft):

air pressure = 0 kPa (0 psi)

0 kgf/cm²)

ndard:

air pressure = 0 kPa (0 psi)

0 kgf/cm²)

imum (hard):

air pressure = 40 kPa (5.8 psi)

0.4 kgf/cm²)

ECA10090

ON:

**exceed the maximum air pres-
therwise the front fork oil
ay become damaged.**

EWA10180

ARNING

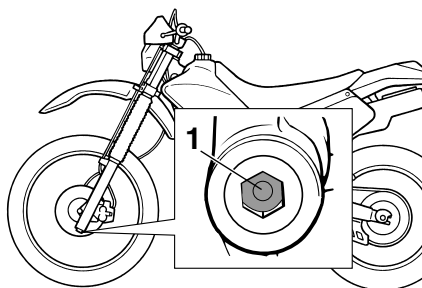
**adjust both fork legs equal-
rwise poor handling and loss
lity may result.**

ecurely install the air valve caps.

g force

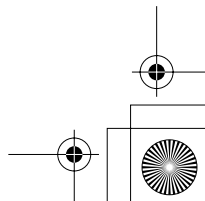
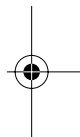
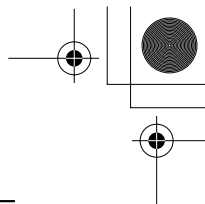
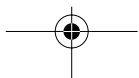
move the rubber cap from each

leg.



1. Rubber cap

2. 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).



INSTRUMENT AND CONTROL FUNCTIONS

ECA10960

CAUTION: _____
e to install the rubber caps to
t dust, etc. from entering the
gs.

h the total number of clicks of a
g force adjusting mechanism
t exactly match the above spec-
s due to small differences in
ion, the actual number of clicks
represents the entire adjusting
To obtain a precise adjustment,
be advisable to check the num-
clicks of each damping force ad-
mechanism and to modify the
ations as necessary.

EAU15070

Adjusting the shock absorber assembly

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

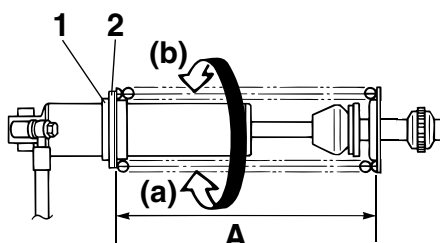
ECA10100

CAUTION: _____

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

3

Spring preload



- 1. Locknut
- 2. Adjusting nut

- 1. Loosen the locknut.

FUNCTIONS

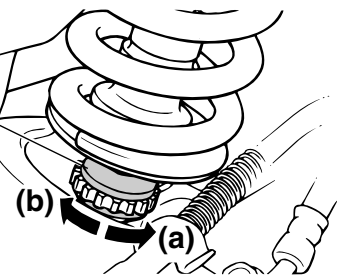
Tightening torque:

Locknut:
10 Nm (7.0 m·kgf, 51 ft·lbf)

ECA11240

ON:
tighten the locknut against
adjusting nut, and then tighten
locknut to the specified torque.

Rebound damping force



Rebound damping force adjusting dial

To increase the rebound damping force and thereby harden the rebound damping, turn the adjusting dial in direction (b). To decrease the rebound damping and thereby soften the rebound damping, turn the adjusting dial in direction (a).

direction (b).

Rebound damping setting:

Minimum (soft):

16 clicks in direction (b)*

Standard:

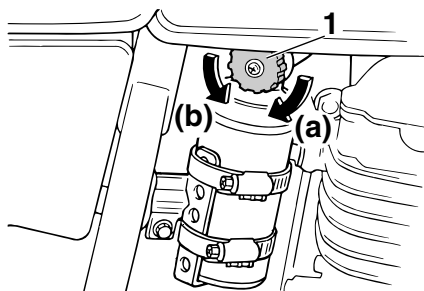
8 clicks in direction (b)*

Maximum (hard):

1 click in direction (b)*

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

Compression damping force



1. Compression damping force adjusting knob

To increase the compression damping force and thereby harden the compression damping, turn the adjusting knob in direction (b). To decrease the compression damping force and thereby soften the compression damping, turn the adjusting knob in direction (a).

INSTRUMENT AND CONTROL FUNCTIONS

ized nitrogen gas. For prop-
dling, read and understand
llowing information before
g the shock absorber. The
acturer cannot be held re-
ble for property damage or
al injury that may result from
er handling.

not tamper with or attempt to
en the gas cylinder.

not subject the shock ab-
rber to an open flame or other
h heat sources, otherwise it
y explode due to excessive
s pressure.

not deform or damage the
s cylinder in any way, as this
l result in poor damping per-
mance.

ways have a Yamaha dealer
rvice the shock absorber.

Starting circuit cut-off system

The starting circuit cut-off system (com-
prising the clutch switch and the neutral
switch) prevents starting when the
transmission is in gear and the clutch
lever is not pulled.

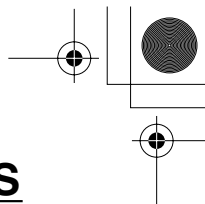
Periodically check the operation of the
starting circuit cut-off system according
to the following procedure.

WARNING

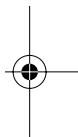
If a malfunction is noted, have a
Yamaha dealer check the system be-
fore riding.

EAU15390

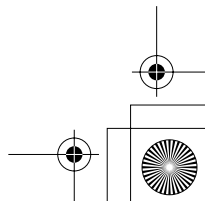
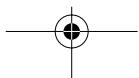
EWA10250



3



3-11



L FUNCTIONS

to “○”.
n.

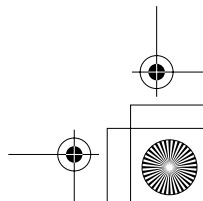
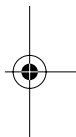
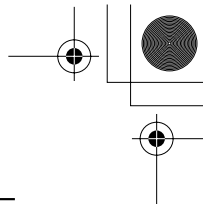
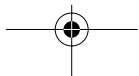
NOTE: _____
This check is most reliable if performed with
a warmed-up engine.

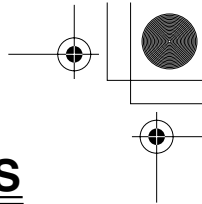
The neutral switch may be defective.
The motorcycle should not be ridden until
checked by a Yamaha dealer.

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

den.

3-12





PRE-OPERATION CHECKS

EAU15591

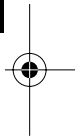
bility. Vital components can start to deteriorate quickly and unexpectedly, as a result of exposure to the elements). Any damage, fluid leakage or loss of oil. Therefore, it is very important, in addition to a thorough visual inspection.

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

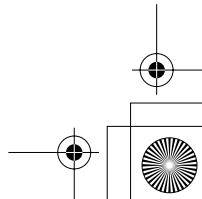
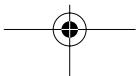
EWA11150

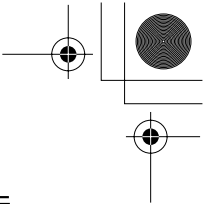
not working properly, have it inspected and repaired before operating

4



4-1

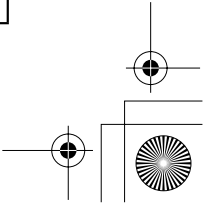
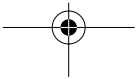


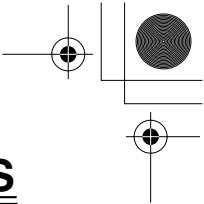


EAU15602

CHECKS	PAGE
el tank.	3-4
akage.	
gine.	6-8
commended oil to specified level.	
leakage.	
re Yamaha dealer bleed hydraulic system.	6-18, 6-19, 6-20
y.	
r wear.	
y.	
eservoir.	
commended brake fluid to specified level.	
tem for leakage.	
re Yamaha dealer bleed hydraulic system.	6-19, 6-20
r wear.	
y.	
eservoir.	
commended brake fluid to specified level.	
tem for leakage.	
ecessary.	6-18
y.	
ation is smooth.	6-14, 6-24
y.	
amaha dealer adjust cable free play and lubricate cable	

4-2

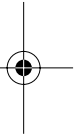




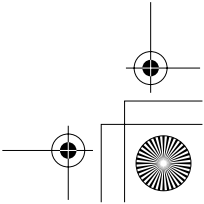
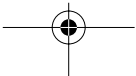
PRE-OPERATION CHECKS

CHECKS	PAGE
ration is smooth. ary.	6-23
on. ary.	6-21, 6-23
and tread depth.	6-15, 6-17
ration is smooth. oting points if necessary.	6-24
ration is smooth. ting points if necessary.	6-24
ration is smooth. ecessary.	6-25
uts, bolts and screws are properly tightened.	—
y.	—
y.	3-1

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.

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.

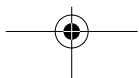
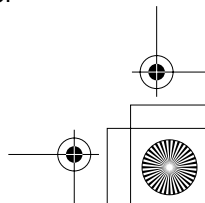
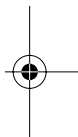
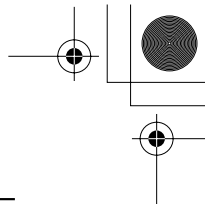
CAUTION:

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 normally to the throttle with the starter



OPERATION AND IMPORTANT RIDING POINTS

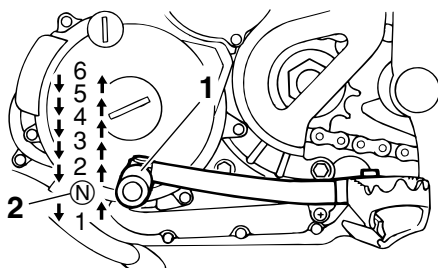
EAU16640

EAU16671

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.

IMPORTANT RIDING POINTS

EAU16850

Engine 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 10 hours of operation. The various stresses will break in the engine wear and polish the surfaces to the correct operating condition. During this period, prolonged full-throttle operation or any operation that might result in engine overheating must be avoided. However, momentary full-throttle operation (i.e., two to three seconds maximum) does not harm the engine. Full-throttle acceleration should be followed with a substantial rest period for the engine. To allow the engine to cool down from the temporary build-up of heat, cruise at a lower engine speed.

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.

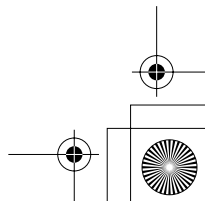
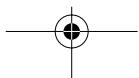
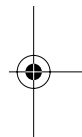
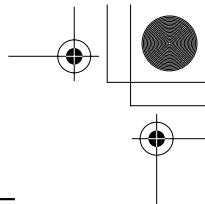
After break-in

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

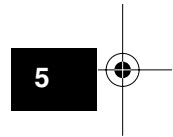
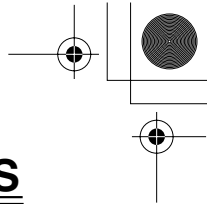
ECA10270

CAUTION:

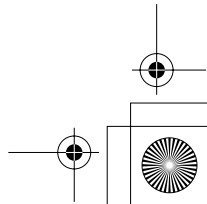
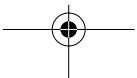
If any engine trouble should occur during the engine break-in period, immediately have a Yamaha dealer check the vehicle.



URATION AND IMPORTANT RIDING POINTS



5-4



END MINOR REPAIR

EAU17310

's tool kit

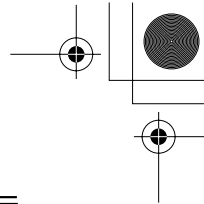
vice information included in this
and the tools provided in the
tool kit are intended to assist
the performance of preventive
ance and minor repairs. How-
ditional tools such as a torque
may be necessary to perform
maintenance work correctly.

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

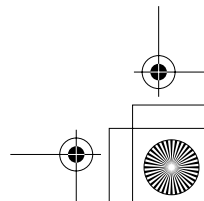
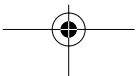
EWA10340

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

EAU35230

Transmission control system

at the maintenance intervals starting from 600 mi (1000 km) or 6 months.
ormed by a Yamaha dealer as they require special tools, data and technical

CHECKS AND MAINTENANCE JOBS	INITIAL	EVERY	
	100 mi (150 km) or 1 month	600 mi (1000 km) or 6 months	1200 mi (2000 km) or 12 months
ises for cracks or damage. ecessary.		√	√
on. d clean.		√	√
just valve clearance when engine is cold.			√
lvent. ecessary.		√	√
tion hose for cracks or damage and drain any		√	√
ecessary.			
idling speed and starter operation. ssary.	√	√	√
kage. ecessary. et(s) if necessary.		√	√
n engine before draining). m engine before draining.)	√	√	√
	√	√	√

6-2

6

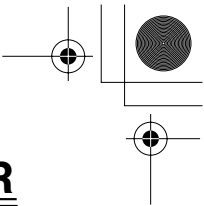
ND MINOR REPAIR

EAU35340

Chart

KS AND MAINTENANCE JOBS	INITIAL	EVERY	
	100 mi (150 km) or 1 month	600 mi (1000 km) or 6 months	1200 mi (2000 km) or 12 months
n. ce cable.	✓	✓	✓
n, fluid level, and for fluid leakage. pads if necessary.	✓	✓	✓
n, fluid level, and for fluid leakage. pads if necessary.	✓	✓	✓
ks or damage.			✓
	Every 4 years		
spoke tightness and for damage. s if necessary.	✓	✓	✓
pth and for damage. essary. sure. ssary.		✓	✓
s for smooth operation. essary.		✓	✓
assemblies for looseness. ack with lithium-soap-based grease.		✓	✓
ack/alignment and condition. icate chain with a special O-ring chain lubricant	Every ride		
assemblies for looseness. ack with lithium-soap-based grease every 1200 r 12 months (whichever comes first).	✓		✓

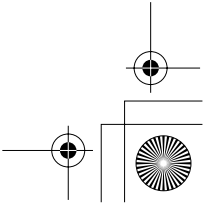
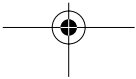
6-3



PERIODIC MAINTENANCE AND MINOR REPAIR

CHECKS AND MAINTENANCE JOBS	INITIAL	EVERY	
	100 mi (150 km) or 1 month	600 mi (1000 km) or 6 months	1200 mi (2000 km) or 12 months
Check and adjust valve timing fitting and fasteners. If necessary.	✓	✓	✓
Check and adjust valve timing fitting and fasteners. If necessary.		✓	✓
Check and adjust valve timing fitting and fasteners. If necessary.		✓	✓
Check and adjust valve timing fitting and fasteners. If necessary.	✓		✓
Check and adjust valve timing fitting and fasteners. If necessary.			✓
Check and adjust valve timing fitting and fasteners. If necessary.		✓	✓
Check and adjust valve timing fitting and fasteners. If necessary.			✓
Check and adjust valve timing fitting and fasteners. If necessary.	✓	✓	✓
Check and adjust valve timing fitting and fasteners. If necessary.	✓	✓	✓

6

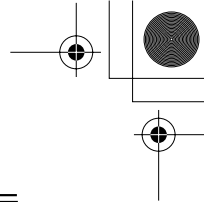


END MINOR REPAIR

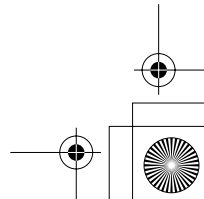
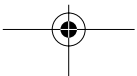
EAU18670

you are riding in unusually wet or dusty areas.

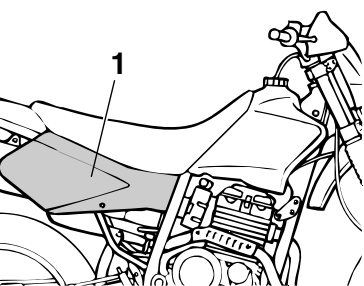
the brake fluid level.
ponents of the brake master cylinders and calipers, and change the brake
and if cracked or damaged.



6-5



PERIODIC MAINTENANCE AND MINOR REPAIR



To install the cowling

Place the cowling in the original position, and then install the screws.

EAU19292

Panels A and B

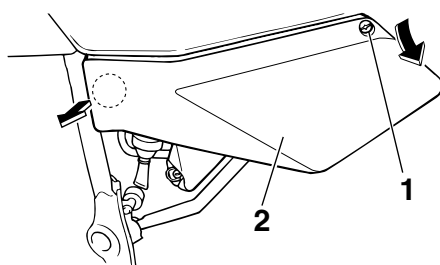
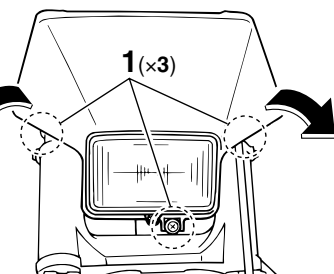
To remove one of the panels

Remove the screw, and then pull the panel off as shown.

B

EAU18850

g A
To remove the cowling, remove the cowling screws, and then pull the cowling off as shown.



- 1. Screw
- 2. Panel A

6

END MINOR REPAIR

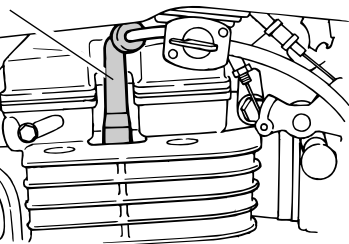
EAU19602

Checking the spark plug

A spark plug is an important engine component, which is easy to check. Heat and deposits will cause any spark plug to slowly erode, the spark plug could be removed and checked in accordance with the periodic maintenance and lubrication chart. In addition, the condition of the spark plug can reveal the condition of the engine.

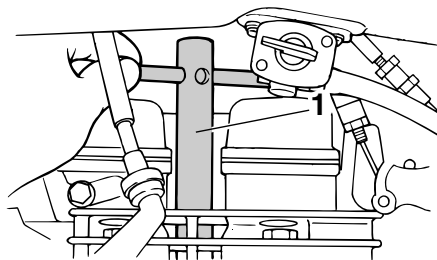
Remove the spark plug

To remove the spark plug cap.



spark plug cap

To remove the spark plug as shown, use the spark plug wrench included in the owner's tool kit.



1. Spark plug wrench

To check the spark plug

1. 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 ridden normally).

NOTE:

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 Yamaha dealer check the vehicle.

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

PERIODIC MAINTENANCE AND MINOR REPAIR

Tighten the spark plug with the spark plug wrench, and then tighten it to the specified torque.

Tightening torque:

Spark plug:
12.5 Nm (1.25 m·kgf, 9.0 ft·lbf)

If a torque wrench is not available when tightening a spark plug, a good estimate of the correct torque is 1/4–1/2 turn tighter than finger tight. However, the spark plug should be tightened to the specified torque as soon as possible.

Tighten the spark plug cap.

Engine oil and oil filter element

EAU19784

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

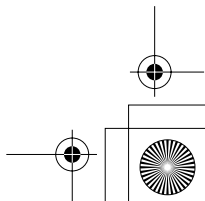
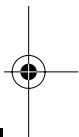
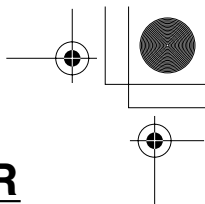
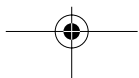
To check the engine oil level

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

NOTE:

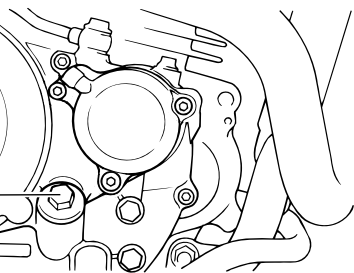
Make sure that the vehicle is positioned straight up when checking the oil level. A slight tilt to the side can result in a false reading.

2. Start the engine, warm it up for several minutes, and then turn it off.
3. 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.

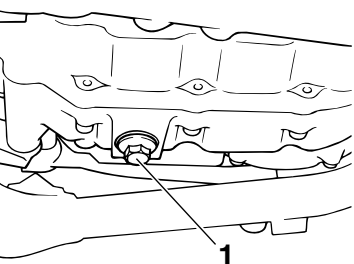


END MINOR REPAIR

Remove the engine oil filler bolt and drain bolt to drain the oil from the crankcase.



Oil filler bolt

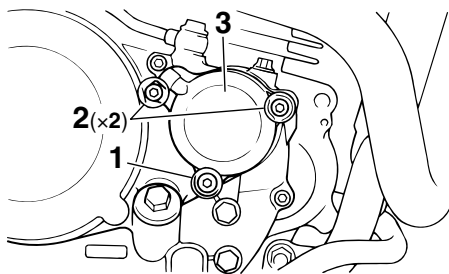


Oil drain bolt

Check washer for damage and re-

place them if necessary.

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



1. Oil filter element drain bolt
2. Bolt
3. Oil filter element cover

NOTE:

Skip steps 5–9 if the oil filter element is not being cleaned.

5. Remove the oil filter element cover by removing the bolts.
6. Remove the oil filter element and O-rings.

PERIODIC MAINTENANCE AND MINOR REPAIR

Tightening torque:

Oil filter element cover bolt:
10 Nm (1.0 m·kgf, 7.2 ft·lbf)

Make sure that the O-rings are properly

Install the engine oil drain bolt, and then tighten it to the specified torque.

Install the engine oil filter element drain bolt, and then tighten it to the specified torque.

Tightening torques:

Engine oil drain bolt:
20 Nm (2.0 m·kgf, 14.5 ft·lbf)
Oil filter element drain bolt:
10 Nm (1.0 m·kgf, 7.2 ft·lbf)

Add the specified amount of the recommended engine oil, and then install and tighten the oil filler cap.

Recommended oil:
See page 8-1.

Oil quantity:

Without oil filter element replacement:

1.10 L (1.16 US qt) (0.97 Imp.qt)

With oil filter element replacement:

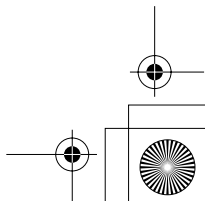
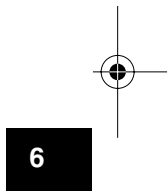
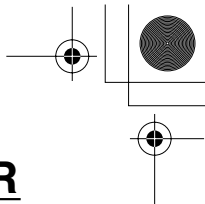
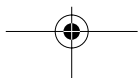
1.20 L (1.27 US qt) (1.06 Imp.qt)

ECA11620

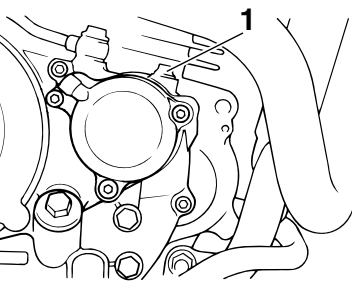
CAUTION:

- In order to prevent clutch slippage (since the engine oil also lubricates the clutch), do not mix any chemical additives. Do not use oils with a diesel specification of “CD” or oils of a higher quality than specified. In addition, do not use oils labeled “ENERGY CONSERVING II” or higher.
- Make sure that no foreign material enters the crankcase.

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



END MINOR REPAIR



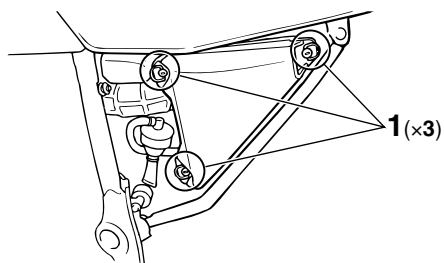
bolt

enning torque:
ed bolt:
Nm (0.7 m·kgf, 5.0 ft·lbf)

Cleaning the air filter element

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

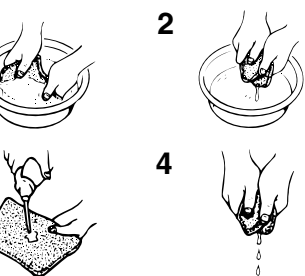
1. Remove panel A. (See page 6-6.)
2. Remove the air filter case cover by removing the holding clips.



1. Holding clip
3. Pull the air filter element out of the air filter case.

PERIODIC MAINTENANCE AND MINOR REPAIR

ECA10480



Apply oil of the recommended type to the entire surface of the sponge material, and then squeeze the excess oil out.

Sponge material should be wet but not dripping.

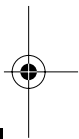
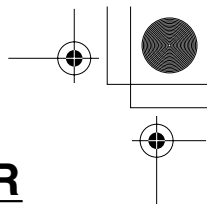
Recommended oil:
Yamaha foam air filter oil or other
quality air filter oil

Install the sponge material onto the frame, insert the air filter element into the air filter case, and then install the air filter case cover by installing the holding clips.

CAUTION:

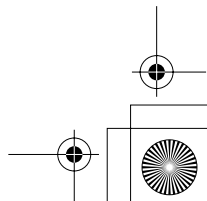
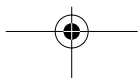
- Make sure that the air filter element is properly seated in the air filter case.
- The engine should never be operated without the air filter element installed, otherwise the piston(s) and/or cylinder(s) may become excessively worn.

8. Install the panel.

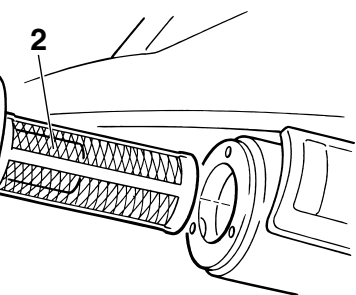


6

6-12



END MINOR REPAIR

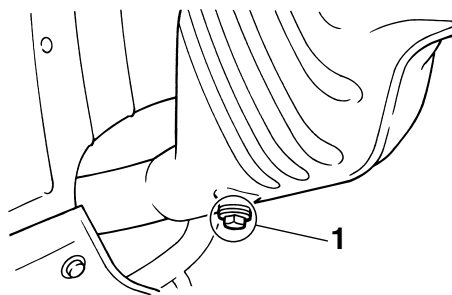


e
arrester

ert the tailpipe into the muffler,
l then install and tighten the
s.

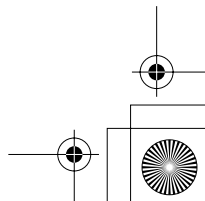
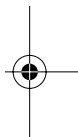
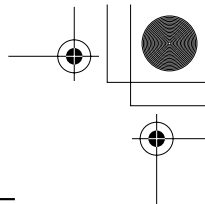
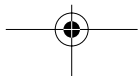
ure to align the bolt holes when
y the tailpipe.

move the purging bolt.



1. Purging bolt

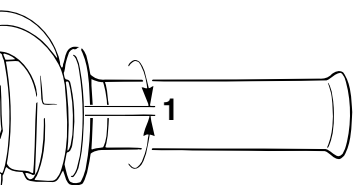
5. Start the engine and rev it approximately twenty times while momentarily creating exhaust system back pressure using a shop towel to block the end of the muffler.
6. Stop the engine and allow the exhaust pipe to cool.
7. Install the purging bolt and tighten it.



PERIODIC MAINTENANCE AND MINOR REPAIR

Adjusting the throttle cable free play

EAU21380



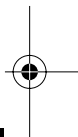
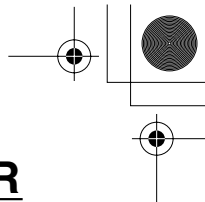
Throttle cable free play

Throttle cable free play should measure 0–5.0 mm (0.12–0.20 in) at the grip. Periodically check the throttle cable free play and, if necessary, have a Yamaha dealer adjust it.

Adjusting the valve clearance

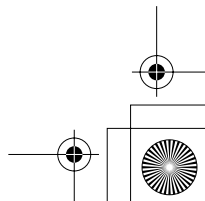
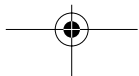
EAU21400

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



6

6-14



END MINOR REPAIR

Load riding:

nt:
00 kPa (15 psi) (1.00 kgf/cm²)
ar:
00 kPa (15 psi) (1.00 kgf/cm²)
imum load*:
00 kg (198 lb)
al weight of rider, cargo and ac-
sories

EWA10450

WARNING

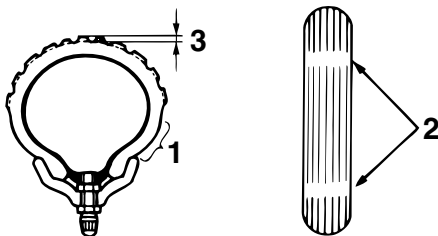
Overloading has an enormous effect on the handling, braking, balance and safety characteristics of your vehicle, you should keep the following precautions in mind. NEVER OVERLOAD THE VEHICLE! Operation of an overloaded vehicle may result in tire damage, loss of control, or severe injury. Make sure that the total weight of rider, cargo, and accessories does not exceed 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 air pressure with regard to the load.
- Check the tire condition and air pressure before each ride.

Tire inspection



1. Tire sidewall
2. Tire wear indicator
3. Tire tread depth

The tires must be checked before each ride. If a tire tread shows crosswise lines (minimum tread depth), if the tire

PERIODIC MAINTENANCE AND MINOR REPAIR

Front tire:

Size: 80/100-21 51M
Manufacturer/model:
DUNLOP/D739FA

Rear tire:

Size: 100/100-18 59M
Manufacturer/model:
DUNLOP/D739

very carefully and replace it as soon as possible with a high-quality product.

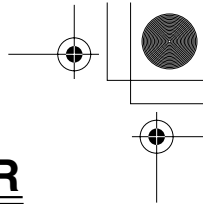
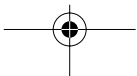
EWA10570

WARNING

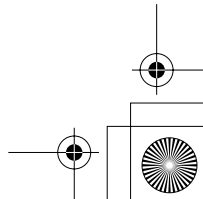
Have a Yamaha dealer replace excessively worn tires. Besides being illegal, operating the machine with excessively worn tires decreases riding stability and can lead to loss of control. The replacement of all wheel- and brake-related parts, including the tires, should be left to a Yamaha dealer, who has the necessary professional knowledge and experience.

It is not recommended to patch a punctured tube. If unavoidable, however, patch the tube

6-16



6



AND MINOR REPAIR

Accessories and replacement

EAU22011

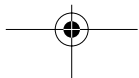
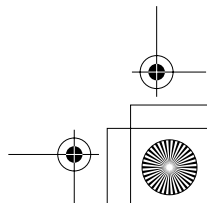
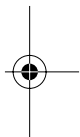
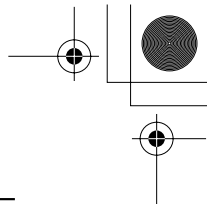
the use of items which have not been approved by Yamaha.

EWA10621

WARNING

This vehicle is not designed to pull a trailer or to be attached to a sidecar. Accessories or replacement parts you choose for your vehicle must be designed specifically for your model, and they must be securely mounted to maintain the handling stability of the original motorcycle. Genuine Yamaha Parts and Accessories are designed and tested to be compatible with your vehicle. Please consider Genuine Yamaha Parts and Accessories before making a purchase. Use of non-Yamaha-approved accessories or replacement parts may cause handling stability and riding safety issues. Since Yamaha cannot control the quality of accessories or parts manufactured by other companies, Yamaha cannot be held liable for any consequences caused by the use of such parts.

6-17



PERIODIC MAINTENANCE AND MINOR REPAIR

For free play, turn the adjusting nut in direction (b).

If the specified clutch lever free play could be obtained as described above, tighten the locknut and skip the rest of the procedure, otherwise proceed as follows.

Turn the adjusting bolt in direction (a) to loosen the clutch cable.

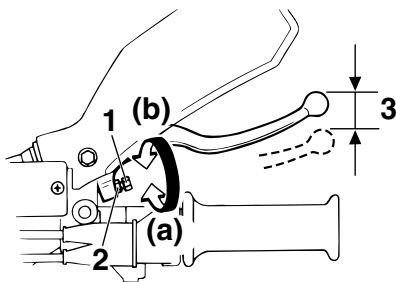
Loosen the locknut further down the clutch cable.

To increase the clutch lever free play, turn the adjusting nut in direction (a). To decrease the clutch lever free play, turn the adjusting nut in direction (b).

Tighten both locknuts.

Adjusting the brake lever free play

EAU22092



1. Adjusting bolt
2. Locknut
3. Brake lever free play

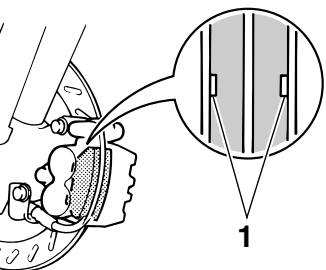
The brake lever free play should measure 2.0–5.0 mm (0.08–0.20 in) as shown. Periodically check the brake lever free play and, if necessary, adjust it as follows.

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

END MINOR REPAIR

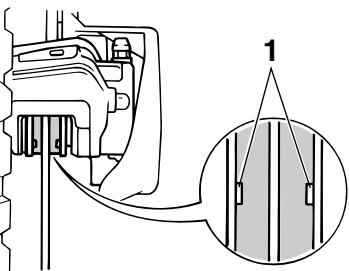
ing the front and rear pads ake

EAU22311



indicator

ake

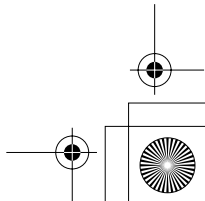
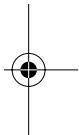
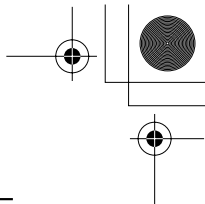


indicator

nt and rear brake pads must be
l for wear at the intervals spec-

6-19

ified in the periodic maintenance and lubrication chart. Each brake pad is provided with a wear indicator, which allows you to check the brake pad wear without having to disassemble the brake. To check the brake pad wear, check the position of the wear indicator while applying the brake. If a brake pad has worn to the point that the wear indicator almost touches the brake disc, have a Yamaha dealer replace the brake pads as a set.



PERIODIC MAINTENANCE AND MINOR REPAIR

While riding, check that the brake fluid is at the minimum level mark and top up if necessary. A low brake fluid level may indicate worn brake pads or a 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, be sure that the top of the brake fluid reservoir is level.

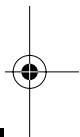
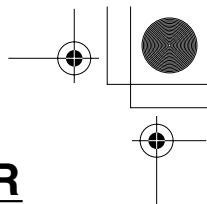
Use only the recommended quality brake fluid, otherwise the rubber seals may deteriorate, causing leakage and poor braking performance.

Recommended brake fluid:
DOT 4

Do not fill 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

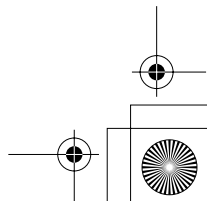
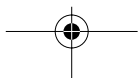
refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.

- Brake fluid may deteriorate painted surfaces or plastic parts. Always clean up spilled fluid immediately.
- As the brake pads wear, it is normal for the brake fluid level to gradually go down. However, if the brake fluid level goes down suddenly, have a Yamaha dealer check the cause.



6

6-20



END MINOR REPAIR

chain slack

ive chain slack should be
l before each ride and adjusted
sary.

Check the drive chain slack

ce the machine on a level sur-
e and hold it in an upright posi-
.

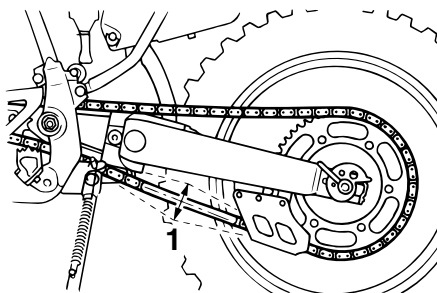
hecking and adjusting the drive
ack, the machine should be po-
straight up and there should be
nt on it.

ft the transmission into the neu-
position.

ve the rear wheel by pushing
machine to locate the tightest
tion of the drive chain, and then
asure the drive chain slack as
wn.

ve chain slack:
5.0–50.0 mm (1.38–1.97 in)

EAU22760



1. Drive chain slack

4. If the drive chain slack is incorrect,
adjust it as follows.

EAU22770

EAU22910

To adjust the drive chain slack

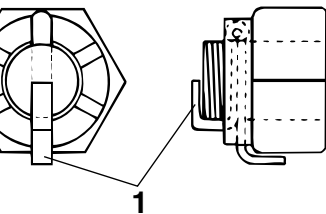
1. Remove the cotter pin from the axle nut, and then loosen the axle nut.
2. To tighten the drive chain, turn the adjusting plate on each side of the swingarm in direction (a). To loosen the drive chain, turn the adjusting plate on each side of the swingarm in direction (b), and then push the rear wheel forward.

PERIODIC MAINTENANCE AND MINOR REPAIR

Tighten the axle nut to the specified torque.

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

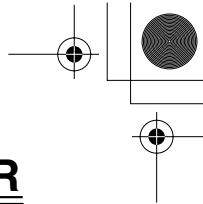
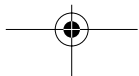
Insert a new cotter pin into the axle nut, and then bend its ends as shown.



Cotter pin

Ensure that two notches in the axle nut are aligned with the hole through the axle, otherwise further tightening the axle nut until they are.

6-22

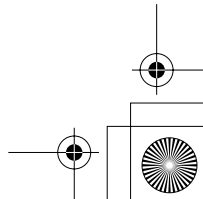


EWA10700



WARNING
Always use a new cotter pin for the axle nut.

6



END MINOR REPAIR

ECA11110

ON: _____
Use engine oil or any other lu-
s for the drive chain, as they
contain substances that could
the O-rings.

Checking and lubricating the cables

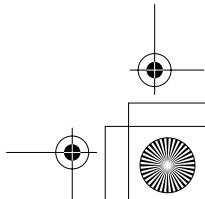
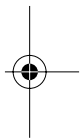
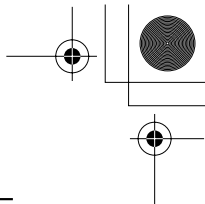
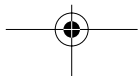
The operation of all control cables and the condition of the cables should be checked before each ride, and the cables and cable ends should be lubricated if necessary. If a cable is damaged or does not move smoothly, have a Yamaha dealer check or replace it.

Recommended lubricant:
Yamaha Chain and Cable Lube
or engine oil SAE 10W-30 (API
SE)

EWA10710

WARNING

Damage to the outer housing of cables may result in internal rusting and cause interference with cable movement. Replace damaged cables as soon as possible to prevent unsafe conditions.



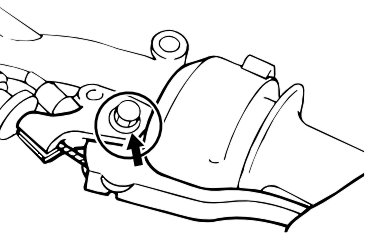
PERIODIC MAINTENANCE AND MINOR REPAIR

Checking and lubricating the
brake and clutch levers

EAU23140

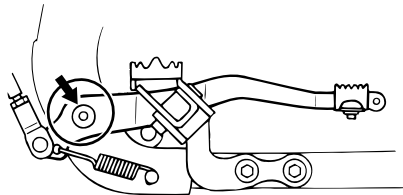
Lubricating the brake pedal

EAU23180



The operation of the brake and clutch
levers should be checked before each
ride and the lever pivots should be lu-
bricated if necessary.

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



The operation of the brake pedal
should be checked before each ride,
and the pedal pivot should be lubricat-
ed if necessary.

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

6

END MINOR REPAIR

ing the front fork

dition and operation of the front
st be checked as follows at the
specified in the periodic main-
and lubrication chart.

ck the condition

ARNING

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

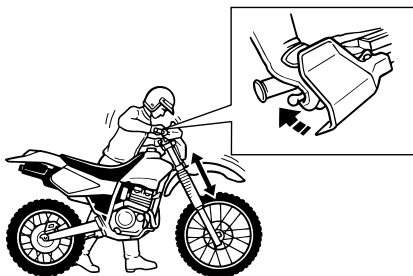
he inner tubes for scratches,
and excessive oil leakage.

ck the operation

ce the vehicle on a level sur-
e and hold it in an upright posi-

ile applying the front brake,
h down hard on the handlebars
veral times to check if the front
k compresses and rebounds
oothly.

EAU23271

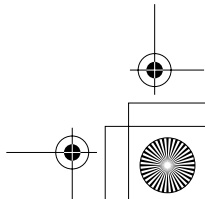
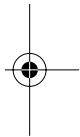
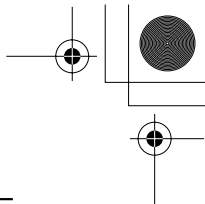
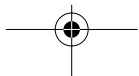


EWA10750

ECA10590

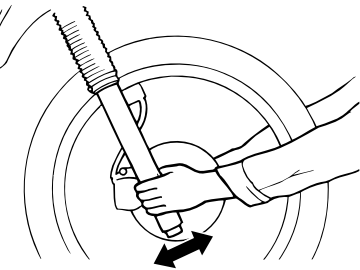
CAUTION:

If any damage is found or the front
fork does not operate smoothly,
have a Yamaha dealer check or re-
pair it.



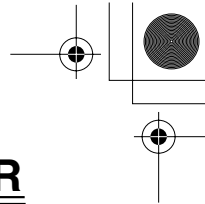
ODIC MAINTENANCE AND MINOR REPAIR

EAU23290



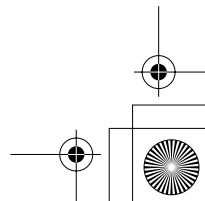
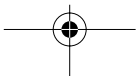
Checking the wheel bearings

The front and rear wheel bearings must be checked at the intervals specified in the periodic maintenance and lubrication chart. If there is play in the wheel hub or if the wheel does not turn smoothly, have a Yamaha dealer check the wheel bearings.



6

6-26



END MINOR REPAIR

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 away from sparks, flames, cigarettes, etc., stay away from the battery and provide sufficient ventilation when charging it in an enclosed

space.

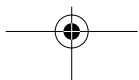
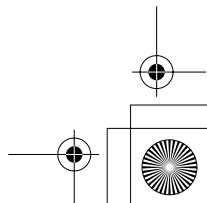
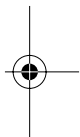
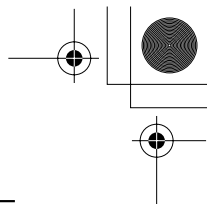
- **KEEP THIS AND ALL BATTERIES OUT OF THE REACH OF CHILDREN.**

To charge the battery

Have a Yamaha dealer charge the battery as soon as possible if it seems to have discharged. Keep in mind that the battery tends to discharge more quickly if the vehicle is equipped with optional electrical accessories.

To store the battery

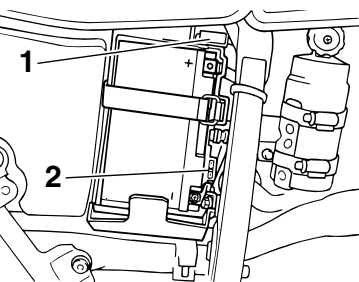
1. If the vehicle will not be used for more than one month, remove the battery, fully charge it, and then place it in a cool, dry place.
2. If the battery will be stored for more than two months, check it at least once a month and fully charge it if necessary.
3. Fully charge the battery before installation.
4. After installation, make sure that the battery leads are properly connected to the battery terminals.



PERIODIC MAINTENANCE AND MINOR REPAIR

Replacing the fuse

EAU23500



the fuse

The fuse holder is located behind panel (see page 6-6.)

If the fuse is blown, replace it as follows:

1. Turn the key to "OFF" and turn off the electrical circuits.

2. Remove the blown fuse, and then install a new fuse of the specified amperage.

Specified fuse:
15.0 A

ECA10640

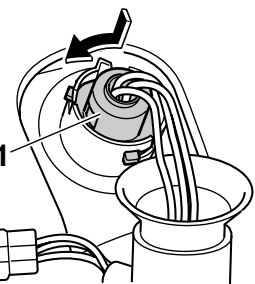
CAUTION:

Do not use a fuse of a higher amperage rating than recommended to avoid causing extensive damage to the electrical system and possibly a fire.

3. Turn the key to "ON" and turn on the electrical circuits to check if the devices operate.
4. If the fuse immediately blows again, have a Yamaha dealer check the electrical system.

6

END MINOR REPAIR



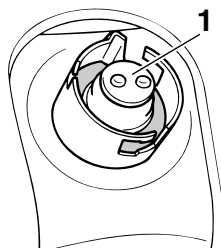
light bulb holder

EWA10790

WARNING

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

Insert a new headlight bulb into position, and then secure it with the top holder.

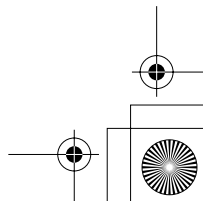
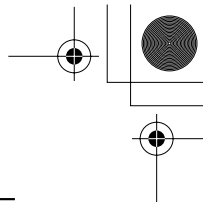
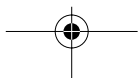


1. Headlight bulb

ECA10660

CAUTION:

Do not touch the glass part of the headlight bulb to keep it free from oil, otherwise the transparency of the glass, the luminosity of the bulb, and the bulb life will be adversely affected. Thoroughly clean off any dirt and fingerprints on the headlight bulb using a cloth moistened with alcohol or thinner.

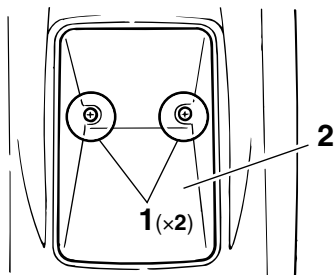


PERIODIC MAINTENANCE AND MINOR REPAIR

EAU24191

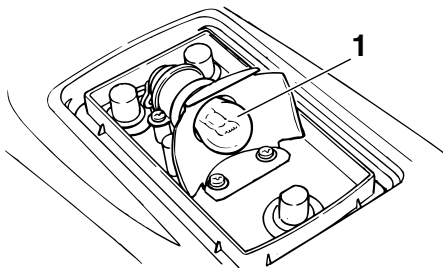
Replacing the taillight bulb

Remove the taillight lens by removing the screws.



Remove the defective bulb by

pushing it in and turning it counter-clockwise.



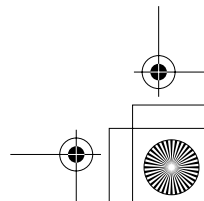
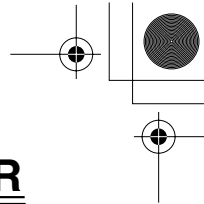
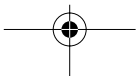
1. Bulb

3. Insert a new bulb into the socket, push it in, and then turn it clockwise until it stops.
4. Install the lens by installing the screws.

ECA10680

CAUTION:

Do not overtighten the screws, otherwise the lens may break.



END MINOR REPAIR

Wheel

Remove the front wheel

WARNING

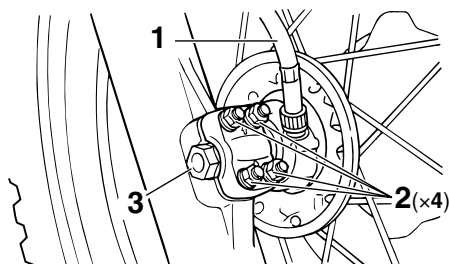
It is advisable to have a Yamaha dealer service the wheel. Securely support the machine so that there is no danger of it falling over.

Remove the tripmeter cable from the front wheel. Loosen the wheel axle holder nuts, and pull the wheel axle out.

EAU24360

EAU24670

EWA10820



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

3. Lift the front wheel off the ground according to the procedure on page 6-31.
4. Pull the wheel axle out, and then remove the wheel.

ECA11070

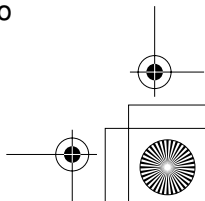
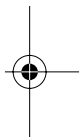
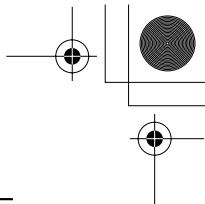
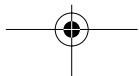
CAUTION:

Do not apply the brake after the wheel has been removed together with the brake disc, otherwise the brake pads will be forced shut.

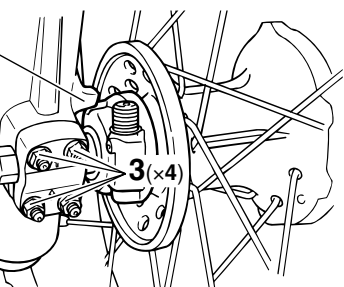
EAU24961

To install the front wheel

1. Install the tripmeter gear unit into



PERIODIC MAINTENANCE AND MINOR REPAIR



ner
l axle
l axle holder nut

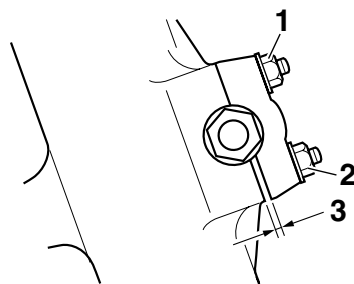
vert the wheel axle, and then
ten it to the specified torque.

Tightening torque:

heel axle:
58 Nm (5.8 m·kgf, 42 ft·lbf)

ghten the wheel axle holder nuts
he specified torque.

the upper nuts first, and then
ver ones. When the nuts are
ed in this sequence, there
be a gap at the bottom of the
lder.



1. Upper nut
2. Lower nut
3. Gap

Tightening torque:

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

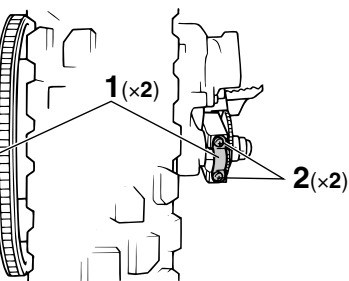
5. While applying the front brake, push down hard on the handlebars several times to check if the front fork compresses and rebounds smoothly.
6. Connect the tripmeter cable.

6

END MINOR REPAIR

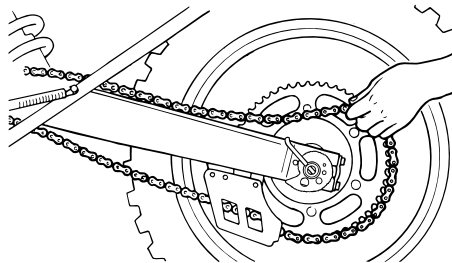
Figure 6-31.

Remove each swingarm end cover by removing the screws.



Swingarm end cover

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



NOTE: _____

The drive chain does not need to be disassembled in order to remove and install the wheel.

5. Remove the wheel.

ECA11070

CAUTION: _____

Do not apply the brake after the wheel has been removed together with the brake disc, otherwise the brake pads will be forced shut.

EAU25630

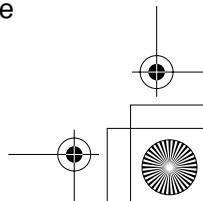
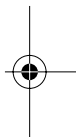
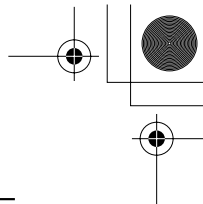
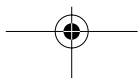
To install the rear wheel

1. Install the wheel.

NOTE: _____

Make sure that there is enough space

6-33



PERIODIC MAINTENANCE AND MINOR REPAIR

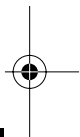
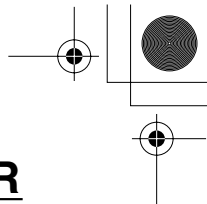
EAU25850

Troubleshooting

Each Yamaha machine receives a thorough inspection before shipment from the factory, trouble may occur during operation. Any problem in the fuel, lubrication, or ignition systems, for example, can cause poor starting and low power.

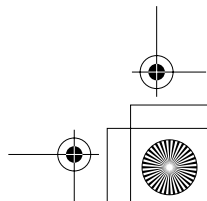
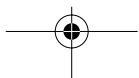
The following troubleshooting chart presents a quick and easy procedure for checking these vital systems yourself. However, should your machine require any repair, take it to a Yamaha dealer whose skilled technicians have the necessary tools, experience, and know-how to service the machine properly.

Only use genuine Yamaha replacement parts. Imitation parts may look like Yamaha parts, but they are often inferior and have a shorter service life and can result in expensive repair bills.



6

6-34

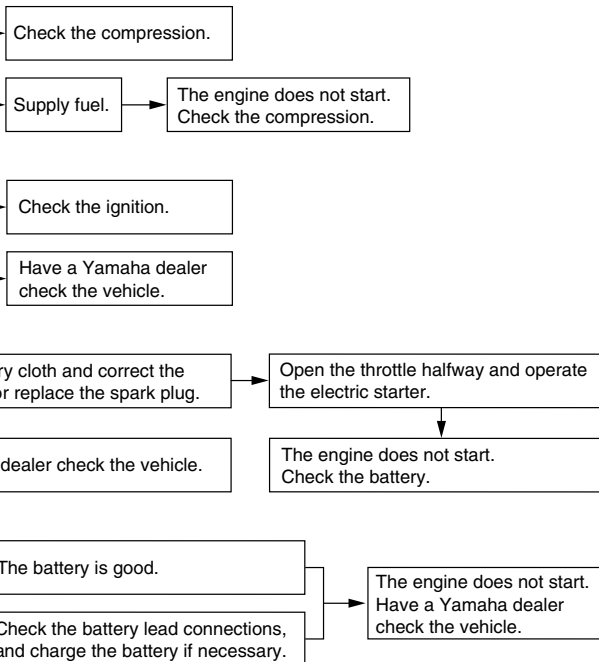


END MINOR REPAIR

EAU25901

EWA10840

le checking or working on the fuel system.



MACHINE CARE AND STORAGE

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

ng

ECA10770

ON:

oid using strong acidic wheel
aners, especially on spoked
heels. If such products are
ed on hard-to-remove dirt, do
t leave the cleaner on the af-
ted area any longer than in-
ucted. Also, thoroughly rinse
e area off with water, immedi-
ly dry it, and then apply a cor-
sion protection spray.

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

not use any harsh chemical
products on plastic parts. Be
re 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

DAMAGE

Use a mild detergent, after the engine has cooled down.

ECA10790

CAUTION: _____
Use warm water since it inhibits the corrosive action of the

Apply a corrosion protection spray on all metal, including chrome- and nickel-plated, surfaces to prevent corrosion.

Cleaning

Clean the machine with a chamois or an absorbent cloth.

Immediately dry the drive chain and lubricate it to prevent it from rusting.

Use a chrome polish to shine chrome, aluminum and stainless-steel parts, including the exhaust system. (Even the thermally induced discoloring of stainless-steel exhaust systems can be removed through polishing.)

To prevent corrosion, it is recommended to apply a corrosion pro-

tection spray on all metal, including chrome- and nickel-plated, surfaces.

5. Use spray oil as a universal cleaner to remove any remaining dirt.
6. Touch up minor paint damage caused by stones, etc.
7. Wax all painted surfaces.
8. Let the machine dry completely before storing or covering it.

EWA10930

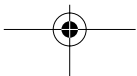
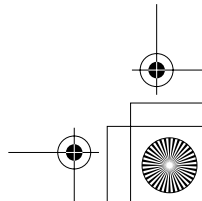
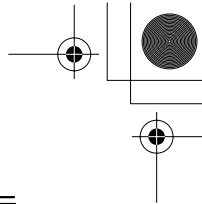
WARNING

- Make sure that there is no oil or wax on the brakes or tires. If necessary, clean the brake discs and brake linings with a regular brake disc cleaner or acetone, and wash the tires with warm water and a mild detergent.
- Before operating the machine test its braking performance and cornering behavior.

ECA10800

CAUTION:

- Apply spray oil and wax spar-



MACHINE CARE AND STORAGE

EAU26150

ge
erm

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

ECA10810

ON:

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

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

erm

storing your machine for several months:

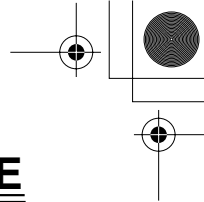
Follow all the instructions in the "Maintenance" section of this chapter.

For machines equipped with a fuel cock that has an "OFF" position: Turn the fuel cock lever to "OFF".

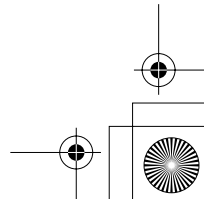
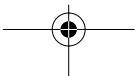
Drain the carburetor float chamber

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



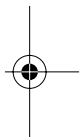
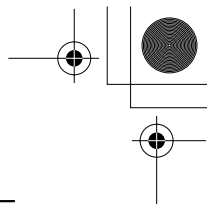
7



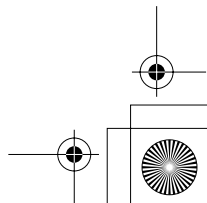
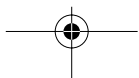
AGE

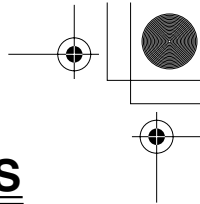
not store the battery in an ex-
sively cold or warm place
s than 0 °C (30 °F) or more
n 30 °C (90 °F)]. For more in-
nation on storing the battery,
page 6-27.

ny necessary repairs before
he machine.



7-4

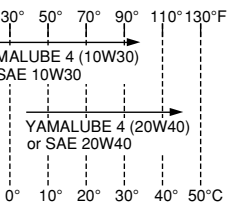




SPECIFICATIONS

oil:

YAMALUBE 4, SAE10W30 or SAE20W40



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

oil quantity:

Oil filter element replacement:
Oil L (1.16 US qt) (0.97 Imp.qt)
Oil filter element replacement:
Oil L (1.27 US qt) (1.06 Imp.qt)

oil:

Oil element:
Oil element

Recommended fuel:
Unleaded gasoline only
Tank capacity:
Oil L (2.51 US gal) (2.09 Imp.gal)
Reserve amount:
Oil L (0.53 US gal) (0.44 Imp.gal)

Motor:

Manufacturer:
KEI

Type x 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

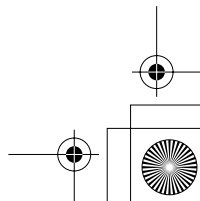
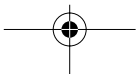
Gear ratio:

1st:
37/15 (2.467)
2nd:
29/16 (1.813)
3rd:
30/22 (1.364)



8

8-1



pressure (measured on cold

riding:

kPa (15 psi) (1.00 kgf/cm²)

kPa (15 psi) (1.00 kgf/cm²)

heel:

type:

ke wheel

e:

.60

heel:

type:

ke wheel

e:

2.15

ake:

le disc brake

on:

t hand operation

mended fluid:

4

ake:

le disc brake

on:

t foot operation

mended fluid:

4

Front suspension:

Type:

Telescopic fork

Spring/shock absorber type:

Coil-air spring/oil damper

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

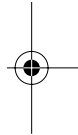
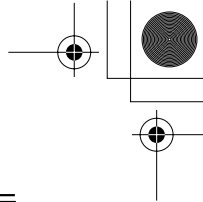
Bulb voltage, wattage x quantity:

Headlight:

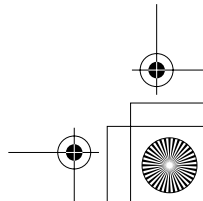
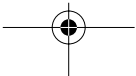
12 V, 35 W/36.5 W × 1

Tail/brake light:

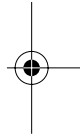
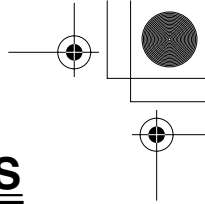
12 V, 5.0/21.0 W × 1



8-2

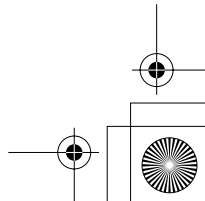
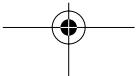


SPECIFICATIONS



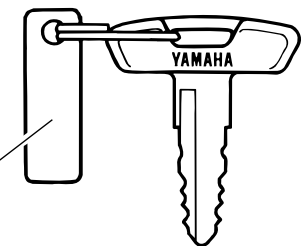
8

8-3



Identification number

EAU26381

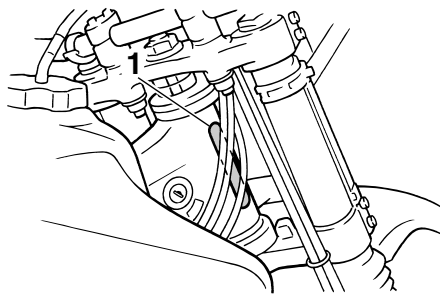


Identification number

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

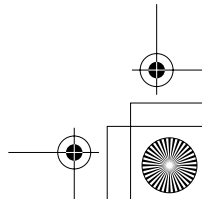
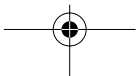


1. Vehicle identification number

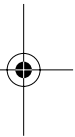
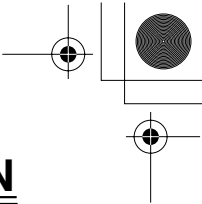
The vehicle identification number is stamped into the steering head pipe. Record this number in the space provided.

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.

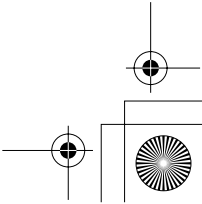
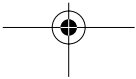


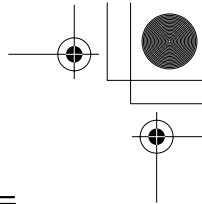
CONSUMER INFORMATION



9

9-2





EAU26560

PROHIBITED:

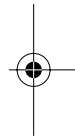
ing thereof: (1) The removal or rendering inoperative by any person other
 cement of any device or element of design incorporated into any new ve-
 e or delivery to the ultimate purchaser or while it is in use or (2) the use of
 has been removed or rendered inoperative by any person.
 ITUTE TAMPERING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

Exhaust system

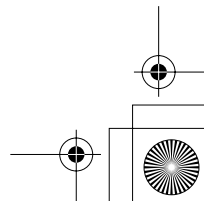
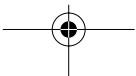
- Muffler
- Exhaust pipe
- Silencer

Intake system

- Air cleaner case
- Air cleaner element
- Intake duct



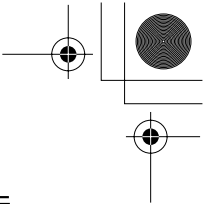
9-3





n the machine is serviced.

[illegible]



EAU26670

II.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. Bring the motorcycle to an authorized Yamaha motorcycle dealer for inspection and repairs 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. For this warranty to remain in effect, this inspection and registration must take place within ten days after transfer. An inspection and registration charge will be charged for this service.

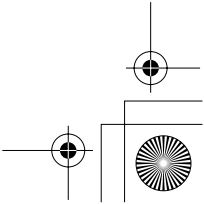
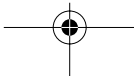
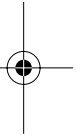
YAMAHA MOTOR CORPORATION, U.S.A. MAKES NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH EXCEED THE OBLIGATIONS AND LIMITATIONS STATED IN THIS WARRANTY. THESE WARRANTIES ARE DISCLAIMED BY YAMAHA MOTOR CORPORATION, U.S.A.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

SOME STATES DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES, SO THE LIMITATION MAY NOT APPLY TO YOU. ALSO, SOME STATES DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES, SO THE LIMITATION MAY NOT APPLY TO YOU. ALSO, SOME STATES DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES, SO THE LIMITATION 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

services, non-
ir filters, spark
use?
mples include:
operating the
to fail, damage
you have any
aler for advice.
rtation due to

n the Owner's
in the Owner's
g special tools
ny new motor-
ed." However,
an as shown
ty.

s to your satis-
ite.
p, service and

n request. The
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.

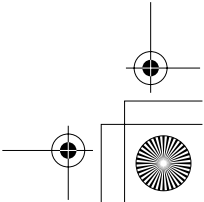
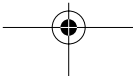
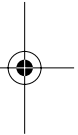
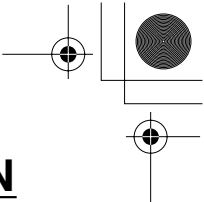
CHANGE OF ADDRESS

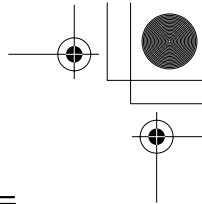
The federal government requires each manufacturer of a motor vehicle to maintain a complete, up-to-date list of all first purchasers against the possibility of a safety-related defect and recall. This list is compiled from the purchase registrations sent to Yamaha Motor Corporation, U.S.A. by the selling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





EAU26750

warranty
e (Y.E.S.).
aha Motor
action. You
for extra

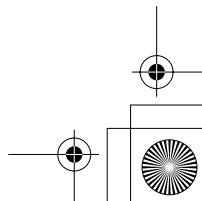
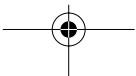
s right for
on certain
period.

the same
– and it
fits. There
limited to
her plans.
st like the
r Yamaha
d factory-

d repairs.
irs aren't
expenses

- 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.

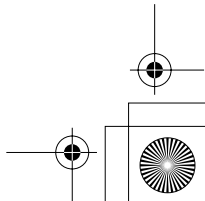
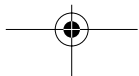
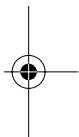
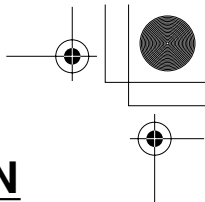


benefits of
y knowing
a after your

maha with
. We'll be
ed.



CONSUMER INFORMATION



.....	3-4
.....	3-5
.....	3-5
.....	3-4
.....	6-28
.....	3-1
.....	6-29
.....	9-1
.....	9-1
.....	1-6
.....	3-2
.....	3-1
.....	6-3
.....	6-2
.....	9-4
.....	9-2
.....	9-3
.....	5-4
.....	2-1
.....	4-2
.....	1-1
.....	3-7
.....	5-2
.....	3-3
.....	3-9

Sidestand, checking and lubricating.....	6-25
Spark plug, checking.....	6-7
Specifications.....	8-1
Starter (choke) knob.....	3-6
Starting and warming up a cold engine.....	5-1
Starting circuit cut-off system.....	3-11
Start switch.....	3-2
Steering, checking.....	6-26
Storage.....	7-3
Supporting the motorcycle.....	6-31

T

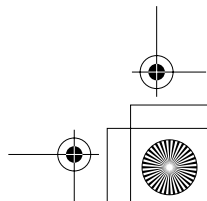
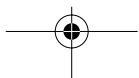
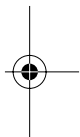
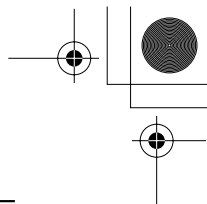
Taillight bulb, replacing.....	6-30
Throttle cable free play, adjusting.....	6-14
Throttle grip and cable, checking and lubricating.....	6-24
Tires.....	6-15
Tool kit.....	6-1
Tripmeter.....	3-1
Troubleshooting.....	6-34
Troubleshooting chart.....	6-35

V

Valve clearance, adjusting.....	6-14
Vehicle identification number.....	9-1

W

Warranty, extended.....	9-7
Warranty, limited.....	9-5
Wheel bearings, checking.....	6-26
Wheel (front).....	6-31
Wheel (rear).....	6-33
Wheels.....	6-17




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

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



PRINTED ON RECYCLED PAPER

PRINTED IN JAPAN
2004.5-0.7×1 
(E)