# Ninja ZX-10RR

Motorcycle

# **OWNER'S MANUAL**

A Read this manual carefully. It contains safety information.

Kawasaki

# **Quick Reference Guide**

This Quick Reference Guide will assist you in finding the information you're looking for.

SAFETY INFORMATION

GENERAL INFORMATION

HOW TO RIDE THE MOTORCYCLE

MAINTENANCE AND ADJUSTMENT

**APPENDIX** 

**MAINTENANCE RECORD** 

A Table of Contents is included after the Foreword.

Whenever you see the symbols shown below, heed their instructions! Always follow safe operating and maintenance practices.

## A DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

# **A** WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

### NOTICE

NOTICE is used to address practices not related to personal injury.

#### NOTE

 NOTE indicates information that may help or guide you in the operation or service of the vehicle.

# **A** WARNING

Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## NOTICE

THIS PRODUCT HAS BEEN MANUFACTURED FOR USE IN A REASONABLE AND PRUDENT MANNER BY A QUALIFIED OPERATOR AND AS A VEHICLE ONLY.

## **Foreword**

Congratulations on your purchase of a new Kawasaki motorcycle. Your new motorcycle is the product of Kawasaki's advanced engineering, exhaustive testing, and continuous striving for superior reliability, safety and performance.

Please read this Owner's Manual carefully before riding so that you will be thoroughly familiar with the proper operation of your motorcycle's controls, its features, capabilities, and limitations. This manual offers many safe riding tips, but its purpose is not to provide instruction in all the techniques and skills required to ride a motorcycle safely. Kawasaki strongly recommends that all operators of this vehicle enroll in a motorcycle rider training program to attain awareness of the mental and physical requirements necessary for safe motorcycle operation.

To ensure a long, trouble-free life for your motorcycle, give it the proper care and maintenance described in this manual. For those who would like more detailed information on their Kawasaki Motorcycle, a Service Manual is available for purchase from any authorized Kawasaki motorcycle dealer. The Service Manual contains detailed disassembly and maintenance information. Those who plan to do their own work should, of course, be competent mechanics and possess the special tools described in the Service Manual.

Keep this Owner's Manual aboard your motorcycle at all times so that you can refer to it whenever you need information.

This manual should be considered a permanent part of the motorcycle and should remain with the motorcycle when it is sold.

All rights reserved. No part of this publication may be reproduced without our prior written permission.

This publication includes the latest information available at the time of printing. However, there may be minor differences between the actual product and illustrations and text in this manual.

All products are subject to change without prior notice or obligation.

# KAWASAKI HEAVY INDUSTRIES, LTD. Motorcycle & Engine Company

© 2017 Kawasaki Heavy Industries, Ltd.

Apr. 14, 2017. (1)

## **Emission Control Information**

To protect the environment in which we all live, Kawasaki has incorporated crankcase emission (1) and exhaust emission (2) control systems in compliance with applicable regulations of the United States Environmental Protection Agency and California Air Resources Board. Additionally, Kawasaki has incorporated an evaporative emission control system (3) in compliance with applicable regulations of the United States Environmental Protection Agency and California Air Resources Board.

#### 1. Crankcase Emission Control System

This system eliminates the release of crankcase vapors into the atmosphere. Instead, the vapors are routed through an oil separator to the intake side of the engine. While the engine is operating, the vapors are drawn into the combustion chamber, where they are burned along with the fuel and air supplied by the fuel injection system.

#### 2. Exhaust Emission Control System

This system reduces the amount of pollutants discharged into the atmosphere by the exhaust of this motorcycle. The fuel, ignition and exhaust systems of this motorcycle have been carefully designed and constructed to ensure an efficient engine with low exhaust pollutant levels. The exhaust system of this model motorcycle includes a catalytic converter system.

#### 3. Evaporative Emission Control System

The evaporative emission control system for this vehicle consists of low permeation fuel hoses and fuel tank.

## 3. Evaporative Emission Control System (California)

Vapors caused by fuel evaporation in the fuel system are not vented into the atmosphere. Instead, fuel vapors are routed into the running engine to be burned, or stored in a canister when the engine is stopped.

# High Altitude Performance Adjustment Information

High Altitude adjustment is not required.

# **Maintenance and Warranty**

Proper maintenance is necessary to ensure that your motorcycle will continue to have low emission levels. This Owner's Manual contains those maintenance recommendations for your motorcycle. Those items identified by the Periodic Maintenance Chart are necessary to ensure compliance with the applicable standards.

As the owner of this motorcycle, you have the responsibility to make sure that the recommended maintenance is carried out according to the instructions in this Owner's Manual at your own expense.

The Kawasaki Limited Emission Control System Warranty requires that you return your motorcycle to an authorized Kawasaki dealer for remedy under warranty. Please read the warranty carefully, and keep it valid by complying with the owner's obligations it contains.

You should keep a maintenance record for your motorcycle. To assist you in keeping this record, we have provided space on pages 204 through 209 of this manual where an authorized Kawasaki dealer, or someone equally competent, can record the maintenance. You should also retain copies of maintenance work orders, bills, etc., as verification of this maintenance.

# **Tampering With Noise Control System Prohibited**

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

Among those acts presumed to constitute tampering are the acts listed below:

- \* Replacement of the original exhaust system or muffler with a component not in compliance with Federal regulations.
- \* Removal of the muffler(s) or any internal portion of the muffler(s).
- \* Removal of the air box or air box cover.
- \* Modifications to the muffler(s) or air intake system by cutting, drilling, or other means if such modifications result in increased noise levels.

## **TABLE OF CONTENTS**

SAFETY INFORMATION	13	Specifications	24
Read Owner's Manual	13	Serial Number Locations	28
Training	13	Location of Labels	29
Daily Checks and Periodic		Location of Parts	38
Maintenance	13	Meter Instruments	41
Loading and Accessories		Indicators	42
Information	14	Speedometer/Tachometer	51
Baggage and Luggage	15	Coolant/Intake Air Temperature	
Accessories	16	Meter	52
Other Load	17	Display Setting	54
If You are Involved in an Accident	17	Setting Mode	65
Safe Operation	18	Features	77
Carbon Monoxide Hazard	18	Keys	79
Fueling	18	Ignition Switch/Steering Lock	79
Never Ride with Drugs or Alcohol.	18	Right Handlebar Switches	81
Protective Gear and Clothing	19	Left Handlebar Switches	82
Safe Riding Techniques	20	Brake Lever Adjuster	83
Additional Considerations for High		Fuel	84
Speed Operation	22	Fuel Requirements	84
GENERAL INFORMATION	24	Filling the Tank	87

Side Stand	90	S-KTRC and Power Mode	
Single Seat Cover	91	Combination	115
Seat		Kawasaki Launch Control Mode	
Tool Kit	95	(KLCM)	115
Air Cleaner Intake	95	Kawasaki Engine Brake Control	
Event Data Recorder	96	(KEBC)	118
<b>HOW TO RIDE THE MOTORCYCLE.</b>	98	Kawasaki Quick Shift (KQS)	118
Break-In	98	Inertial Measurement Unit (IMU)	119
Starting the Engine	99 I	MAINTENANCE AND ADJUSTMENT	120
Moving Off	101	Daily Checks	122
Shifting Gears	101	Periodic Maintenance	125
Braking	103	Engine Oil	130
Anti-lock Brake System (ABS)	104	Coolant	134
Kawasaki Intelligent anti-lock Brake		Air Cleaner	143
System (KIBS)	107	Throttle Control System	144
Stopping the Engine	107	Idle Speed	147
Stopping the Motorcycle in an		Clutch	147
Emergency	108	Drive Chain	149
Parking	109	Brakes	153
Sport-Kawasaki TRaction Control		Brake Light Switches	156
(S-KTRC)	110	Electronic Steering Damper (ESD)	158
Power Mode	114	Suspension System	159
		Front Fork	159

Rear Shock Absorber 162	Where to be Careful 186
Setting Tables 165	Washing Your Vehicle 186
Wheels 168	<b>APPENDIX</b>
Battery 171	Storage 188
Headlight	Troubleshooting Guide 191
Fuses 179	Your Warranty/Owner Satisfaction 196
General Lubrication 181	Reporting Safety Defects 202
Cleaning 182	Environmental Protection 203
General Precautions 182	MAINTENANCE RECORD 204

## SAFETY INFORMATION

## Read Owner's Manual

Read this Owner's Manual carefully before riding so that you will be thoroughly familiar with the proper operation of your motorcycle's controls, its features, capabilities, and limitations. This manual offers many safe riding tips, but its purpose is not to provide instruction in all of the techniques and skills required to ride a motorcycle safely.

# Training

Kawasaki strongly recommends that all operators of this vehicle complete a suitable motorcycle rider training program to learn the proper skills and techniques necessary for safe motorcycle operation.

## **Daily Checks and Periodic** Maintenance

It is important to keep your motorcycle properly maintained and in safe riding condition. Inspect your motorcycle before every ride and carry out all periodic maintenance. See the Daily Checks section and the Periodic Maintenance section in the MAINTENANCE AND ADJUSTMENT chapter for more information



Failure to perform these checks or to correct a problem before operation may result in serious damage or an accident. Always perform daily checks before operation.

#### 14 SAFETY INFORMATION

To ensure your motorcycle is serviced using the latest servicing information, it is recommended that an authorized Kawasaki Dealer performs the periodic maintenance as directed in the Owner's Manual.

If you notice any irregular operating condition, have your motorcycle thoroughly checked at an authorized Kawasaki dealer as soon as possible.

# Loading and Accessories Information

# **A** WARNING

Incorrect loading, improper installation or use of accessories or modification of your motorcycle may result in an unsafe riding condition. Before you ride the motorcycle, make sure it is not overloaded and that you have followed these instructions.

#### Maximum Load

Weight of rider, baggage, and accessories must not exceed 180 kg (397 lb).

With the exception of genuine Kawasaki Parts and Accessories, Kawasaki has no control over the design or application of accessories. In some cases, improper installation

or use of accessories, or motorcycle modification, will void the motorcycle warranty; can negatively affect performance, stability and safety; and can even be illegal.

In selecting and using accessories, and in loading the motorcycle, you are personally responsible for your own safety and the safety of other persons involved.

#### NOTE

O Kawasaki Parts and Accessories have been specially designed for use on Kawasaki motorcycles. We strongly recommend that all parts and accessories you add to your motorcycle be genuine Kawasaki components.

Because a motorcycle is sensitive to changes in weight and aerodynamic forces, you must take extreme care

in carrying cargo and/or in fitting additional accessories. The following general guidelines have been prepared to assist you in making your determinations.

## Baggage and Luggage

- 1. All baggage should be carried as low as possible to reduce the effect on the motorcycle's center of gravity. Baggage weight should also be distributed equally on both sides of the motorcycle. Avoid carrying baggage that extends beyond the rear of the motorcycle.
- 2. Baggage should be securely attached. Make sure that the baggage will not move around while you are riding. Recheck baggage security as often as possible (not while the motorcycle is in motion) and adjust as necessary.

#### 16 SAFETY INFORMATION

 Do not carry heavy or bulky items on a luggage rack. It is designed for light items, and overloading can affect handling due to changes in weight distribution and aerodynamic forces.

#### **Accessories**

 Do not install accessories or carry baggage that impairs the performance of the motorcycle. Make sure that you have not adversely affected any lighting components, road clearance, banking capability (i.e., lean angle), control operation, wheel travel, front fork movement, or any other aspects of the motorcycle's operation.

- Weight attached to the handlebar or front fork will increase the mass of the steering assembly and can result in an unsafe riding condition.
- 3. Fairings, windshields, backrests, and other large items have the capability of adversely affecting stability and handling of the motorcycle, not only due to their weight, but also due to the aerodynamic force acting on these surfaces while the motorcycle is in operation. Poorly designed or installed items can result in an unsafe riding condition. Lugs are provided on the swingarm to attach accessory rear stand adaptors. Always remove the rear stand adapters before riding or sitting on the machine to prevent possible damage to the muffler or swingarm.

#### Other Load

- 1. This motorcycle is not intended to be equipped with a sidecar or to be used to tow any trailers or other vehicles. Kawasaki does not manufacture sidecars or trailers for motorcycles and cannot predict the effects of such accessories on handling or stability, but can only warn that the effects can be adverse and that Kawasaki cannot assume responsibility for the results of such unintended use of the motorcycle.
- 2. Furthermore, any adverse effects on motorcycle components caused by the use of such accessories will not be remedied under warranty.

## If You are Involved in an Accident

Make sure of your own safety first. Determine the severity of any injuries and call for emergency assistance if needed. Always follow applicable laws and regulations if any other person, vehicle or property is involved.

Do not attempt to continue riding without first evaluating your motorcycle's condition. Inspect for fluid leaks, check critical nuts and bolts, and check the handlebars, control levers, brakes, and wheels for damage and proper function. Ride slowly and cautiously - your motorcycle may have suffered damage that is not immediately apparent. Have your motorcycle thoroughly checked at a Kawasaki dealer as soon as possible.

# **Safe Operation**

The following should be carefully observed for safe and effective vehicle operation.

#### **Carbon Monoxide Hazard**

# **A** DANGER

Exhaust gas contains carbon monoxide, a colorless, odorless poisonous gas. Inhaling carbon monoxide can cause serious brain injury or death. DO NOT run the engine in enclosed areas. Operate only in a well-ventilated area.

## **Fueling**



Gasoline is extremely flammable and can be explosive under certain conditions. To prevent fire or explosion, turn the ignition key off. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

## **Never Ride with Drugs or Alcohol**

Alcohol and drugs impair your judgment and reaction time. Never consume alcohol or drugs before or while riding motorcycles.

## **Protective Gear and Clothing**

#### Helmet

Kawasaki strongly recommends the operator wear a DOT-approved helmet even if this is not a legal requirement.

- Make sure that your helmet fits correctly and is properly fastened.
- Choose a motorcycle helmet that meets DOT safety standards. Ask your motorcycle dealer to advise you if necessary.

## Eve Protection

Always use eye protection. If your helmet does not have a visor installed, wear goggles.

#### **Gloves**

Wear gloves which have suitable protection for your hands, especially against abrasion.

## Clothina

Wear the riding wear which have protectors for each parts of the body (chest, shoulders, back, elbows and knees, etc.) as much as possible, or wear protectors for them.

- Always wear a long-sleeved jacket and long trousers which are abrasion resistant and keep you warm.
- Wear clothing that allows freedom of movement
- Avoid wearing clothes which have loose cuffs or other fastenings which could interfere with the controls of your motorcycle.
- Wear bright, highly visible clothing.

#### **Boots**

Wear proper protective boots that fit properly and do not interfere with gear shifting or braking.

## Safe Riding Techniques

## Keep Hands on Handlebars

When riding always keep both hands on the handlebars and both feet on the footpegs. Removing your hands from the handlebars or feet from the footpegs while riding can be hazardous. If you remove even one hand or foot, you reduce your ability to control the motorcycle.

#### Look Over Your Shoulder

Before changing lanes, look over your shoulder to make sure the way is clear. Do not rely solely on the rear view mirror; you may misjudge a vehicle's distance and speed, or you may not see it at all.

## Accelerate and Brake Smoothly

In general your actions should be smooth as sudden acceleration, braking or turning may cause loss of control, especially when riding in wet conditions or on loose road surfaces, when the ability to maneuver will be reduced.

## Select Correct Gear Speeds

When going up steep slopes, shift to a lower gear so that there is power to spare rather than overloading the engine.

#### Use Both Front and Rear Brakes

When applying the brakes, use both the front and rear brakes. Applying only one brake for sudden braking may cause the motorcycle to skid and lose control.

## Use Engine Brake

When going down long slopes, help control vehicle speed by closing the

throttle so that the engine can act as an auxiliary brake. Use the front and rear brakes for primary braking.

## Riding in Wet Conditions

Rely more on the throttle to control vehicle speed and less on the front and rear brakes. The throttle should also be used judiciously to avoid skidding the rear wheel from too rapid acceleration or deceleration

Braking performance is also reduced in wet conditions. Carefully ride at a slow speed and apply the brakes several times to help dry and restores them to normal operating performance.

Lubricate the drive chain after wet -weather riding to prevent rust and corrosion.

## Ride Prudently

Riding at the proper speed and avoiding unnecessarily fast acceleration are important not only for safety and low fuel consumption but also for long vehicle life and quieter operation.

## Riding on Rough Roads

Exercise caution, slow down, and grip the fuel tank with the knees for better stability.

#### Acceleration

When quick acceleration is necessary to pass another vehicle, shift to a lower gear to obtain the necessary power.

## **Downshifting**

To avoid engine damage and rear -wheel lock-up do not downshift at high rpm.

## Avoid Unnecessary Weaving

Unnecessary weaving jeopardizes the safety of both the rider and other motorists

## Additional Considerations for High Speed Operation

# **A** WARNING

Handling characteristics of a motorcycle at high speeds may vary from those you are familiar with at legal highway speeds. Do not attempt high speed operation unless you have received sufficient training and have the required skills.

Do not operate at high speeds on public roads.

#### **Brakes**

The importance of the brakes, especially during high speed operation, cannot be overemphasized. Check to

see that they are correctly adjusted and functioning properly.

## Steering

Looseness in the steering can cause loss of control. Check to see that the handlebar turns freely but has no play.

#### **Tires**

High speed operation is hard on tires, and good tires are crucial for safe riding. Examine their overall condition, inflate them to the proper pressure, and check the wheel balance.

#### Fuel

Have sufficient fuel for the high fuel consumption during high speed operation.

## Engine Oil

To avoid engine seizure and resulting loss of control, make sure that the oil level is at the upper level line.

#### Coolant

To avoid overheating, check that the coolant level is at the upper level line.

## Electrical Equipment

Make sure that the headlight, tail/brake light, turn signals, horn, etc., all work properly.

#### Miscellaneous

Make sure that all nuts and bolts are tight and that all safety related parts are in good condition.

## **GENERAL INFORMATION**

# **Specifications**

#### **PERFORMANCE**

Minimum Turning Radius 3.4 m (11 ft)

#### **DIMENSIONS**

Overall Length 2 090 mm (82.28 in.)

Overall Width 740 mm (29.1 in.)

Overall Height 1 145 mm (45.08 in.)

Wheelbase 1 440 mm (56.69 in.)

Road Clearance 145 mm (5.71 in.)

Curb Mass 206 kg (454 lb)

#### **ENGINE**

Type DOHC, 4-cylinder, 4-stroke, liquid-cooled

Displacement 998 cm<sup>3</sup> (60.9 cu in.)

Bore x Stroke  $76.0 \times 55.0 \text{ mm} (2.99 \times 2.17 \text{ in.})$ 

Compression Ratio 13.0:1

Starting System Electric starter

Cylinder Numbering Method Left to right, 1-2-3-4

Firing Order 1-2-4-3

Fuel System FI (Fuel Injection)

Ignition System Battery and coil (transistorized ignition)

Ignition Timing 10° BTDC @1 100 r/min (rpm) ~ 42.5° BTDC @10 500 (Electronically advanced) r/min (rpm)

(Electronically advanced) r/min (rpm)

Spark Plug Type NGK SILMAR9B9

Gap  $0.8 \sim 0.9 \text{ mm } (0.031 \sim 0.035 \text{ in.})$ 

Lubrication System Forced lubrication (wet sump)

Engine Oil: Type API SG, SH, SJ, SL, or SM with JASO MA, MA1 or MA2

Viscosity SAE 10W-40

Capacity 3.7 L (3.9 US qt)

Coolant Capacity 2.6 L (2.7 US qt)

### **TRANSMISSION**

Transmission Type 6-speed, constant mesh, return shift

Clutch Type Wet, multi disc

#### **26 GENERAL INFORMATION**

Driving System		Chain drive
Primary Reduction Ratio		1.681 (79/47)
Final Reduction Ratio		2.294 (39/17)
Overall Drive Ratio		5.365 (Top gear)
Gear Ratio:	1st	2.600 (39/15)
	2nd	2.214 (31/14)
	3rd	1.944 (35/18)
	4th	1.722 (31/18)
	5th	1.550 (31/20)
	6th	1.391 (32/23)
FRAME		
Caster		25.0°
Trail		107 mm (4.21 in.)
Tire Size:	Front	120/70ZR17 M/C (58W)
	Rear	190/55ZR17 M/C (75W)
Rim Size:	Front	17M/C × MT3.50
	Rear	17M/C × MT6.00

Fuel Tank Capacity 17 L (4.5 US gal)

Brake Fluid: Front DOT4

Rear DOT4

#### **ELECTRICAL EQUIPMENT**

Battery 12 V 8.6 Ah (10 HR)

Headlight: High Beam 12 V 55 W x 2

Low Beam 12 V 55 W

Brake/Tail Light LED

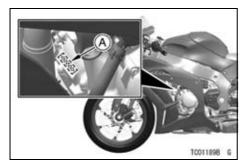
Even if one of LED (Light Emitting Diode) tail/brake light does not go on, consult with an authorized Kawasaki dealer.

Specifications are subject to change without notice.

## **Serial Number Locations**

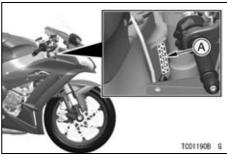
The engine and frame serial numbers are used to register the motorcycle. They are the only means of identifying your particular machine from others of the same model type. These serial numbers may be needed by your dealer when ordering parts. In the event of theft, the investigating authorities will require both numbers as well as the model type and any peculiar features of your machine that can help them identify it.

#### **Engine No.**



A. Engine Number

#### Frame No.



A. Frame Number

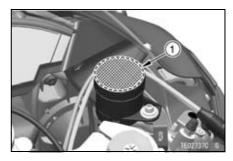
### **Location of Labels**

All warning labels which are on your vehicle are repeated here. Read labels on your vehicle and understand them thoroughly. They contain information which is important for your safety and the safety of anyone else who may operate your vehicle. Therefore, it is very important that all warning labels be on your vehicle in the locations shown. If any label is missing, damaged, or worn, get a replacement from your Kawasaki dealer and install it in the correct position

#### NOTE

OThe sample warning labels in this section have part numbers to help

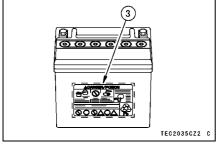
- you and your dealer obtain the correct replacement.
- O Refer to the actual vehicle label for model specific data grayed out in the illustration



1. Brake Fluid (Front)

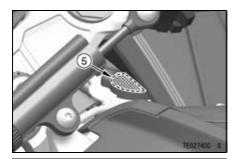
#### **30 GENERAL INFORMATION**

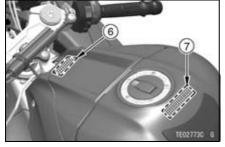


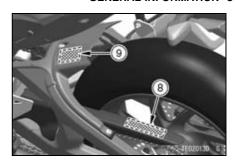




- Brake Fluid (Rear)
   Battery Poison/Danger
   Rear Shock Absorber Warning



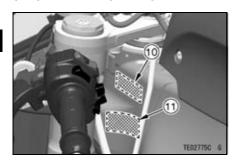


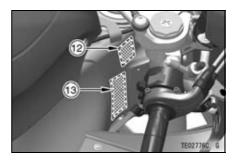


- 5. Radiator Cap Danger \*6. Fuel Level
- 7. Fuel Notice
- 8. Important Drive Chain Information
  9. Tire and Load Data

\*: only on California model

#### 32 GENERAL INFORMATION





- 10. Noise Emission Control Information
- 11. Vehicle Emission Control Information \*12. Vacuum Hose Routing Diagram 13. Weight and Manufacture

\*: only on California model

1) 3)



TE03678E S

A DANGER/POISON

SHIELD NO SULFURIC WITH WATER

EXPLOSIVE NO ACID

EXPLOSIVE OF PARKS CANDAGES COMMINITY SHORTER

EXPLOSIVE STATEMENT OF THE PARKS CANDAGES COMMINITY SHORTER

EXPLOSIVE OF PARKS CANDAGES COMMINITY SHORTER

EXPLOSIVE OF PARKS CANDAGES COMMINITY SHORTER

EXPLOSIVE OF PARKS CANDAGES COMMINITY OF THE PARKS CANDAGES COMMINITY SHORTER

EXPLOSIVE OF THE PARKS CANDAGES COMMINITY OF THE PARKS CANDAGES CANDA

2)



TE03879DN9 C

#### 34 GENERAL INFORMATION

4)

#### **A** WARNING

This unit contains high pressure nitrogen gas. Mishandling can cause explosion.

Do not incinerate puncture or open.

#### A AVERTISSEMENT

Cette unité contient de l'azote à haute pression. Une mauvaise manipulation peut entraÎner d'explosion.

Ne pas brûler ni perforer ni ouvrir.

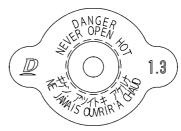
## ▲ 警告

高圧窒素ガス入りです。

取り扱いを誤ると爆発する恐れがあります。

● 火中への投入、穴あけ、分解はしないでください。

5)



TE03680D S

## 6) only on California model

# NOTICE

Never fill tank so fuel level rises into filler neck. If tank is overfilled, heat may cause fuel to expand and flow into Evaporative Emission Control System resulting in hard starting and engine hesitation.

56030-0357

56071-0158 TE03142C S

7)



8)



56033-0927

TE03491E S

9)



56053-1425 TE03835E S

TE03172CN9 C

## 10)



TE03304D S

# 11)



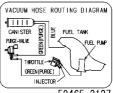
TE03300D S

## 11) only on California model



TE03301D S

## 12) only on California model



59465-2127

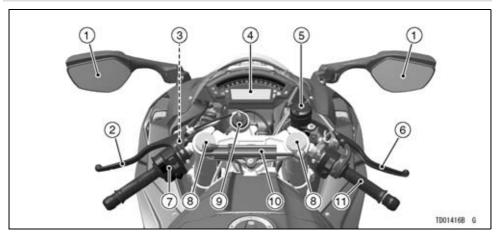
TE03501E S

## 13)

```
WFD. BY KAWASANI HEAVY INDUSTRIES, LTD.
DATE: $\infty \text{This Yehicle concorns} \text{To all applicable Federal Wolfor Yehicle} \text{SAFETY STAMPARDS IN EFFECT ON THE DATE DF WANUFACTURE SHOWN ABOVE GYBR $\infty$ LS. $\text{Earr Fixed Ls. } \text{Hin Example Sample Sampl
```

TE03303D S

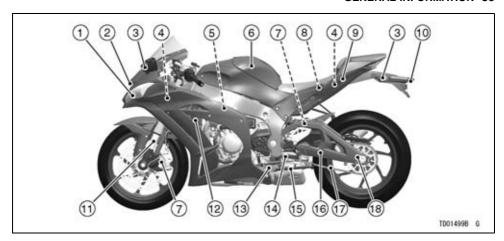
# **Location of Parts**



- 1. Rear View Mirrors
- 2. Clutch Lever
- 3. Starter Lockout Switch
- 4. Meter Instrument
- 5. Brake Fluid Reservoir (Front)
- 6. Front Brake Lever

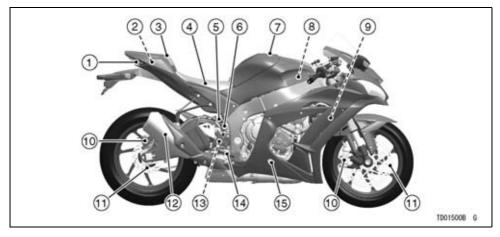
- 7. Left Handlebar Switches

- 8. Spring Preload Adjusters
  9. Ignition Switch/Steering Lock
  10. Electronic Steering Damper (ESD)
- 11. Throttle Grip



- 1. Headlight
- 2. Air Cleaner Intake
- 3. Turn Signal Lights
- 4. Fuse Boxes
- 5. Spark Plugs
- 6. Fuel Tank
- 7. Compression Damping Force Adjuster/Rebound Damping Force Adjuster
- 8. Battery

- 9. Seat Lock
- 10. License Plate Light
- 11. Front Fork
- 12. Radiator
- 13. Side Stand Switch
- 14. Shift Pedal
- 15. Side Stand
- 16. Swingarm
- 17. Drive Chain
- 18. Chain Adjuster



- 1. Tail/Brake Light
- 2. Tool Kit
- 3. Passenger's Seat
- 4. Rider's Seat
- 5. Rear Shock Absorber
- 6. Brake Fluid Reservoir (Rear)
- 7. Fuel Tank Cap
- 8. Air Cleaner

- 9. Coolant Reserve Tank
- 10. Brake Calipers
- 11. Brake Discs
- 12. Muffler
- 13. Rear Brake Light Switch
- 14. Brake Pedal
- 15. Oil Level Inspection Window

## **Meter Instruments**

- 1. Tachometer and Shift-up Indicator
- 2. Multifunction Meter
- 3. Ambient Brightness Sensor
- 4. Multifunction Display
  - Odometer
  - Trip Meter A/B
  - Current Mileage/Average Mileage/Fuel Consumption
  - Clock
  - Stop Watch
- 5. Speedometer
- 6. Gear Position Indicator
- 7. Power Mode Indicator
- 8. KEBC Mode Indicator
- 9. S-KTRC Mode Indicator
- 10. Economical Riding Indicator
- 11. Coolant and Intake Air Temperature Meter

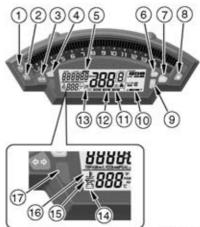
When the ignition switch is turned on, all LCD functions are shown for a few seconds, then the multifunction meter turns to operational mode.



## **Indicators**

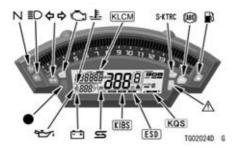
- 1. Neutral Indicator (Green)
- 2. ID High Beam Indicator (Blue)
- 3. 💠 Turn Signal Indicator (Green)
- 4. C Engine Warning Indicator (Yellow)
- 5. KLCM Indicator
- 6. S-KTRC Indicator (Yellow)
- 7. 

  ABS Indicator (Yellow)
- 8. Fuel Level Warning Indicator (Amber)
- 9. A Warning Indicator (Yellow)
- 10. KQS Indicator (Up/Down)
- 11. III ESD Indicator
- 12. IIII KIBS Indicator
- 13. 5 IMU\*1 Indicator
- 14. E Battery Warning Indicator
- 15. \*\*Oil Pressure Warning Indicator
- 16. La Coolant Temperature Warning Indicator
- 17. Warning Indicator (Red)



<sup>\*1:</sup> Inertial Measurement Unit

## Indicator Initial Operation



When the ignition switch is turned on, all indicators go on/off as shown in the table. If any indicator does not operate as shown, have it checked by an authorized Kawasaki dealer.

ON	8	A	Indicators
			Z ®, ¤
		•	• §
	•	•	A ESD EBS MORE RICHE
			<b>≣</b> D ♦♦

ON: When ignition switch is turned on.

After a few seconds.

When engine starts.

□: Goes on. Goes off.

\*: @ goes off shorty after the motorcycle starts moving.

# When Warning Indicators Go On or Blink

When warning indicators appear, there could be a problem with vehicle function. Follow actions in the table after stopping the vehicle in a safe place.

\*: The numbers in this column corresponds to reference numbers on page 42.

*No.	Indi- cators	Status	Actions
15	• \$	ON	This indicator goes on whenever the oil pressure is dangerously low or the ignition switch is turned on with the engine not running. If this indicator goes on when the engine speed is above idle, stop the engine immediately and check the engine oil level. If the amount of engine oil is insufficient, add engine oil. If the oil level is good, have the engine checked by an authorized Kawasaki dealer.
16 17	±	ON	This indicator goes on whenever the coolant temperature rises to about 115°C (239°F). Refer to the Coolant/Intake Air Temperature Meter for more information and follow instruction in it.

*No.	Indi- cators	Status	Actions
14	•	ON	These indicators go on if the battery voltage is less than 11.0 V or more than 16.0 V. If the voltage is less than 11.0 V, charge the battery. If the voltage is more than 16.0 V, or if indicators still go on after charging the battery, have the battery and/or charging system checked by an authorized Kawasaki dealer.
4	Q	ON The DFI system has malfunctioned. Have it checked by an authorized Kawasaki dealer.	
		ON* <sup>1</sup>	The ABS has malfunctioned. ABS and other electronic brake control system will not work but conventional brakes function. Have the ABS checked by an authorized Kawasaki dealer.
7	(B)	Blink (fast)	The battery voltage is too low for ABS to work normally. ABS will function with the low voltage mode and other electronic brake control system will not work. Turn the ignition switch off and charge the battery. If the battery is fully charged and the low voltage mode continues, have ABS checked by an authorized Kawasaki dealer.

*No.	Indi- cators	Status	Actions	
8		ON	The fuel level warning indicator goes on and the "FUEL" message blinks on the multifunction meter when approximately 3.8 L (1.0 US gal) of usable fuel remains. Refuel at the earliest opportunity. If the vehicle is on the side stand, the warning indicator cannot estimate the amount of fuel in the tank. Stand the vehicle upright to check the fuel level.	
		Blink	If the fuel level warning indicator and "FUEL" message blink, the fuel level warning system has malfunctioned. Have the fuel level warning system checked by an authorized Kawasaki dealer.	
5	(KLCM)	Blink	The KLCM system has malfunctioned. Have the KLCM system checked by an authorized Kawasaki dealer.	
9	Δ	ON		

*No.	Indi- cators	Status	Actions	
			If the warning indicator goes on and the power mode indicator* <sup>2</sup> blinks on the multifunction meter, the power mode system has malfunctioned. Have the power mode system checked by an authorized Kawasaki dealer.	
9	▲	ON	If the warning indicator goes on and the KEBC mode indicator* <sup>2</sup> blinks on the multifunction meter, the KEBC system has malfunctioned. Have the KEBC system checked by an authorized Kawasaki dealer.	
			If the warning indicator goes on and the S-KTRC mode indicator*2 blinks on the multifunction meter, the S-KTRC system has malfunctioned. The S-KTRC system or a part of S-KTRC system will not work, and the S-KTRC mode cannot be changed. Have the S-KTRC system checked by an authorized Kawasaki dealer.	
10	(KQS)	Blink	The KQS system has malfunctioned. Have it checked by	
9	$\triangle$	ON	an authorized Kawasaki dealer.	
11	ESD	Blink*3	The electronic steering damper system has malfunctioned Have it checked by an authorized Kawasaki dealer.	
9	$\triangle$	ON*3		

*No.	Indi- cators	Status	Actions	
12	KIBS)	Blink	The KIBS has malfunctioned. KIBS or a part of KIBS will	
9	Δ	ON	not work but ABS function. Have the KIBS checked by an authorized Kawasaki dealer.	
13	ធ	Blink	The IMU has malfunctioned. Have it checked by an	
9	$\triangle$	ON	authorized Kawasaki dealer.	

- \*1: ABS indicator may go on:
  - O After continuous riding on a rough road.
  - OWhen the engine is started with the stand raised and the transmission engaged, and the rear wheel turns.
  - OWhen accelerating so abruptly that the front wheel leaves the ground.
  - OWhen the ABS has been subjected to strong electrical interference.
  - OWhen tire pressure is abnormal. Adjust tire pressure.
  - OWhen a tire different in size from the standard size is being used. Replace with standard size.
  - OWhen the wheel is deformed. Replace the wheel.

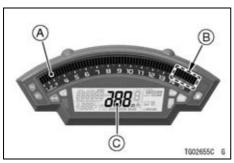
If this happens, first turn the ignition switch off, and then back on, and ride the motorcycle at 5 km/h (3.1 mph) or more. The ABS indicator should then go off. If it does not, have the ABS checked by an authorized Kawasaki dealer.

- \*2: Refer to the beginning of this section for indicator position.
- \*3: ESD (Electronic Steering Damper) indicator may blink and the warning indicator may go on when the ignition switch is turned on with the motorcycle moving. If this happens, first turn the ignition switch off, and then back on with the motorcycle completely stopped. The ESD and warning indicator should then go off. If they do not, have the ESD system checked by an authorized Kawasaki dealer.

## **Other Indicators**

*No.	Indicators	Status
1	Z	When the transmission is in neutral, this indicator goes on.
2	<b>■</b> D	When the headlight is on high beam, this indicator goes on.
3	ф	When the turn signal switch is pushed to the left or right, this indicator blinks.
5	(KLCM)	When the KLCM stands by, this indicator goes on. Refer to the Kawasaki Launch Control Mode (KLCM) section in the HOW TO RIDE THE MOTORCYCLE chapter for more information and follow instruction in it.
6	S-KTRC	When the S-KTRC functions, this indicator blinks.
10	(KQS)	When the KQS (upshifting or downshifting) mode is "ON," this indicator goes on.
13	ឆ	When the IMU functions, this indicator goes on.

## Speedometer/Tachometer



- A. Tachometer and Shift-up Indicator
- B. Red Zone
- C. Speedometer

# Speedometer

The speedometer is digital and can be set for km/h or mph.

The unit setting can be changed according to local regulations. Make sure the unit setting (km/h or mph) is correctly displayed before riding.

Refer to the Unit Setting in the Display Setting section.

## Tachometer

The tachometer shows the engine speed in revolutions per minute (r/min, rpm).

## NOTICE

Engine speed should not be allowed to enter the red zone; operation in the red zone will overstress the engine and may cause serious engine damage.

When the ignition switch is turned on, the tachometer segments momentarily sweeps from the minimum to the maximum reading, then back the minimum reading to check its operation. If

the tachometer does not operate correctly, have it checked by an authorized Kawasaki dealer.

The tachometer also serves as the shift-up indicator.

# Shift-up Indicator

The shift-up indicator can be used in closed course competition. Do not use the shift-up indicator during everyday riding.

The shift-up indicator can be used to indicate the timing for next up shift to prevent engine damage by blinking the shift-up indicator once a pre-set engine speed is reached.

## Shift-up Indicator Setting

 This function can be selected the blinking patterns and engine speed.
 Refer to the Shift-up Indicator Setting in the Setting Mode section.

# Coolant/Intake Air Temperature Meter

This meter show the coolant temperature or intake air temperature.

## **Temperature Display Setting**

 Refer to the Temperature Display Setting in the Setting Mode section.

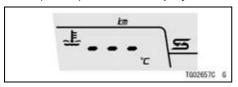
## Coolant Temperature Meter

The coolant temperature meter indicates temperature of the engine coolant.



A. Coolant Temperature Meter

If the coolant temperature is below  $40^{\circ}$ C ( $104^{\circ}$ F), "---" is displayed.



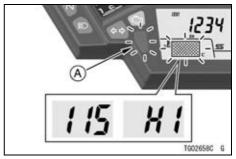
If the coolant temperature rises to above 115°C (239°F) and below 120°C (248°F), the numerical value of the current coolant temperature starts blinking, the warning indicator goes on. This warns the operator that the coolant temperature is high.

If the coolant temperature rises to 120°C (248°F) or more, "HI" is displayed and starts blinking, the warning indicator goes on. Stop the engine and check the coolant level in the reserve tank after the engine cools down. If the amount of the coolant is insufficient, add coolant to the reserve tank. If the

coolant level is good, have the cooling system checked by an authorized Kawasaki dealer.

## **NOTICE**

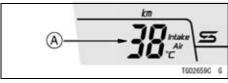
Stop the engine if the coolant temperature shows "HI." Prolonged engine operation will result in severe engine damage from overheating.



A. Warning Indicator (Red)

# Intake Air Temperature Meter

The intake air temperature meter indicates the air temperature in the air cleaner housing.



A. Intake Air Temperature Meter

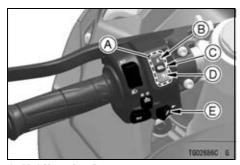
## NOTE

 The intake air temperature meter shift to the coolant temperature meter automatically if the coolant temperature rises to above 115°C (239°F).  When the battery is reconnected, the meter display is set to coolant temperature meter by default.

# **Display Setting**

# Multifunction Buttons and Lap Switch

The multifunction buttons and lap switch on the left handlebar switches are used to operate the various functions displayed in the multifunction meter.



A. Multifunction Buttons

**B.** Upper Button

C. "SEL" Button

D. Lower Button E. Lap Switch

With these buttons you can select desired functions. Refer to each section for procedure for selection.

Functions	"SEL" But- ton	Up- per/Lower Buttons	Lap Switch
S-KTRC Mode	_	•	1
Multifunction Display Mode	•	-	-
Numerical Value Reset	-	-	1
Shifting to Setting Mode	1	ı	1
Setting Mode	•	•	_

: Push/Turn and hold.

## To select S-KTRC Mode:

 Refer to the Sport-Kawasaki TRaction Control (S-KTRC) section in the HOW TO RIDE THE MOTORCYCLE chapter.

To select **Multifunction** Display Mode:

 Push the "SEL" button to select the display mode. The display modes can be shifted in the following order.

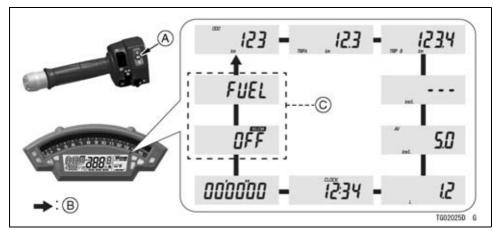
### NOTE

 The multifunction display is displayed in the unit depending on the unit setting.

#### **Multifunction Display Items**

Odometer
Trip Meter A
Trip Meter B
Current Mileage
Average Mileage
Fuel Consumption
Clock
Stop Watch
KLCM OFF Warning Message*
Fuel Level Warning Message*

\*: When occurred.



A. "SEL" Button

B. Flow when pushing "SEL" button

C. Warning Messages

## To select **Setting Mode**:

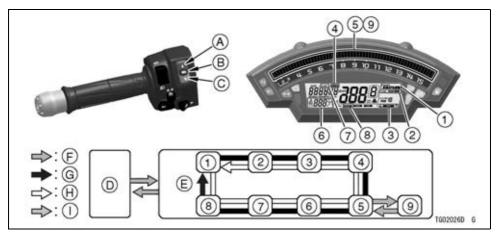
- Push and hold the "SEL" button to shift to the setting mode.
- Push the upper button or lower button to select the setting mode. The setting modes can be shifted in the following order.

## NOTE

- O When the vehicle speed exceeds 5 km/h (3 mph), the meter ends the setting mode and shifts to the ordinary display.
- The meter instrument cannot shift to the setting mode while the KLCM is setting.

## **Setting Mode Items**

JE	iting wode items
1	Power Mode Setting
2	KEBC Setting
3	KQS Setting (Up/Down)
4	KLCM Setting
5	Shift-up Indicator Setting
6	Temperature Display Setting
7	Clock Setting
8	Setting Reset
9	Meter Illumination Brightness Setting



- A. Upper Button
- B. "SEL" Button
- C. Lower Button
- D. Ordinary Display
- E. Setting Mode
- F. Flow when pushing and holding "SEL" button
- G. Flow when pushing upper button
- H. Flow when pushing lower button
- I. Flow when pushing and holding upper button

## Multifunction Display

#### Odometer

The odometer shows the total distance. This meter cannot be reset.

 Push the "SEL" button to display the odometer.

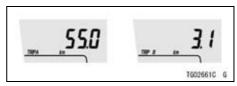


#### NOTE

 When the figures come to 999999, the display is stopped and locked.

## **Trip Meter**

 Push the "SEL" button to display the trip meter A/B.



To reset the trip meter:

 Turn the lap switch rightward and hold it until the display turns to 0.0.

#### NOTE

When the trip meter reaches 9999.9
 while riding, the meter resets to 0.0
 and continues counting.

## **Current Mileage**

The current mileage display is renewed every 4 seconds.

 Push the "SEL" button to display the current mileage.



#### NOTE

O When the ignition switch is turned on, the numerical value shows "- -. -." After a few seconds of riding the numerical value is displayed.

## Average Mileage

This display shows the average fuel consumption from the reset. The average mileage display is renewed every 5 seconds.

 Push the "SEL" button to display the average mileage.



To reset the average mileage:

 Turn the lap switch rightward and hold it until the average mileage values resets to "- -. -."

## NOTE

- O When the battery is disconnected, the average mileage resets to "- -.
- After resetting the average mileage, the numerical value is not displayed until the vehicle has travelled 100 m (328 ft).

## **Fuel Consumption**

This display shows the fuel consumption by numerical value counted

from the start of measuring to present time. The fuel consumption display is renewed every 4 seconds.

 Push the "SEL" button to display the fuel consumption.



To reset the fuel consumption:

 Turn the lap switch rightward and hold it until the fuel consumption values resets to 0.0.

## NOTE

O When the battery is disconnected, the fuel consumption resets to 0.0.

#### Clock

To adjust the clock:

Refer to the Clock Setting in the Setting Mode section.

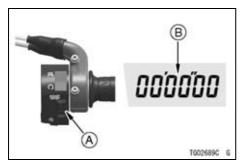
#### NOTE

 When the battery is disconnected, the clock is reset to 1:00 and starts working again when the battery is connected.

## Stop Watch

The stop watch is operated as follows:

- Push the "SEL" button to display the stop watch.
- Turn the start/stop switch leftward.
   The stop watch starts timing laps.



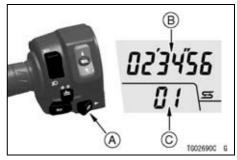
A. Start/Stop Switch

- B. Stop Watch
- After each lap, turn the lap switch rightward. The stop watch starts timing the next lap and the previous lap time is displayed for 10 seconds.

## NOTE

O The lap time can be stored for a maximum of 99 times.

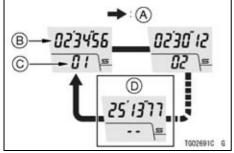
- OWhen the battery is disconnected, the stop watch is reset and erase all lap numbers and times.
- To stop the stop watch, turn the start/stop switch leftward.



A. Lap Switch

- B. Lap Time
- C. Lap Number
- To display each measured lap time, turn the lap switch rightward while stopping the stop watch.

 The measured lap time is switched each time the lap switch is turned.
 When no lap number is displayed, the displayed time is the total time of all timed laps.



- A. Flow when turning lap switch
- B. Lap Time
- C. Lap Number
- D. Total Lap Time

To reset the stop watch and erase all lap numbers and times:

 Turn the lap switch rightward and hold it until the stop watch values resets to "00'00"00."

# **Unit Setting**

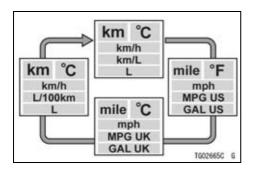
The unit setting in the meter instrument can be changed according to local regulations. Make sure the unit setting is correctly displayed before riding.

## NOTE

- O Do not operate the motorcycle with wrong unit (mph or km/h) of the speedometer.
- The unit setting can be selected from four unit types.

#### To set the units:

- Push the "SEL" button to display the odometer.
- Push the "SEL" button while turning the lap switch rightward. The display units can be shifted in the following order.



# **Setting Mode**

# Power Mode Setting

The power mode can be selected from three modes.

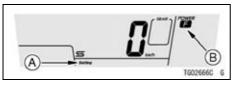
Mode	Engine Power Output
F	Full Power
М	Middle Power (About 80%)
L	Low Power (About 60%)

## NOTE

Off the power mode system has any problem, it cannot select the mode.

## To set the setting:

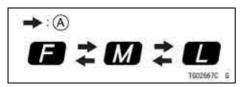
- Push and hold the "SEL" button to display the setting mode.
- Push the upper button or lower button to display the power mode indicator.



A. "Setting" Segment

B. Power Mode Indicator

- Push the "SEL" button. The power mode indicator starts blinking.
- Push the upper button or lower button to select the "F," "M" or "L."



A. Flow when pushing upper or lower button

Push the "SEL" button.

## **KEBC Setting**

The engine braking force can be selected from two modes.

Mode	Engine Braking Force
OFF	Normal (Initial Setting)
L (Light)	Smallest

## NOTE

 If the KEBC system has any problem, it cannot select the mode.

To set the setting:

- Push and hold the "SEL" button to display the setting mode.
- Push the upper button or lower button to display the KEBC mode indicator.



A. "Setting" Segment B. KEBC Mode Indicator

- Push the "SEL" button. The KEBC indicator starts blinking.
- Push the upper button or lower button to select the "OFF" or "L."



A. Flow when pushing upper and lower button

Push the "SEL" button.

# KQS Setting (Up/Down)

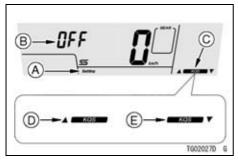
The KQS system can be selected from on or off.

#### NOTE

- The upshifting and downshifting can be set separately.
- O If the KQS system has any problem. it cannot select the mode.
- The initial setting is "OFF."

## To set the setting:

- Push and hold the "SEL" button to display the setting mode.
- Push the upper button or lower button to display the KQS indicator (upshifting or downshifting). The current setting appears on the multifunction display.



- A. "Setting" Segment
- **B. Current Setting**
- C. KQS Indicator
- D. Upshifting
- E. Downshifting
- Push the "SEL" button. The current setting starts blinking.
- Push the upper button or lower button to select the "OFF" or "ON."



- A. Flow when pushing upper or lower button
- Push the "SEL" button.

# KLCM Setting

The KLCM can be used in closed course competition. Do not use the KLCM during everyday riding.

The KLCM can be selected from three modes.

Mode	Acceleration Level
1	High (Initial Setting)
2	Middle
3	Low

#### NOTE

○ If the KLCM system has any problem, "OFF" is displayed in the multifunction display and it cannot select the mode

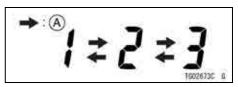
## To set the setting:

- Push and hold the "SEL" button to display the setting mode.
- Push the upper button or lower button to display the KLCM indicator. The current mode appears on the multifunction display.



- A. "Setting" Segment
- **B. Current Mode**
- C. KLCM Indicator

- Push the "SFI" button. The current. mode starts blinking.
- Push the upper button or lower button to select the mode.



A. Flow when pushing upper or button

Push the "SEL" button.

# Shift-up Indicator Setting

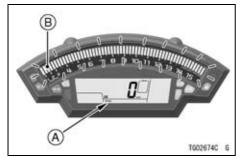
The shift-up indicator can be used in closed course competition. Do not use the shift-up indicator during everyday riding.

The shift-up indicator can be selected the blinking pattern from three modes.

The shift-up engine speed can be adjusted between 9 500 r/min (rpm) and 14 000 r/min (rpm).

To set the setting:

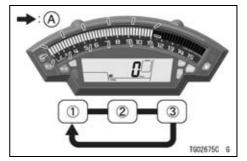
- Push and hold the "SEL" button to display the setting mode.
- Push the upper button or lower button to blink the shift-up indicator.



- A. "Setting" Segment
- B. Shift-up Indicator (Tachometer)
- Push the "SEL" button. The current shift-up engine speed starts blinking with the current pattern.

 Push the upper button and select the blinking pattern from following.

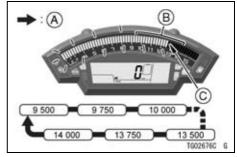
Mode	Blinking Pattern
1	Fast Blinking (Initial Setting)
2	Slow Blinking
3	Non Blinking



- A. Flow when pushing upper button
- Push the lower button and adjust the shift-up engine speed.

#### NOTE

- O When pushing the lower button, the shift-up engine speed increases in 250 r/min (rpm) increments up to 14 000 r/min (rpm).
- O If the shift-up engine speed increases up to 14 000 r/min (rpm), it returns to 9 500 r/min (rpm) and begin increasing.
- O The initial setting is 11 000 r/min (rpm).



- A. Flow when pushing lower button
- B. Adjustable Range
- C. Current Setting
- Push the "SEL" button.

## **A** WARNING

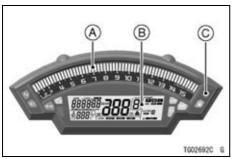
Failing to properly observe the road ahead increases the chance of an accident. Do not concentrate on the shift-up indicator by taking your eyes off the road, observe using peripheral vision. When shifting down to a lower gear, do not shift at such a high speed that the engine r/min (rpm) jumps excessively. Not only can this cause engine damage, but the rear wheel may skid and cause an accident. Downshifting should be done below 5 000 r/min (rpm) for each gear.

#### **NOTICE**

Engine speed should not be allowed to enter the red zone; operation in the red zone will overstress the engine and may cause serious engine damage.

## Meter Illumination Brightness Setting

The brightness of the tachometer and the multifunction meter are controlled automatically depending on the ambient brightness.



- A. Tachometer
- **B. Multifunction Meter**
- C. Ambient Brightness Sensor

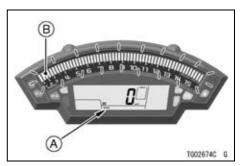
#### NOTE

 Be careful not to cover the ambient brightness sensor on the meter instrument while riding the motorcycle.

The brightness can be adjusted manually in three levels.

To set the setting:

- Push and hold the "SEL" button to display the setting mode.
- Push the upper button or lower button to display the shift-up indicator setting.
- Push the "SEL" button.
- Push the upper button and hold it until all tachometer segments go on.



- A. "Setting" Segment
- B. Tachometer

 Push the lower button to select the brightness level.

Mode	Brightness
1	Bright (Initial Setting)
2	Medium
3	Dark

Push the "SEL" button.

## Temperature Meter Setting

The temperature meter can be selected from the coolant temperature or intake air temperature.

#### To set the setting:

- Push and hold the "SEL" button to display the setting mode.
- Push the upper button or lower button to display the temperature meter.



- A. "Setting" Segment
- B. Coolant/Intake Air Temperature Meter
- Push the "SEL" button. The current meter starts blinking.
- Push the upper button or lower button to select the coolant temperature or intake air temperature.



- A. Flow when pushing upper or lower button
- Push the "SEL" button.

## Clock Setting

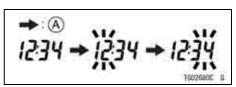
To adjust the clock:

- Push and hold the "SEL" button to display the setting mode.
- Push the upper button or lower button to display the clock. The current time appears on the multifunction display.



A. "Setting" Segment B. Current Time

Push the "SEL" button to select the hour or minute digits.



#### A. Flow when pushing "SEL" button

- Push the upper button or lower button to adjust the hour or minute digits
- To finish the adjustment, push the "SFI" button

## Setting Reset

The following settings of the meter can be reset. Other settings are not reset.

**Initial Setting** 

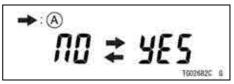
Meter Illumination Brightness	1 (Brightest)
KEBC	OFF
KQS (Up/Down)	OFF
KLCM	1
Shift-up Indicator Blinking Pattern	Fast Blinking
Shift-up Engine Speed	11 000 r/min (rpm)
S-KTRC	1

#### To reset the setting:

- Push and hold the "SEL" button to display the setting mode.
- Push the upper button or lower button to display the reset segment.
- Push the "SEL" button. The "NO" appears on the multifunction display.



- A. "Setting" Segment
- B. "NO"
- C. "RESET" Segment
- Push the upper button or lower button to select the "NO" or "YES."



- A. Flow when pushing upper or lower button
- Push the "SEL" button. When select the "YES," starting the mode reset.

#### NOTE

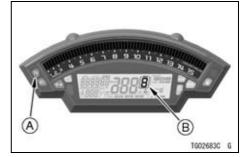
O When turning off the ignition switch while resetting, the mode reset is not carried out.

#### **Features**

#### Gear Position Indicator

This display shows the corresponding gear position when the transmission is shifted. As the transmission is shifted, the corresponding gear position (1st ~ 6th) is shown in this display.

When the transmission is in neutral. nothing is displayed, and the neutral indicator goes on.



- A. Neutral Indicator
- B. Gear Position Indicator

#### Economical Riding Indicator

When riding the motorcycle efficiently, the economical riding indicator appears on the multifunction meter to indicate favorable fuel consumption. Monitoring the economical riding indicator can help the rider maximize fuel efficiency.



A. Economical Riding Indicator

## **A** WARNING

Failing to properly observe the road ahead increases the chance of an accident resulting in severe injury or death. Do not concentrate on the economical riding indicator by taking your eyes off the road; observe using peripheral vision.

#### Power Mode Indicator

This display shows the current mode of the power mode.

Refer to the Power Mode section in the HOW TO RIDE THE MOTORCY-CLE chapter.

#### **Power Mode Setting**

 Refer to the Power Mode Setting in the Setting Mode section.

#### **KEBC Mode Indicator**

This display shows the current mode of the KEBC.

Refer to the Kawasaki Engine Brake Control (KEBC) section in the HOW TO RIDE THE MOTORCYCLE chapter.

#### **KEBC Mode Setting**

 Refer to the KEBC Setting in the Setting Mode section.

#### S-KTRC Mode Indicator

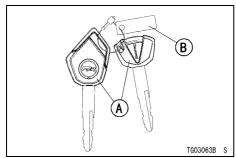
This display shows the current mode of the S-KTRC.

Refer to the Sport-Kawasaki TRaction Control (S-KTRC) section in the

HOW TO RIDE THE MOTORCYCLE chapter.

## **Keys**

You will need the key number or spare key to have a duplicate made.



A. Ignition Key B. Kev Number Tag

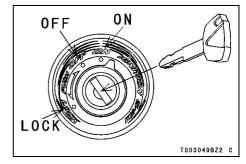
If you lose all keys and the key number, you will need to replace the ignition switch and all other locks operated by that key.

Contact your Kawasaki dealer to purchase additional spare keys.

## **Ignition Switch/Steering** Lock

This is a three-position, key-operated switch.

The key can be removed when it is in the "OFF" or "LOCK" position.



ON	<ul> <li>Engine can be started.</li> <li>All electrical equipment can be used.</li> <li>Key cannot be removed.</li> </ul>
OFF	<ul><li>Engine off.</li><li>Electrical equipment is off.</li><li>Key can be removed.</li></ul>
LOCK	<ul> <li>Steering locked.</li> <li>Engine off.</li> <li>Electrical equipment is off.</li> <li>Key can be removed.</li> </ul>

#### For locking:

- 1. Turn the handlebars fully to the left.
- 2. Push the key down in the "OFF" position and turn it to "LOCK."



## **A** WARNING

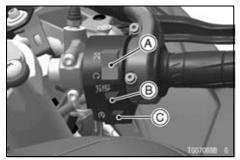
Turning the ignition switch to the "OFF" position while riding the motorcycle shuts down the entire electrical system (headlight, brake light, turn signal light, etc) and the engine will stop, which could cause an accident resulting in severe injury or death. Never operate the ignition switch while riding the motorcycle; only operate it when the motorcycle is at a standstill.

#### NOTE

- O The tail, city and license plate lights are on whenever the ignition key is in the "ON" position. The headlight goes on when the starter button is released after starting the engine.
- O Do not leave the ignition switch at the "ON" position for an extended time

with the engine stopped, or the battery may become totally discharged.

## **Right Handlebar Switches**



- A. Engine Stop Switch
- B. Start/Stop Switch (for Stop Watch)
- C. Starter Button

#### 

Refer to the Starting the Engine section in the HOW TO RIDE THE

MOTORCYCLE chapter for starting instructions.

#### Start/Stop Switch (for Stop) Watch)

Refer to the Multifunction Display in the Display Setting section for stop watch instructions.

#### **Engine Stop Switch**

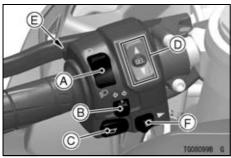
To stop the engine in an emergency, move the engine stop switch to the position.

Ordinarily, the engine stop switch must be in the oposition for the motorcycle to operate.

#### NOTE

- Ordinarily, the ignition switch should be used to stop the engine.
- O Although the engine stop switch stops the engine, it does not turn off all the electrical circuits and eventually the battery will be discharged.

#### **Left Handlebar Switches**



- A. Dimmer Switch
- **B. Turn Signal Switch**
- C. Horn Button
- D. Multifunction Button
- E. Passing Button
- F. Lap Switch

#### **Dimmer Switch**

High or low beam can be selected with the dimmer switch.

High beam... 

(High beam indicator: see Meter Instruments section)

#### **NOTE**

O Do not allow anything to cover the headlight lens when the headlight is on. If covered, heat can build up in the headlight lens causing lens discoloration or melting, as well as damage to the item covering the lens.

## **Turn Signal Switch**

When the turn signal switch is turned to the left ( ⇔ ) or right ( ⇔ ) the corresponding turn signal lights and turn signal indicator blinks. To cancel the turn signal, push the switch in.

## Horn Button

When the horn button is pushed, the horn sounds.

#### Multifunction Button

The multifunction button is used for setting the meter display and S-KTRC mode.

Meter: Refer to the Display Setting

and Setting Mode sections.

S-KTRC: Refer to the Sport-Kawasaki

TRaction Control (S-KTRC) section in the HOW TO RIDE THE MOTORCYCLE chapter.

## Passing Button States

The high beam turns on only while the passing button is pushed.

## Lap Switch

The lap switch is used for stop watch and setting the meter.

Refer to the Multifunction Display in the Display Setting section.

## **Brake Lever Adjuster**

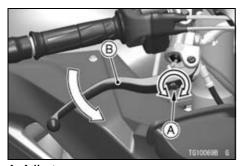
#### NOTICE

Only adjust the front brake lever position as shown below. not attempt to make any other adjustments to the front brake lever and master cylinder. If any brake adjustment is required other than the brake lever position, consult your authorized Kawasaki dealer.

While pushing the brake lever forward, turn the adjuster and choose a suitable lever position.

[Rrake | ever Adjustment]

LD: a.ko _0.0.	, iajaoii.			
Adjuster	Turn in	<b>←</b>	$\rightarrow$	Turn out
Lever Position	Far	←	$\rightarrow$	Near



A. Adjuster B. Brake Lever

#### **Fuel**

## **A** WARNING

Gasoline is extremely flammable and can be explosive under certain conditions, creating the potential for serious burns. Turn the ignition switch off.

Do not smoke.

Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

## **Fuel Requirements**

Use clean, fresh unleaded gasoline with the following conditions.

Antiknock Index of 90 or more Up to 10% of ethanol contained

#### NOTICE

Use only unleaded gasoline. Never use leaded gasoline. Leaded gasoline significantly reduces the capability of the catalytic converter in the exhaust system.

#### NOTICE

Use minimum of 90 octane gasoline only to prevent severe engine damage.

#### NOTICE

If engine "knocking" or "pinging" occurs, use a different brand of gasoline of a higher octane rating. If this condition is allowed to continue it can lead to severe engine damage. Gasoline quality is important. Fuels of low quality or not meeting standard industry specifications may result in unsatisfactory performance. Operating problems that result from the use of poor quality or nonrecommended fuel may not be covered under your warranty.

#### **NOTICE**

Avoid using blends of unleaded gasoline and methanol (wood alcohol) whenever possible, and never use "gasohol" containing more than 5% methanol. Fuel system damage and performance problems may result.

#### NOTE

Other oxygenates approved for use in unleaded gasoline include TAME (up to 16.7%) and ETBE (up to 17.2%). Fuel containing these oxygenates can also be used in your Kawasaki.

#### NOTICE

Never use gasoline with an octane rating lower than the minimum specified by Kawasaki. Never use "gasohol" with more than 10% ethanol, or more than 5% methanol.

Gasoline containing methanol must also be blended with cosolvents and corrosion inhibitors. Certain ingredients of gasoline may cause paint fading or damage. Be extra careful not to spill gasoline or gasoline oxygenate blends during refueling.

When not operating your Kawasaki for 30 to 60 days, mix a fuel stabilizer (such as STA-BIL) with the gasoline in the fuel tank. Fuel stabilizer additives inhibit oxidation of the fuel which minimizes gummy deposits.

## Fuel Type and Octane Rating

Use clean, fresh unleaded gasoline. The Antiknock Index is posted on service station pumps. The octane rating of a gasoline is a measure of its resistance to detonation or "knocking." The Antiknock Index is an average of the Research Octane Number (RON) and the Motor Octane Number (MON) as shown in the table

Fuel Type	Unleaded Gasoline
Ethanol Content	E10 or less
Antiknock Index	90 or more

#### NOTICE

Do not use any fuel that contains more ethanol or other oxygenates than specified for E10 fuel\* in this vehicle. Damage to the engine and fuel system, or engine starting and/or performance problems may result from the use of improper fuel.

\*E10 means fuel containing up to 10% ethanol.

## Filling the Tank

Avoid filling the tank in the rain or where heavy dust is blowing so that the fuel does not get contaminated.

## **A** WARNING

Gasoline is extremely flammable and can be explosive under certain conditions, creating the potential for serious burns. Turn the ignition switch off. Do not smoke.

Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light. Never fill the tank completely to the top.

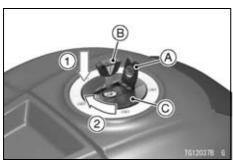
If the tank is filled completely to the top, heat may cause the fuel to expand and overflow through the vents in the tank cap.

After refueling, make sure the tank cap is closed securely. If gasoline is spilled on the fuel tank, wipe it off immediately.

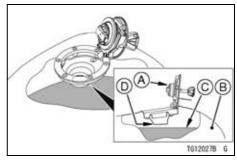
#### **NOTICE**

California model only: Never fill the tank so the fuel level rises into the filler neck. If the tank is overfilled, heat may cause the fuel to expand and flow into the Evaporative Emission Control System resulting in hard starting, engine hesitation and non-compliance with the emission regulation.

- Lift the key hole cover.
- Insert the ignition key into the fuel tank cap.
- Turn the key clockwise while pushing down the fuel tank cap.



- A. Key Hole Cover
- B. Ignition Key
- C. Fuel Tank Cap
- Open the fuel tank cap.
- Add fuel.



- A. Tank Cap
- B. Fuel Tank
- C. Top Level
- D. Bottom of Filler Neck (Maximum Fuel Level)

#### NOTE

- ODo not exceed the maximum fuel level as shown.
- Push the fuel tank cap down into place with the key inserted.

- The key can be removed by turning counterclockwise to the original position.
- Close the key hole cover.

#### **NOTICE**

Never fill the tank completely to the top.

If the tank is filled completely to the top, heat may cause the fuel to expand and overflow through the vents in the tank cap. After refueling, make sure the

tank cap is closed securely.

If gasoline is spilled on the fuel tank, wipe it off immediately.

#### NOTE

 The fuel tank cap cannot be closed without the key inserted, and the key

- cannot be removed unless the cap is locked properly.
- O Do not push on the key to close the cap, or the cap cannot be locked.

## Side Stand

Always kick the stand fully up before moving the motorcycle. The engine will stop automatically if the motorcycle is in gear and the clutch is released with the side stand down.

#### NOTE

- O When using the side stand, turn the handlebars to the left.
- Make sure the side stand is down securely before leaving the motorcycle.
- O Do not sit on the motorcycle while it is on its side stand.

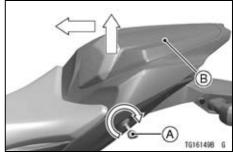
## **Single Seat Cover**

#### NOTE

O Do not carry any passenger when the single seat cover is installed on the motorcycle.

#### Single Seat Cover Removal

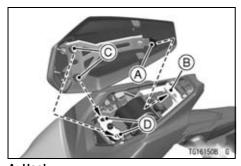
- Insert the ignition key into the seat lock
- Lift the front part of the single seat cover upward while turning the key clockwise.
- Remove the single seat cover forward.
- Remove the ignition key.



A. Ignition Key **B. Single Seat Cover** 

#### Single Seat Cover Installation

- Insert the hook on the rear of the single seat cover into the slot in the frame
- Insert the projections at the front of the single seat cover into the latch holes on the frame.
- Push down the front part of the single seat cover until the lock clicks

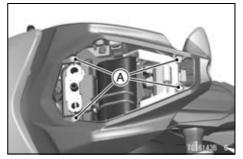


- A. Hook
- B. Slot
- C. Projections
- D. Latch Holes
- Pull up the front and rear ends of the single seat cover to make sure they are securely locked.

## Seat

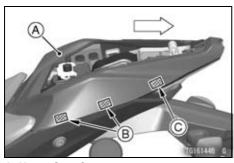
#### Rider's Seat Removal

- Remove the single seat cover (see Single Seat Cover Removal).
- Remove the seat cover bolts and washers.

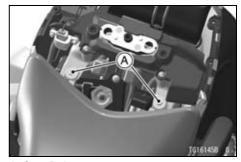


A. Seat Cover Bolts and Washers

 Remove the upper seat cover backward to clear the hook portions.

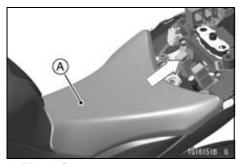


- A. Upper Seat Cover
- B. Hooks (Both Sides)
- C. Hook and Slot (Both Sides)
- Remove the seat bolts.



#### A. Seat Bolts

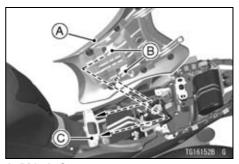
Remove the rider's seat backward.



A. Rider's Seat

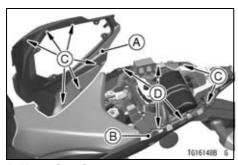
#### Rider's Seat Installation

• Insert the hooks on the rider's seat under the fuel tank bracket.



A. Rider's Seat

- B. Hooks
- C. Fuel Tank Bracket
- Tighten the seat bolts.
- Fit the hook portions of the upper seat cover to the slots and hooks of the lower seat cover.



A. Upper Seat Cover

B. Lower Seat Cover

C. Hooks

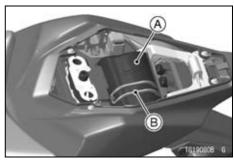
D. Slots

- Tighten the seat cover bolts together with the washers
- Install the single seat cover (see Single Seat Cover Installation).

## **Tool Kit**

The tool kit is located under the single seat cover.

Keep the tool kit in the original place. Hold the tool kit with the band securely.

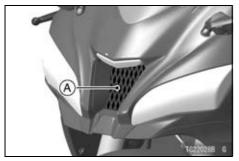


A. Tool Kit B. Band

## Air Cleaner Intake

The air cleaner intake allows air to enter the fuel system. Never allow anything to restrict the flow of air into the air cleaner. A restricted air cleaner will

reduce performance and increase exhaust emissions.



A. Air Cleaner Intake

## **Event Data Recorder**

In common with many other vehicle manufacturers, Kawasaki has equipped this motorcycle with an event data recorder (EDR). The purpose of this device is to record data that assists with understanding of how some of the

vehicle's systems were performing during a short period of time immediately before and during an accident or similar event involving minor damage. Due to accident variables, all vehicle performance data may not be stored on the EDR.

#### NOTE

- During normal riding, data is recorded but not saved unless the vehicle is involved in an accident event.
- At no time other than in the event of an accident or similar event involving minor damage is it possible for EDR data to be stored for retrieval.
- Depending on the type of accident event, it is possible that the EDR may not record some or all of the data, or it may not record if the EDR is damaged.

 This device does not collect or store personal data or information (e.g. name, gender, age).

The EDR in this vehicle is designed to record only data that is relevant to the vehicle's running condition at the time of an accident like, but not limited to, vehicle speed, engine crankshaft rotational speed and throttle opening, etc.

This data can help provide a better understanding for both the rider and the

manufacturer of how the vehicle was performing at the time of an accident or near accident-like situation

To access information on an EDR. special equipment and access to the EDR is required. Kawasaki will not share EDR information without obtaining your consent, unless required by government authorities, or acting pursuant to lawful authority.

## **HOW TO RIDE THE MOTORCYCLE**

#### Break-In

The first 1 600 km (1 000 mile) that the motorcycle is ridden is designated as the break-in period. If the motorcycle is not used carefully during this period, you may very well end up with a "broken down" instead of a "broken in" motorcycle after a few thousand kilometers.

The following rules should be observed during the break-in period.

 The table shows maximum recommended engine speed during the break-in period.

Distance traveled	Maximum engine speed
0 ~ 800 km (0 ~ 500 mile)	4 000 r/min (rpm)
800 ~ 1 600 km (500 ~ 1 000 mile)	6 000 r/min (rpm)

#### NOTE

- When operating on public roadways, keep maximum speed under traffic law limits.
- Do not start moving or race the engine immediately after starting it, even if the engine is already warm.
   Run the engine for two or three minutes at idle speed to give the oil a chance to work up into all the engine parts.

• Do not race the engine while the transmission is in neutral.

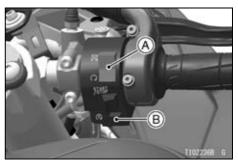
## **A** WARNING

New tires are slippery and may cause loss of control and injury. A break-in period of 160 km (100 miles) is necessary to establish normal tire traction. During break-in, avoid sudden and maximum braking and acceleration, and hard cornering.

In addition to the above, at 1 000 km (600 mile) it is extremely important that the owner has the initial maintenance service performed by an authorized Kawasaki dealer.

## **Starting the Engine**

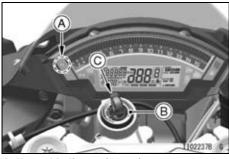
 Check that the engine stop switch is in the oposition.



A. Engine Stop Switch

- B. Starter Button
- Turn the ignition key to "ON" position.
- Make sure the transmission is in neutral.

#### 100 HOW TO RIDE THE MOTORCYCLE



- A. Neutral Indicator (Green)
- **B.** Ignition Switch
- C. ON Position

#### NOTE

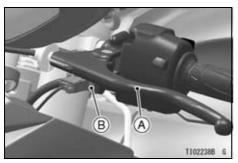
O The motorcycle is equipped with a vehicle-down sensor which causes the engine to stop automatically if the motorcycle falls down. After righting the motorcycle, first turn the ignition key to "OFF" and then back to "ON" before starting the engine.  Without holding the throttle grip, push the starter button to start the engine.

#### **NOTICE**

Do not operate the starter continuously for more than 5 seconds, or the starter will overheat and the battery power will drop temporarily. Wait 15 seconds between each operation of the starter to let it cool and the battery power recover.

#### NOTE

The motorcycle is equipped with a starter lockout switch. This switch is designed so that the engine does not start if the transmission is in gear and the side stand is down. However, the engine can be started if the clutch lever is pulled and the side stand is fully up.



A. Clutch Lever
B. Starter Lockout Switch

## **NOTICE**

Do not let the engine idle longer than 5 minutes, or engine overheating and damage may occur.

## **Moving Off**

- Check that the side stand is up.
- Pull in the clutch lever.
- Shift into 1st gear.
- Open the throttle a little, and start to let out the clutch lever very slowly.
- As the clutch starts to engage, open the throttle a little more, giving the engine just enough fuel to keep it from stalling.

#### NOTE

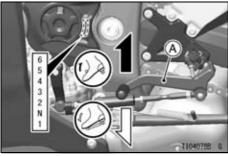
The motorcycle is equipped with a side stand switch. This switch is designed so that the engine does not start if the transmission is in gear and the side stand is down.

## **Shifting Gears**

 Close the throttle while pulling in the clutch lever.

#### 102 HOW TO RIDE THE MOTORCYCLE

 Shift into the next higher or lower gear.



#### A. Shift Pedal

- Open the throttle part way, while releasing the clutch lever.
- For smooth riding, each gear position should cover the proper rate of speed shown in the table.

## **A** WARNING

Downshifting to a lower gear at high speed causes engine rpm to increase excessively, potentially damaging the engine and it may also cause the rear wheel to skid and cause an accident. Downshifting should be done below the vehicle speeds for each gear shown in the table.

#### Vehicle speed when shifting

Shifting up	km/h (mph)
1st $\rightarrow$ 2nd	15 ( 9)
2nd → 3rd	25 (15)
3rd → 4th	35 (21)
4th → 5th	45 (27)
5th → 6th	55 (34)

Shifting down	km/h (mph)
6th → 5th	30 (19)
5th → 4th	25 (15)
4th → 3rd	20 (12)
3rd → 2nd	15 ( 9)
2nd → 1st	15 ( 9)

#### NOTE

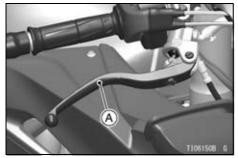
The transmission is equipped with a positive neutral finder. When the motorcycle is standing still, the transmission cannot be shifted past neutral from 1st gear. To use the positive neutral finder, shift down to 1st gear, then lift up on the shift pedal while standing still. The transmission will shift only into neutral.

## **Braking**

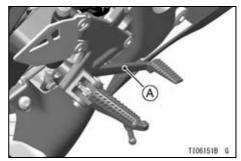
- Close the throttle completely, leaving the clutch engaged (except when shifting gears) so that the engine will help slow down the motorcycle.
- Shift down one gear at a time so that you are in 1st gear when you come to a complete stop.
- When stopping, always apply both brakes at the same time. Normally the front brake should be applied a little more than the rear. Shift down or fully disengage the clutch as necessary to keep the engine from stalling.
- Never lock the brakes, or it will cause the tires to skid. When turning a corner, it is better not to brake at all. Reduce your speed before you get into the corner.
- For emergency braking, disregard downshifting, and concentrate on

#### 104 HOW TO RIDE THE MOTORCYCLE

- applying the brakes as hard as possible without skidding.
- Even in motorcycles equipped with ABS, braking during cornering may cause wheel slip. When turning a corner, it is better to limit braking to the light application of both brakes or not to brake at all. Reduce your speed before you get into the corner.



A. Front Brake Lever



A. Rear Brake Pedal

# Anti-lock Brake System (ABS)

ABS is designed to help prevent the wheels from locking up when the brakes are applied hard while running straight. The ABS automatically regulates brake force. Intermittently gaining gripping force and braking force helps prevent wheel lock-up and allows stable steering control while stopping.

Brake control function is identical to that of a conventional motorcycle. The brake lever is used for the front brake and the brake pedal for the rear brake.

Although the ABS provides stability while stopping by preventing wheel lock-up, remember the following characteristics:

- To apply the brake effectively, use the front brake lever and rear brake pedal simultaneously in the same manner as conventional motorcycle brake system.
- ABS cannot compensate for adverse road conditions, misjudgment or improper application of brakes. You must take the same care as with motorcycles not equipped with ABS.
- ABS is not designed to shorten the braking distance. On loose, uneven

or downhill surfaces, the stopping distance of a motorcycle with ABS may be longer than that of an equivalent motorcycle without ABS. Use special caution in such areas.

- ABS will help prevent wheel lock-up when braking in a straight line, but it cannot control wheel slip which may be caused by braking during cornering. When turning a corner, it is better to limit braking to the light application of both brakes or not to brake at all. Reduce your speed before you get into the corner.
- Same as conventional brake system, an excessive sudden braking may cause wheel lock up that makes it harder to control a motorcycle.
- During braking, ABS will not prevent the rear wheel lifting.

## **A** WARNING

ABS cannot protect the rider from all possible hazards and is not a substitute for safe riding practices. Be aware of how the ABS system operates and its limitations. It is the rider's responsibility to ride at appropriate speeds and manner for weather, road surface and traffic conditions.

 The computers integrated in the ABS compare vehicle speed with wheel speed. Since non-recommended tires can affect wheel speed, they may confuse the computers, which can extend braking distance.

## **A** WARNING

Use of non-recommended tires may cause malfunctioning of ABS and can lead to extended braking distance. The rider could have an accident as a result. Always use recommended standard tires for this motorcycle.

#### NOTE

- When the ABS is functioning, you may feel a pulsing in the brake lever or pedal. This is normal. You need not suspend applying brakes.
- ABS does not function at speeds of approx. 5 km/h (3.1 mph) or below.
- ABS does not function if the battery is discharged. When riding with an insufficiently charged battery, ABS may not function. Keep the battery

in good condition according to the "Battery Maintenance" section.

# Kawasaki Intelligent anti-lock Brake System (KIBS)

KIBS regulates smoother braking performance during sports riding.

KIBS automatically regulates brake force using engine data in addition to front and rear wheel speed to help prevent wheel lock-up and allows more stable steering control while slowing down.

## **A** WARNING

KIBS cannot protect the rider from all possible hazards and is not a substitute for safe riding practices. Be aware of how the KIBS system operates and its limitations. It is the rider's responsibility to ride at appropriate speeds and manner for weather, road surface and traffic conditions.

## **Stopping the Engine**

- Close the throttle completely.
- Shift the transmission into neutral.
- Turn the ignition key to "OFF."
- Support the motorcycle on a firm, level surface with the side stand.
- Lock the steering.

# **Stopping the Motorcycle in an Emergency**

Your Kawasaki Motorcycle has been designed and manufactured to provide you optimum safety and convenience. However, in order to fully benefit from Kawasaki's safety engineering and craftsmanship, it is essential that you, the owner and operator, properly maintain your motorcycle and become thoroughly familiar with its operation. Improper maintenance can create a dangerous situation known as throttle failure. Two of the most common causes of throttle failure are:

 An improperly serviced or clogged air cleaner may allow dirt and dust

- to enter the throttle body and stick the throttle open.
- During removal of the air cleaner, dirt is allowed to enter and jam the fuel injection system.

In an emergency situation such as throttle failure, your vehicle may be stopped by applying the brakes and disengaging the clutch. Once this stopping procedure is initiated, the engine stop switch may be used to stop the engine. If the engine stop switch is used, turn off the ignition switch after stopping the motorcycle.

# **Parking**

# **A** WARNING

Operating or parking the vehicle near flammable materials can cause a fire, and can result in property damage or severe personal injury.

Do not idle or park your vehicle in an area where tall or dry vegetation, or other flammable materials could come into contact with the muffler or exhaust pipe.

# **A** WARNING

The engine and exhaust system get extremely hot during normal operation and can cause serious burns.

Never touch a hot engine, exhaust pipe, or muffler during operation or after stopping the engine.

- Shift the transmission into neutral and turn the ignition key to "OFF."
- Support the motorcycle on a firm, level surface with the side stand.

## NOTICE

Do not park on a soft or steeply inclined surface, or the motorcycle may fall over.

 If parking inside a garage or other structure, be sure it is well ventilated

#### 110 HOW TO RIDE THE MOTORCYCLE

and the motorcycle is not close to any source of flame or sparks; this includes any appliance with a pilot light.

# **A** WARNING

Gasoline is extremely flammable and can be explosive under certain conditions, creating the potential for serious burns. Turn the ignition switch off. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

 Lock the steering to help prevent theft.

# Sport-Kawasaki TRaction Control (S-KTRC)

S-KTRC is an intelligent system that calculates the slip level of the rear wheel (wheelspin) and is suitable for sports riding conditions. S-KTRC is designed to function on public roads.

Acceleration may be delayed under certain circumstances depending on road conditions. S-KTRC cannot respond to every condition.

# **A** WARNING

S-KTRC cannot protect the rider from all possible hazards and is not a substitute for safe riding practices. Be aware of how the S-KTRC system operates and its limitations. It is the rider's responsibility to ride at appropriate speeds and manner for weather, road surface and traffic conditions.

The S-KTRC functions at 3 km/h (1.9 mph) or more, and stops functioning at 2 km/h (1.2 mph) or below.

# **A** WARNING

Use of nonrecommended tires could cause a malfunction or improper operation of S-KTRC. Always use recommended standard tires for this motorcycle.

The S-KTRC determines the traction control characteristics with five mode selections. The S-KTRC can also be set to OFF.

The S-KTRC and the power mode can be set separately. By combining each setting, the rider can get various riding feelings. For further details on the combined use of the S-KTRC and the power mode, refer to the S-KTRC and Power Mode Combination section. S-KTRC Mode

Mode	Traction Control
1	Weak
2	1
3	Middle
4	↓
5	Strong

#### 112 HOW TO RIDE THE MOTORCYCLE

### Mode 1:

The S-KTRC least intervenes among the five modes. This makes lengthy drifts and wheelies possible when exiting tight corners.

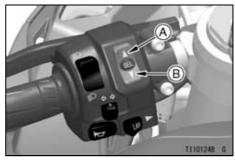
## Mode 5:

The S-KTRC intervenes early enough to prevent the rear wheel from spinning whenever possible.

## S-KTRC Mode Setting

- Close the throttle grip completely.
- When pushing the upper or lower button of the multifunction button for one second and releasing it, the S -KTRC mode changes. The S-KTRC

OFF can be selected only when the motorcycle is at a stop.



A. Upper Button B. Lower Button

# S-KTRC S-KTRC L S-KTRC S-KTRC 5-KTRC 5-KTRC

- A. Flow when pushing and releasing upper button
- B. Flow when pushing and releasing lower button
- C. While stopping the motorcycle

### **NOTE**

- O When changing the mode, stop the motorcycle.
- The mode can be changed only when the throttle grip is closed completely.
- Operate the throttle carefully while the S-KTRC is OFF because wheelspin of the rear wheel cannot be controlled.
- When the traction control is activated while riding, the S-KTRC indicator blinks.



A. S-KTRC Indicator (Yellow)

#### 114 HOW TO RIDE THE MOTORCYCLE

For more detailed information about the warning of the S-KTRC, see Indicators section in the GENERAL INFORMATION chapter.

## **NOTE**

- The selected mode is maintained even when the ignition switch is turned off or the battery is discharged or removed.
- In the S-KTRC OFF, the mode automatically switched to mode 1, whenever the ignition switch is turned off.

## **Power Mode**

The power mode determines the engine power output characteristics and has three settings.

The S-KTRC and the power mode can be set separately. By combining each setting, the rider can get various riding feelings. For further details on the combined use of the power mode and the S-KTRC, refer to the S-KTRC and Power Mode Combination section.

## Mode F (Full Power):

The highest engine power output is achieved. The rider can feel the full throttle response of the engine.

## Mode M (Middle Power):

About 80% of the highest engine power output is achieved.

# Mode L (Low Power):

About 60% of the highest engine power output is achieved. The throttle response is mildest among the 3 modes.

## **Power Mode Setting**

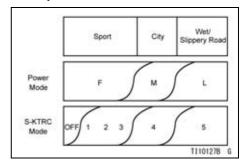
 The power mode can be selected in the setting mode. Refer to the Setting Mode section in the GENERAL INFORMATION chapter.

# S-KTRC and Power Mode Combination

By combining the S-KTRC and power mode, the some combination settings are available to suit the various conditions. For example, on a slippery road surface, combining the power mode "L" with the KTRC mode "5" can reduce the rear wheelspin.

The combination of each mode should be decided according to the driving skill and road conditions. Set the combination with reference to the following table.

## **Examples of mode combinations**



# Kawasaki Launch Control Mode (KLCM)

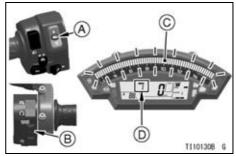
KLCM is a rider assist system which optimizes the starting acceleration. The detail setting can be selected in the setting mode. Refer to the Setting Mode section in the GENERAL INFORMATION chapter.

#### 116 HOW TO RIDE THE MOTORCYCLE

The KLCM can be used in closed course. Do not use the KLCM during everyday riding.

## KLCM Setting

- Set the power mode to the mode F. Refer to Setting Mode section in the GENERAL INFORMATION chapter.
- Set the S-KTRC mode to other than OFF. Refer to Setting Mode section in the GENERAL INFORMATION chapter.
- Push the "SEL" button and turn the start/stop switch leftward simultaneously and hold them in until the KLCM message displays and the tachometer blinks three times.



- A. "SEL" Button
- B. Start/Stop Switch
- C. Tachometer
- D. KLCM Message

After selecting the KLCM, shifting into first gear with the motorcycle stopped will activate the KLCM. Even if you turn the throttle grip fully, the engine speed limiter keeps the engine speed shown below.

MODE1	9 000 r/min (rpm)
MODE2 and 3	8 000 r/min (rpm)

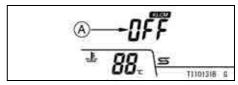
When starting, keep the throttle grip turned fully and engage the clutch gradually.

After the clutch is engaged, the system will control the engine torque to obtain maximum acceleration. KLCM is released when shifted into third gear or when the motorcycle speed reaches 150 km/h (93 mph).

Successive use of the KLCM is restricted to protect the engine.

Coolant temperature at 40°C (104°F) or lower	No limit
Coolant temperature at 41 ~ 100°C (106 ~ 212°F)	Unable to use for 2.5 minutes after the last use
Coolant temperature at 101°C (214°F) or higher	Unable to use

When the KLCM is unable to use, the following message blinks.



A. KLCM OFF Message

# **A** WARNING

KLCM is for experienced riders. Be sure to understand its characteristics completely before use. Never engage the clutch abruptly or you may lose control and crash, plus sudden high power transmission may damage the engine.

# Kawasaki Engine Brake Control (KEBC)

KEBC is the system to select the engine braking force from two modes (OFF/LIGHT). The KEBC mode can be selected in the setting mode. Refer to Setting Mode section in the GENERAL INFORMATION chapter.

# Kawasaki Quick Shift (KQS)

KQS enables shifting gears up and down without operating the clutch lever. KQS is not designed for shifting automatically. Therefore, you must take the same shift pedal operation as with motorcycles not equipped with KQS.

## NOTE

- The KQS system does not work while the clutch lever is being pulled.
- The KQS system does not work properly below approximately 2 500 r/min (rpm).
- Following any up or down shift, the shift pedal must be fully released before another shift with KQS can be made.
- The KQS mode can be selected from on or off in the setting mode. Refer to the Setting Mode section in the GENERAL INFORMATION chapter.

# **Upshifting**

During acceleration, the KQS system allows you to upshift without operating the clutch and letting off the throttle.

## NOTE

 The upshifting function of the KQS system does not work when the throttle is closed.

# **Downshifting**

During deceleration, the KQS system allows you to downshift without operation the clutch.

#### NOTE

 The downshifting function of the KQS system works only when the throttle is closed.  The downshifting function of the KQS system does not work when the engine speed is high (near the red zone on the tachometer).

# Inertial Measurement Unit (IMU)

IMU allows S-KTRC, KLCM, KIBS electronic management technology to advance to incorporate chassis attitude feedback. More advanced system enables even smoother management for control.

The maintenance and adjustments outlined in this chapter must be carried out in accordance with the Daily Checks and Periodic Maintenance to keep the motorcycle in good running condition and to reduce air pollution. The initial maintenance is vitally important and must not be neglected.

# **A** WARNING

Failure to perform these checks or to correct a problem before operation may result in serious damage or an accident. Always perform daily checks before operation.

With a basic knowledge of mechanics and the proper use of tools, you should be able to carry out many of the maintenance items described in this chapter. If you lack proper experience or doubt your ability, all adjustments, maintenance, and repair work should be completed by a qualified technician.

Please note that Kawasaki cannot assume any responsibility for damage resulting from incorrect or improper adjustment made by the owner.

# A DANGER

Exhaust gas contains carbon monoxide, a colorless, odorless poisonous Inhaling carbon monoxide can cause serious brain injury or death. DO NOT run the engine in enclosed areas. Operate only in a well-ventilated area.

# WARNING

The cooling fan spins at high speed and can cause serious injuries. Keep your hands and clothing away from the cooling fan blades at all times.

#### NOTE

O If a torque wrench is not available, the maintenance items which require a specific torque value should be serviced by an authorized Kawasaki dealer.

# **Daily Checks**

Check the following items each day before you ride. The time required is minimal, and habitual performance of these checks will help ensure you a safe, reliable ride.

If any irregularities are found during these checks, refer to the MAINTENANCE AND ADJUSTMENT chapter or see your dealer for the action required to return the motorcycle to a safe operating condition.

Operation	See Page
Fuel	
Adequate supply in tank, no leaks	_
Engine Oil	
Oil level between level lines	130
Tires	
Air pressure (when cold), install the air valve cap	168
Tire wear	169
Drive Chain	
Slack	149
Lubricate if dry	149

Operation	See Page
Bolt, nuts and fasteners	
Check for loose and/or missing bolts, nuts and fasteners	_
Steering	
Action smooth but not loose from lock to lock	_
No binding of control cables	_
Electronic steering damper unit: no oil leakage	_
Brakes	
Brake pad wear	155
Brake fluid level	154
No brake fluid leakage	_
Throttle	
Throttle grip play	144
Clutch	
Clutch lever play	147
Clutch lever operates smoothly	-

Operation S					
Coolant					
No coolant leakage	_				
Coolant level between level lines (when engine is cold)	134				
Electrical equipment					
All lights (head, city, tail/brake, turn signal, license plate, warning/indicator) and horn work	_				
Engine stop switch					
Stops engine	_				
Side stand					
Return to its fully up position by spring tension	_				
Return spring not weak or not damaged	_				
Rear view mirrors					
Rear view sight	_				

# **Periodic Maintenance**

\*A: Service at number of years shown or indicated odometer reading intervals, whichever comes first

\*B: For higher odometer readings, repeat at the frequency interval established here.

\*C: Service more frequently when operating in severe conditions: dusty, wet, muddy, high speed, or frequent starting/stopping.

\*D: California model only

O: Emission Related Item

Inspection

Change or Replace

Lubrication

**Dealer Inspection** 

Dealer Change or Replace



**Dealer Lubrication** 

		year						See
	Items	(*A)	1 (0.6)	6 (3.8)	12 (7.6)	18 (11.4)	24 (15.2)	Page
0	Air cleaner element (*C)					B		143
0	Idle speed		q		ď		ď	147
0	Throttle control system (play, smooth return, no drag)	<b>Q</b> :1	ď		σ		σ	144
0	Engine vacuum synchronization				Ø		Ø	1
	Fuel system	Q:1	Q		Ø		Ø	ı
	Fuel filter						<b>&amp;</b>	1
	Fuel hose	©:5						-
0	Evaporative emission control system (*D)		0	Q	Q	Q	Q	-
	Coolant level		Q		σ		σ	134
	Cooling system	Q:1	Q		Q		Q	-

		year				Readin : 1 000		See
	Items	(*A)	1 (0.6)	6 (3.8)	12 (7.6)	18 (11.4)	24 (15.2)	Page
	Coolant, water hoses and O-rings	©:3	©: every 36 000 km (22 500 mile)				-	
0	Valve clearance						0	_
0	Air suction system				Q		0	-
	Clutch operation (play, engagement, disengagement)		Q		Q		ď	147
	Engine oil (*C) and oil filter	(F) 1	Ğ		Ġ		Ğ	131
	Tire air pressure	<b>Q</b> :1			Q		Q	168
	Wheel and tire	<b>Q</b> :1			Q		Q	169
	Wheel bearing damage	Q:1			Q		Q	_
	Drive chain lubrication condition (*C)		Q	149				

	year				Readin : 1 000	• • •	See
Items	(*A)	1 (0.6)	6 (3.8)	12 (7.6)	18 (11.4)	24 (15.2)	Page
Drive chain slack (*C)		Q: every 1 000 km (600 mile)					149
Drive chain wear (*C)				Q		Q	1
Drive chain guide wear				Q		Q	1
Brake system	Q:1	Q		Q		Q	_
Brake operation (effectiveness, play, no drag)	<b>Q</b> :1	Q		Q		σ	1
Brake fluid level	<b>Q</b> :1	q		q		ď	154
Brake fluid (front and rear)	©:2					B	1
Brake hose	G:4						-
Rubber parts of master cylinder and caliper	©;4	(30 000 mile)					-

		year				Readin		See
	Items	(*A)	1 (0.6)	6 (3.8)	12 (7.6)	18 (11.4)	24 (15.2)	Page
	Brake pad wear (*C)			Q	σ	Q	ď	155
	Brake light switch operation		Q	Q	Q	Q	ď	156
	Suspension system	Q:1			Q		Q	_
	Steering play	Q:1	Q		Q		Q	_
	Steering stem bearings	₹:2					P	_
	Electronic steering damper oil leak				Q		Q	158
	Electrical system	Q:1			Q		Q	_
							Q	_
0	Spark plugs		0		ery 48	3 000 I mile)	km	_

	year	×	See				
Items	(*A)	1 (0.6)	6 (3.8)	12 (7.6)	18 (11.4)	24 (15.2)	Page
Chassis parts	2.1			P		P	_
Condition of bolts, nuts and fasteners		Q		Q		Q	_

# **Engine Oil**

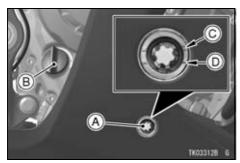
## Oil Level Inspection

- If the engine is cold, start the engine and run it for several minutes at idle speed.
- Stop the engine, then wait several minutes until the oil settles.

## NOTICE

Racing the engine before the oil reaches every part can cause engine seizure.

 Check the engine oil level through the oil level inspection window. With the motorcycle held level, the oil level should come up between the upper and lower level lines next to the oil level inspection window.



A. Oil Level Inspection Window

- B. Oil Filler Cap
- C. Upper Level Line
- D. Lower Level Line
- If the oil level is too high, remove the excess oil through the oil filler opening using a syringe or some other suitable device.

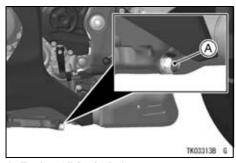
 If the oil level is too low, add oil to reach the correct level. Use the same type and brand of oil that is already in the engine.

## Oil and/or Oil Filter Change

 The oil change and oil filter replacement should be done by an authorized Kawasaki dealer.

# **A** WARNING

Engine oil is a toxic substance. Dispose of used oil properly. Contact your local authorities for approved disposal methods or possible recycling.



A. Engine Oil Drain Bolt

# **Tightening Torque**

Engine Oil Drain Bolt:

29 N·m (3.0 kgf·m, 21 ft·lb)



A. Oil Filter

## **Tightening Torque**

Oil Filter:

17 N·m (1.7 kgf·m, 13 ft·lb)

### Recommended Engine Oil

Type:

Kawasaki Performance 4-Stroke Motorcycle Oil\* Kawasaki Performance 4-Stroke Semi-Synthetic Oil\*

Kawasaki Performance 4-Stroke Full Synthetic Oil\*

or other 4-stroke oils with API SG, SH, SJ, SL or SM with JASO MA, MA1 or MA2 rating

Viscosity:

SAE 10W-40

\*Kawasaki Performance Oils and Lubricants have been specifically engineered for your vehicle. Consistent use of these products meets or exceeds warranty and service requirements and can help to extend the life of your Kawasaki.

#### NOTE

O Do not add any chemical additive to the oil. Oils fulfilling the above requirements are fully formulated and provide adequate lubrication for both the engine and the clutch.

## **Engine Oil Capacity**

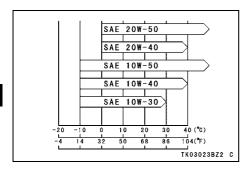
Capacity: 2.9 L (3.1 US qt)

[when filter is not removed]

3.3 L (3.5 US qt)

[when filter is removed]

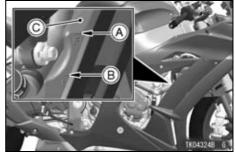
Although 10W-40 engine oil is the recommended oil for most conditions, the oil viscosity may need to be changed to accommodate atmospheric conditions in your riding area.



# Coolant

## Coolant Level Inspection

- Position the motorcycle so that it is perpendicular to the ground.
- Check the coolant level through the coolant level gauge on the reserve tank located to the right of the engine.
   The coolant level should be between the F (Full) and L (Low) level lines.



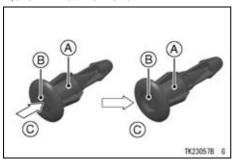
A. F (Full) Level Line B. L (Low) Level Line

C. Reserve Tank

## NOTE

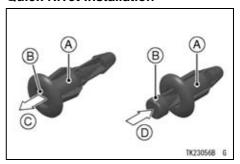
- Check the level when the engine is cold (room or atmospheric temperature).
- If the amount of coolant is insufficient, add coolant into the reserve tank.

## **Coolant Filling Quick Rivet Removal**



- A. Quick Rivet
- **B.** Center Pin
- C. Push in.

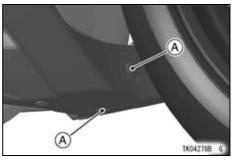
## **Quick Rivet Installation**



- A. Quick Rivet
- B. Center Pin
- C. Pull up fully.
- D. Push in.
- Remove the quick rivets.

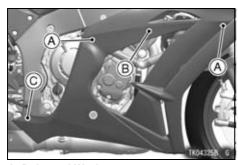


A. Quick Rivets



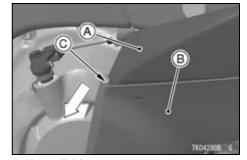
A. Quick Rivets

- Remove the bolts and washers.
- Remove the bolt and collar.
- Remove the bolt.



A. Bolts and Washers

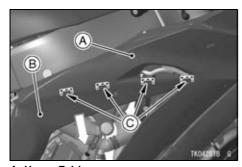
- B. Bolt and Collar
- C. Bolt
- Clear the tab of the lower fairing outward from the upper fairing.



A. Upper Fairing **B.** Lower Fairing

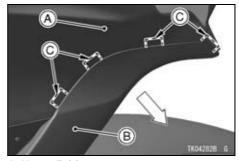
C. Tab

 Clear the tabs of the lower fairing downward from the upper fairing.



A. Upper Fairing

- **B.** Lower Fairing
- C. Tabs
- Clear the tabs of the lower fairing downward from the upper fairing.



A. Upper Fairing

- **B.** Lower Fairing
- C. Tabs
- Remove the coolant reserve tank bolt.
- Remove the reserve tank cap from the reserve tank and add coolant through the filler opening to the F (Full) level line.



A. Coolant Reserve Tank Bolt B. Reserve Tank Cap

## NOTE

O In an emergency you can add water alone to the coolant reserve tank. however it must be returned to the correct mixture ratio by the addition of antifreeze concentrate as soon as possible.

## NOTICE

If coolant must be added often, or the reserve tank completely runs dry, there is probably leakage in the system. Have the cooling system inspected by your authorized Kawasaki dealer.

- Install the reserve tank cap.
- Install the reserve tank and tighten the coolant reserve tank bolt.

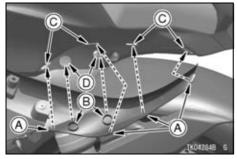
## **Tightening Torque**

Coolant Reserve Tank Bolt: 8.0 N·m (0.82 kgf·m, 71 in·lb)

## NOTE

Off a torque wrench is not available, this item should be serviced by an authorized Kawasaki dealer.

- Insert the tabs of the middle fairing into the slots of the upper fairing.
- Insert the projections of the middle fairing into the holes of the upper fairing.



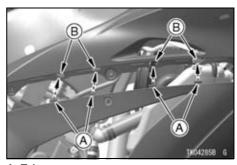
A. Tabs

**B. Projections** 

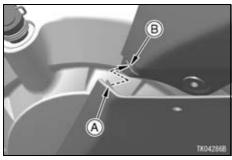
C. Slots

D. Holes

• Insert the tabs of the middle fairing into the slots of the upper fairing.

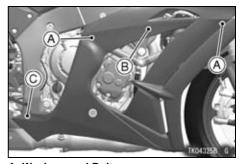


A. Tabs B. Slots



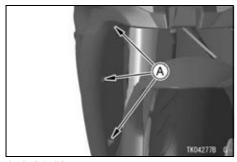
A. Tab B. Slot

- Install the washer and collar.
- Tighten the bolts.

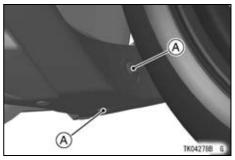


A. Washers and Bolts

- B. Collar and Bolt
- C. Bolt
- Install the quick rivets.



A. Quick Rivets



A. Quick Rivets

## **Coolant Change**

Have the coolant changed by an authorized Kawasaki dealer.

## Coolant Requirement

# **A** WARNING

Coolant containing corrosion inhibitors for aluminum engines and radiators include harmful chemicals for human body. Drinking coolant can result in serious injury or death. coolant in accordance with the instructions of the manufacturer.

Use a permanent type of antifreeze (soft water and ethylene glycol plus corrosion and rust inhibitor chemicals for aluminum engines and radiators) in the cooling system. On the mixture ratio of coolant, choose the suitable one referring to the relation between freezing point and strength directed on the container.

## NOTICE

If hard water is used in the system, it causes scale accumulation in the water passages, and considerably reduces the efficiency of the cooling system.

## NOTE

O A permanent type of antifreeze is installed in the cooling system when shipped. It is mixed at 50% and has the freezing point of -35°C (-31°F).

# Air Cleaner

This motorcycle's air cleaner element consists of a wet paper filter. Cleaning and replacement of the air cleaner element should be done by an authorized Kawasaki dealer.

## Oil Draining

 Inspect the transparent drain hose located under the left side of the engine to see if any oil has run down.



## A. Transparent Drain Hose

 If there is any oil in the transparent drain hose, remove the clamp and plug from the lower end of the drain hose and drain the oil.



Oil on tires will make them slippery and can cause an accident and injury. Be sure to install the reservoir in the drain hose after draining.

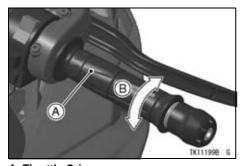
## **Throttle Control System**

## Throttle Grip

## Throttle Grip Free Play Inspection

- Check that the throttle grip moves smoothly from full open to close, and the throttle closes quickly and completely by the return spring in all steering positions.
- If the throttle grip does not return properly, have the throttle control system checked by an authorized Kawasaki dealer.

• Check the throttle grip free play by turning back and forth.



A. Throttle Grip B. Throttle Grip Free Play

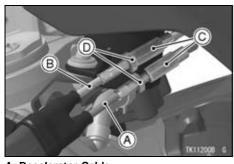
#### Throttle Grip Free Play

 $2 \sim 3 \text{ mm} (0.08 \sim 0.12 \text{ in.})$ 

• If there is improper play, adjust it.

## Throttle Grip Free Play Adjustment

- Loosen the locknuts at the upper ends of the throttle cables, and screw both throttle cable adjusters completely so as to give the throttle grip plenty of play.
- Turn the decelerator cable adjuster until there is no play when the throttle grip is completely closed. Tighten the locknut.



- A. Decelerator Cable
- B. Accelerator Cable
- C. Adjusters
- D. Locknuts
- Turn the accelerator cable adjuster until 2 ~ 3 mm (0.08 ~ 0.12 in.) of throttle grip free play is obtained. Tighten the locknut.
- If the throttle cables cannot be adjusted with the adjusters at the upper end of the throttle cable, further adjustment of the throttle cables should

- be done by an authorized Kawasaki dealer.
- With the engine idling, turn the handlebars to each side. If handlebar movement changes the idle speed, the throttle cables may be improperly adjusted or incorrectly routed, or they may be damaged. Be sure to correct any of these conditions before riding.

## **A** WARNING

Operation with improperly adjusted, incorrectly routed, or damaged cables could result in an unsafe riding condition. Be sure the control cables are adjusted and routed correctly, and are free from damage.

## **Idle Speed**

The idle speed inspection should be performed in accordance with the Periodic Maintenance chart.

This motorcycle is equipped with the Idle Speed Control System. If the idle speed is disturbed, inspection of the idle speed control should be done by an authorized Kawasaki dealer.

## NOTE

 While the engine is cold, the fast idle system automatically raises the engine idle speed.

### Idle Speed

1 100 ±100 r/min (rpm)

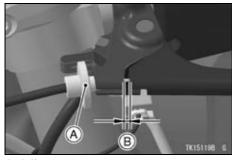
## Clutch

## **Clutch Operation Inspection**

- Check that the clutch lever operates properly and that the inner cable slides smoothly. If there is any irregularity, have the clutch cable checked by an authorized Kawasaki dealer.
- Check the clutch lever free play.

## Clutch Lever Free Play

 $2 \sim 3 \text{ mm } (0.08 \sim 0.12 \text{ in.})$ 



A. Adjuster
B. Clutch Lever Free Play

• If the free play is incorrect, adjust the lever free play as follows.

## Clutch Lever Free Play Adjustment

 Turn the adjuster so that the clutch lever will have the specified free play.

## **A** WARNING

Excess clutch lever free play could prevent clutch disengagement and cause a crash resulting in serious injury or death. When adjusting the clutch lever free play, be sure the upper end of the clutch outer cable is fully seated in its fitting so that it doesn't slip into place later and create excessive free play.

 If it cannot be done, have the clutch cable adjusted by an authorized Kawasaki dealer.

## NOTE

 After the adjustment is made, start the engine and check that the clutch does not slip and that it releases properly.

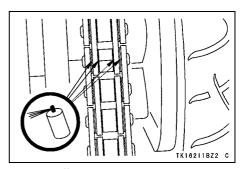
## **Drive Chain**

#### Drive Chain Lubrication

Lubrication is necessary after riding through rain or on wet roads, or any time that the chain appears dry.

Use a lubricant for sealed chains to prevent deterioration of chain seals. If the chain is especially dirty, clean it using a cleaner for sealed chains following the instructions supplied by the chain cleaner manufacturer.

 Apply lubricant to the sides of the rollers so that it will penetrate to the rollers and bushings. Apply lubricant to the seals so that the seals will be coated with lubricant. Wipe off any excess lubricant

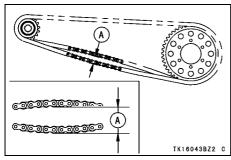


 Wipe off any lubricant that gets on the tire surface.

## **Drive Chain Slack Inspection**

- Set the motorcycle up on its side stand
- Clean the chain if it is dirty, and lubricate it if it appears dry.
- Rotate the rear wheel to find the position where the chain is tightest, and measure the maximum chain slack by pulling up and pushing down the

chain midway between the engine sprocket and rear wheel sprocket.



#### A. Chain Slack

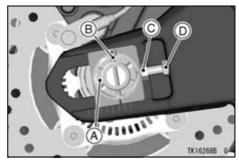
 If the drive chain is too tight or too loose, adjust it so that the chain slack is within the standard value.

#### **Drive Chain Slack**

Standard: 25 ~ 35 mm (1.0 ~ 1.4 in.)

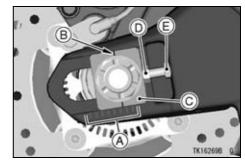
## Drive Chain Slack Adjustment

- Loosen the left and right chain adjuster locknuts.
- Remove the cotter pin, and loosen the axle nut.



- A. Axle Nut
- B. Cotter Pin
- C. Adjuster
- D. Locknut
- If the chain is too loose, turn out the left and right chain adjusters evenly.

- If the chain is too tight, turn in the left and right chain adjusters evenly.
- Turn out both chain adjusters evenly until the drive chain has the correct amount of slack. To keep the chain and wheel properly aligned, the notch on the left wheel alignment indicator should align with the same swingarm mark that the right indicator notch aligns with.



- A. Marks
- B. Notch
- C. Indicator
- D. Adjuster
- E. Locknut

### NOTE

O Wheel alignment can also be checked using the straightedge or string method.

## **A** WARNING

Misalignment of the wheel will result in abnormal wear, and may result in an unsafe riding condition. Align the rear wheel using the marks on the swingarm or measuring the distance between the center of the axle and swingarm pivot.

- Tighten both chain adjuster locknuts.
- Tighten the axle nut to the specified torque.

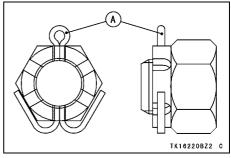
## **Tightening Torque**

Axle Nut: 130 N·m (13.3 kgf·m, 95.9 ft·lb)

## NOTE

 If a torque wrench is not available, this item should be serviced by an authorized Kawasaki dealer.

- Rotate the wheel, measure the chain slack again at the tightest position, and readjust if necessary.
- Install a new cotter pin through the axle nut and axle, and spread its ends.

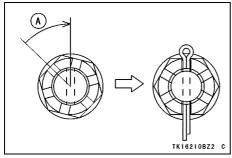


A. Cotter Pin

## NOTE

 When inserting the cotter pin, if the slots in the nut do not align with the cotter pin hole in the axle shaft,

- tighten the nut clockwise up to the next alignment.
- O It should be within 30 degrees.
- O Loosen once and tighten again when the slot goes past the nearest hole.



A. Turn Clockwise

## MARNING

A loose axle nut can lead to an accident resulting in serious iniury or death. Tighten the axle nut to the proper torque and install a new cotter pin.

 Check the rear brake (see the Brakes) section).

## **Brakes**

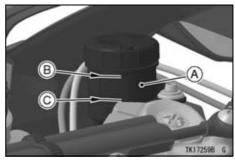
If you feel there is something wrong when applying the brakes, have the brake system checked by an authorized Kawasaki dealer immediately.

## **A** WARNING

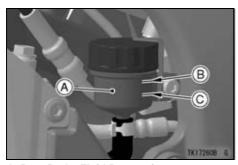
Air in the brake lines diminish braking performance and can cause an accident resulting in injury or death. If the brake lever or pedal feels mushy when it is applied, there might be air in the brake lines or the brake may be defective. Have the brake checked immediately by an authorized Kawasaki dealer.

## Brake Fluid Level Inspection

 With the brake fluid reservoirs held horizontal, the brake fluid level must be kept between the upper and lower level lines.



- A. Front Brake Fluid Reservoir
- B. Upper Level Line (MAX)
- C. Lower Level Line (MIN)

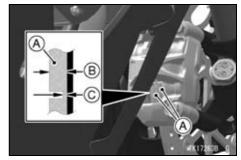


A. Rear Brake Fluid Reservoir

- B. Upper Level Line
- C. Lower Level Line
- If the fluid level is lower than the lower level line it may indicate that the fluid is leaking. In this case, have the brake system inspected by an authorized Kawasaki dealer.

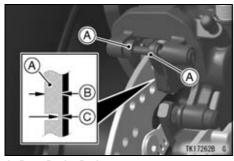
## Brake Pad Wear Inspection

Inspect the brakes for wear. For each front and rear disc brake caliper, if the thickness of either pad lining is less than 1 mm (0.04 in.), replace both pads in the caliper as a set. Pad replacement should be done by an authorized Kawasaki dealer.



A. Front Brake Pads

- **B. Lining Thickness**
- C. 1 mm (0.04 in.)



A. Rear Brake Pads

B. Lining Thickness C. 1 mm (0.04 in.)

## **Brake Light Switches**

## Brake Light Switch Inspection

- Turn the ignition switch on.
- The brake light should go on when the front brake is applied.

- If it does not, ask your authorized Kawasaki dealer to inspect the front brake light switch.
- Check the operation of the rear brake light switch by depressing the brake pedal. The brake light should go on after the proper pedal travel.



A. Brake Pedal B. 10 mm (0.4 in.)

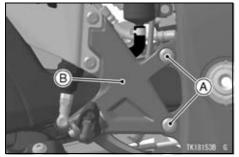
 If the light does not come on, adjust the rear brake light switch.

#### **Brake Pedal Travel**

10 mm (0.4 in.)

## **Brake Light Switch Adjustment**

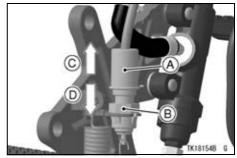
- Remove the right footpeg bracket bolts.
- Pull the footpeg bracket a little bit outward.



A. Bolts

B. Right Footpeg Bracket

 To adjust the rear brake light switch, move the switch up or down by turning the adjusting nut.



- A. Rear Brake Light Switch
- **B.** Adjusting Nut
- C. Lights sooner
- D. Lights later

## **NOTICE**

To avoid damaging the electrical connections inside the switch, be sure that the switch body does not turn during adjustment.

- Install the right footpeg bracket.
- Tighten the right footpeg bracket bolts to the specified torque.

## **Tightening Torque**

Footpeg Bracket Bolts: 25 N·m (2.5 kgf·m, 18 ft·lb)

### NOTE

 If a torque wrench is not available, this item should be serviced by an authorized Kawasaki dealer.

# Electronic Steering Damper (ESD)

This motorcycle is equipped with a electronic steering damper unit.

The steering operation should be checked and the electronic steering damper unit should be inspected for oil leakage each day before riding, and the maintenance must be carried out in accordance with the Periodic Maintenance Chart.

## **Suspension System**

### Front Fork

## **A** WARNING

Improper fork leg adjustment can cause poor handling and loss of stability, which could lead to an accident. Always adjust the fork legs on the left and right side to the same setting.

## NOTICE

After riding on the normal road, the unpaved road and in the rainy weather, clean off any dirt (grit, mud or insect etc.) that stuck to inner tube before it hardens. If the motorcycle keeps running with the dirt stuck to the inner tube, the oil seal will be damaged and it causes the oil leak.

## Spring Preload Adjustment

The adjuster is located at the top of each front fork leg.

#### Standard

6 turns in

In from the fully seated position (turned fully counterclockwise).

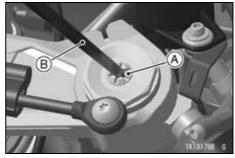
- Turn the adjuster clockwise to increase spring preload and stiffen the suspension.
- Turn the adjuster counterclockwise to decrease preload and soften the suspension.

## NOTICE

Do not turn the adjuster beyond the fully seated position or the adjusting mechanism may be damaged.

## NOTE

 The spring preload adjuster can be turned with the allen wrench or suitable tool.



A. Spring Preload Adjuster

**B. Allen Wrench** 

## Rebound Damping Force Adjustment

The adjuster is located at the lower end of each front fork leg.

### Standard

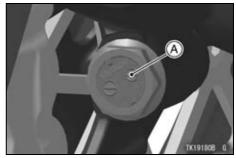
2 1/4 turns out

Out from the fully seated position (turned fully clockwise).

- Turn the adjuster clockwise with a flat tip screwdriver to increase damping force
- Turn the adjuster counterclockwise to decrease damping force.

## **NOTICE**

Do not turn the adjuster beyond the fully seated position or the adjusting mechanism may be damaged.



A. Rebound Damping Force Adjuster

## Compression Damping Force Adjuster

The adjuster is located at the lower end of each front fork leg.

#### Standard

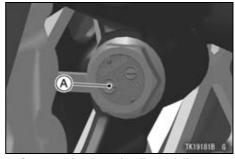
2 3/4 turns out

Out from the fully seated position (turned fully clockwise).

- Turn the adjuster clockwise with a flat tip screwdriver to increase damping force.
- Turn the adjuster counterclockwise to decrease damping force.

## NOTICE

Do not turn the adjuster beyond the fully seated position or the adjusting mechanism may be damaged.



A. Compression Damping Force Adjuster

### Rear Shock Absorber

## Spring Preload Adjustment

The spring adjusting nut on the rear shock absorber can be adjusted.

If the spring action feels too soft or too stiff, have it adjusted by an authorized Kawasaki dealer.

## Rebound Damping Force Adjustment

The adjuster is located at the lower end of the rear shock absorber.

#### Standard

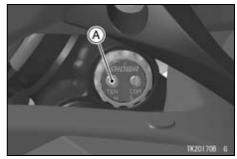
2 1/4 turns out

Out from the fully seated position (turned fully clockwise).

- Turn the adjuster clockwise with a flat tip screwdriver to increase damping force
- Turn the adjuster counterclockwise to decrease damping force.

## NOTICE

Do not turn the adjuster beyond the fully seated position or the adjusting mechanism may be damaged.



A. Rebound Damping Force Adjuster

#### Compression **Damping** Force Adjustment

The adjuster is located at the lower end of the rear shock absorber.

#### Standard

1 turn out

Out from the fully seated position (turned fully clockwise).

- Turn the adjuster clockwise with a flat tip screwdriver to increase damping force.
- Turn the adjuster counterclockwise to decrease damping force.

## NOTICE

Do not turn the adjuster beyond the fully seated position or the adjusting mechanism may be damaged.



A. Compression Damping Force Adjuster

## **Setting Tables**

Front Fork Spring Preload Setting

	Softest setting limit	Standard	Hardest setting limit
Adjuster Position	0*	6 turns in**	15 turns in**
Spring Action	Weak	$\longleftrightarrow$	Strong
Setting	Soft	$\longleftrightarrow$	Hard
Load	Light	$\longleftrightarrow$	Heavy
Road	Good	$\longleftrightarrow$	Bad
Speed	Low	$\longleftrightarrow$	High

<sup>\*:</sup> This position is the fully seated position (turned fully counterclockwise).

<sup>\*\*:</sup> In from the fully seated position (turned fully counterclockwise). This adjustment range may not exactly match the number shown in the table due to small tolerance of production.

Front Fork Damping Force Settings

		Softest setting limit	Standard	Hardest setting limit
Adjuster Desition:	Rebound	4 1/2 turns out**	2 1/4 turns out**	0*
Adjuster Position:	Compression	4 turns out**	2 3/4 turns out**	0*
Damping Force		Weak	$\longleftrightarrow$	Strong
Setting		Soft	$\longleftrightarrow$	Hard
Load		Light	$\longleftrightarrow$	Heavy
Road		Good	$\longleftrightarrow$	Bad
Speed		Low	$\leftarrow \rightarrow$	High

<sup>\*:</sup> This position is the fully seated position (turned fully clockwise).

<sup>\*\*:</sup> Out from the fully seated position (turned fully clockwise). This adjustment range may not exactly match the number shown in the table due to small tolerance of production.

**Rear Shock Absorber Damping Force Settings** 

		Softest setting limit	Standard	Hardest setting limit
Adjuster	Rebound	4 turns out**	2 1/4 turns out**	0*
Position:	Compression	4 1/2 turns out**	1 turn out**	0*
Damping Fo	orce	Weak	$\leftarrow \rightarrow$	Strong
Setting		Soft	$\leftarrow \rightarrow$	Hard
Load		Light	$\leftarrow \rightarrow$	Heavy
Road		Good	$\leftarrow \rightarrow$	Bad
Speed		Low	$\longleftrightarrow$	High

<sup>\*:</sup> This position is the fully seated position (turned fully clockwise).

<sup>\*\*:</sup> Out from the fully seated position (turned fully clockwise). This adjustment range may not exactly match the number shown in the table due to small tolerance of production.

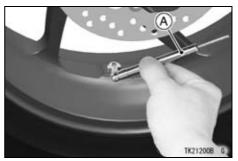
## Wheels

## Tire Pressure Inspection

- Remove the air valve cap.
- Check the tire pressure often, using an accurate gauge.
- Make sure to install the air valve cap securely.

## **NOTE**

- O Measure the tire pressure when the tires are cold (that is, when the motorcycle has not been ridden more than 1.6 km (1 mile) during the past 3 hours).
- O Tire pressure is affected by changes in ambient temperature and altitude, and so the tire pressure should be checked and adjusted when your riding involves wide variations in temperature or altitude.



A. Tire Pressure Gauge

### Tire Air Pressure (when cold)

Front	250 kPa (2.50 kgf/cm², 36 psi)
Rear	290 kPa (2.90 kgf/cm², 42 psi)

## Tire Wear, Damage

As the tire tread wears down, the tire becomes more susceptible to puncture and failure. An accepted estimate is that 90% of all tire failures occur during the last 10% of tread life (90% worn).

So it is false economy and unsafe to use the tires until they are bald.

## Tire Wear Inspection

 Measure the depth of the tread with a depth gauge, and replace any tire that has worn down to the minimum allowable tread depth.

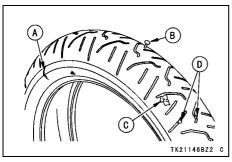


A. Tire Depth Gauge

#### Minimum Tread Depth

Front	_	1 mm (0.04 in.)
Rear	Under 130 km/h (80 mph)	2 mm (0.08 in.)
Real	Over 130 km/h (80 mph)	3 mm (0.12 in.)

 Visually inspect the tire for cracks and cuts, replacing the tire in case of bad damage. Swelling or high spots indicate internal damage, requiring tire replacement.



- A. Crack or Cut
- B. Nail
- C. Swelling or High Spot
- D. Stone
- Remove any imbedded stones or other foreign particles from the tread.

### NOTE

O Have the wheel balance inspected whenever a new tire is installed.

## **A** WARNING

Tires that have been punctured and repaired do not have the same capabilities as undamaged tires and can suddenly fail, causing an accident resulting in serious injury or death. Replace damaged tires as soon as possible. To ensure safe handling and stability, use only the recommended standard tires for replacement, inflated to the standard pressure. If it is necessary to ride on a repaired tire, do not exceed 100 km/h (60 mph) until the tire is replaced.

### NOTE

 When operating on public roadways, keep maximum speed under traffic law limits.

### Standard Tire (Tubeless)

Front	Make, Type: PIRELLI, DIABRO SUPER- CORSA SP Size: 120/70ZR17 M/C (58W)
Rear	Make, Type: PIRELLI, DIABRO SUPER- CORSA SP Size: 190/55ZR17 M/C (75W)

## **A** WARNING

Mixing tire brands and types can adversely affect handling and cause an accident resulting in injury or death. Always use the same manufacturer's tires on both front and rear wheels.

## **A** WARNING

New tires are slippery and may cause loss of control and injury. A break-in period of 160 km (100 miles) is necessary to establish normal tire traction. During break-in, avoid sudden and maximum braking and acceleration, and hard cornering.

## **Battery**

The battery installed in this motorcycle is a sealed type, so it is not necessary to check the battery electrolyte level or add distilled water.

## NOTICE

Never remove the sealing strip, or the battery can be damaged. Do not install a conventional battery in this motorcycle, or the electrical system cannot work properly.

Make	GS Yuasa Power Supply, Ltd.
Туре	YTZ10S

## **Battery Maintenance**

It is the owner's responsibility to keep the battery fully charged. Failure to do so can lead to battery failure and leave you stranded.

If you are riding your vehicle infrequently, inspect the battery voltage weekly using a voltmeter. If it drops below 12.8 volts, the battery should be charged using an appropriate charger (check with your Kawasaki dealer).

If you will not be using the motorcycle for longer than two weeks, the battery should be charged using an appropriate charger. Do not use an automotive-type quick charger that may overcharge the battery and damage it.

#### NOTE

O Leaving the battery connected causes the electrical components (clock etc) to make the battery discharged, resulting the over discharge of the battery. In this case, the repair or replacement of the battery is not included in the warranty. If you do not drive for four weeks or more, disconnect the battery from the vehicle.

### Kawasaki-recommended chargers are:

Battery Mate 150-9 OptiMate 4 Yuasa MB-2040/2060 Christie C10122S

If the above chargers are not available, use equivalent one.

For more details, ask your Kawasaki dealer.

## Battery Charging

- Charge the battery following the instructions of your battery charger.
- The charger will keep the battery fully charged until you are ready to reinstall the battery in the motorcycle (see Battery Installation).

## A DANGER

Battery acid generates hydrogen gas which is flammable and explosive under certain conditions. It is present within a battery at all times, even in a discharged condition. Keep all flames and sparks (cigarettes) away from the battery. Wear eye protection when working with a battery. In the event of battery acid contact with skin, eyes, or clothing, wash the affected areas immediately with water for at least five minutes. Seek medical attention.

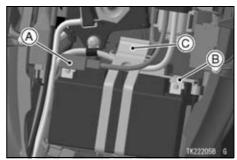
## **A** WARNING

Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

## Battery Removal

- Make sure the ignition switch is turned off.
- Remove the single seat cover and the rider's seat. Refer to the Single Seat Cover and Seat section in the GENERAL INFORMATION chapter.
- Disconnect the negative (–) cable from the (–) terminal.
- Slide the red cap from the positive (+) terminal.
- Disconnect the positive (+) cable from the (+) terminal.

Remove the band.



- A. Red Cap and (+) Terminal
- B. (-) Terminal
- C. Band
- Take the battery out of the battery case.
- Clean the battery using a solution of baking soda and water. Be sure that the cable connections are clean.

### Battery Installation

Place the battery in the battery case.

- Install the band.
- Connect the positive (+) cable to the (+) terminal, and then connect the negative (-) cable to the (-) terminal.

## NOTE

 Install the battery in the reverse order of the Battery Removal.

## NOTICE

Installing the (-) cable to the (+) terminal of the battery or the (+) cable to the (-) terminal of the battery can seriously damage the electrical system.

 Put a light coat of grease on the terminals to prevent corrosion.

- Cover the (+) terminal with the red cap.
- Install the removed parts.

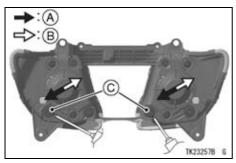
## Headlight

Headlight aiming should be done by an authorized Kawasaki dealer.

The headlight adjusters operate as following tables.

## Left Adjusters

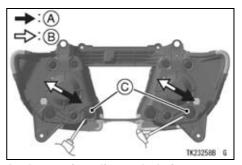
Turning Direction	Moving Direction of Beam
Clockwise	Lower Left
Counterclockwise	Upper Right



A. when turning adjuster clockwise
B. when turning adjuster counterclockwise
C. Left Adjusters

## **Right Adjusters**

Turning Direction	Moving Direction of Beam
Clockwise	Lower Right
Counterclockwise	Upper Left

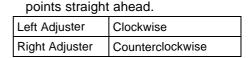


A. when turning adjuster clockwise
B. when turning adjuster counterclockwise

C. Right Adjusters

## NOTE

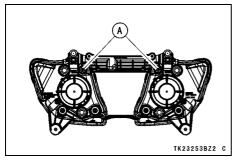
 Do not turn the upper bolts because the reflector in the headlight comes off.





 To move the headlight beam rightward, turn the left adjuster counterclockwise and turn the right adjuster clockwise same number as the left adjuster was turned until the beam points straight ahead.

Left Adjuster	Counterclockwise
Right Adjuster	Clockwise

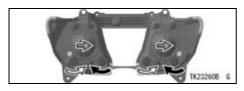


A. Upper bolts are not adjusters.

## Horizontal Adjustment

The headlight beam is adjustable horizontally. If not properly adjusted horizontally, the beam will point to one side rather than straight ahead.

 To move the headlight beam leftward, turn the left adjuster clockwise and turn the right adjuster counterclockwise same number as the left



## Vertical Adjustment

The headlight beam is adjustable vertically. If adjusted too low, neither low nor high beam will illuminate the road far enough ahead. If adjusted too high, the high beam will fail to illuminate the road close ahead, and the low beam will blind oncoming drivers.

 To move the headlight beam upward, turn the both adjusters counterclockwise same number.

Both Adjusters	Counterclockwise
----------------	------------------



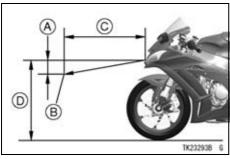
 To move the headlight beam downward, turn the both adjusters clockwise same number.

Both Adjusters Clockwise



### NOTE

On high beam, the brightest points should be slightly below horizontal. The proper angle is 0.4 degrees below horizontal. This is a 50 mm (2.0 in.) drop at 7.6 m (25 ft) measured from the center of the headlight, with the motorcycle on its wheels and the rider seated.



- A. 50 mm (2.0 in.)
- **B.** Center of Brightest Spot
- C. 7.6 m (25 ft)
- D. Height of Headlight Center

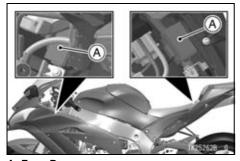
## **Fuses**

Fuses are arranged in the fuse boxes located under the left inner cover and under the single seat cover. The main fuse is located under the single seat cover. If a fuse fails during operation, inspect the electrical system to determine the cause, and then replace it with a new fuse of proper amperage.

If the fuse fails repeatedly, there is something wrong with the electrical system. Have the motorcycle checked by an authorized Kawasaki dealer.

The main fuse removal should be done by an authorized Kawasaki dealer.

#### 180 MAINTENANCE AND ADJUSTMENT



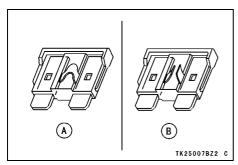
A. Fuse Boxes



A. Main Fuse

# **A** WARNING

Substituting fuses can cause wiring to overheat, catch fire and/or fail. Do not use any substitute for the standard fuse. Replace the blown fuse with a new one of the correct capacity, as specified on the fuse boxes and main fuse.



A. Normal B. Failed

# **General Lubrication**

Lubricate the points shown below, with either engine oil or regular grease, in accordance with the Periodic Maintenance Chart or whenever the vehicle has been operated under wet or rainy conditions.

# Before lubricating each part, clean off any rusty spots with rust remover and wipe off any grease, oil, dirt, or grime.

# Apply motor oil to the following pivots

- Side Stand
- Clutch Lever
- Front Brake Lever
- Rear Brake Pedal

# Lubricate the following cables with a pressure cable luber

- (K) Clutch Inner Cables
- (K) Throttle Inner Cables

# Apply grease to the following points

- (K) Clutch Inner Cable Upper Ends
- (K) Throttle Inner Cable Upper Ends
  - **(K):** Should be serviced by an authorized Kawasaki dealer.

#### NOTE

O After connecting the cables, adjust them.

# Cleaning

### **General Precautions**

Frequent and proper care of your vehicle will enhance its appearance, optimize overall performance, and extend its useful life. Covering your vehicle with a high quality, breathable vehicle cover will help protect its finish from harmful UV rays, pollutants, and reduce the amount of dust reaching its surfaces.

# **A** WARNING

Build-up of debris or flammable material in and around the vehicle chassis, engine, and exhaust can cause mechanical problems and increase the risk of fire. When operating the vehicle in conditions that allow debris or flammable material to collect in and around the vehicle, inspect the engine, electrical component and exhaust areas frequently. If debris or flammable materials have collected, park the vehicle outside and stop the engine. Allow the engine to cool, then remove any collected debris. Do not park or store the vehicle in an enclosed space prior to inspecting for build-up of debris or flammable materials.

- Be sure the engine and exhaust are cool before washing.
- When washing the vehicle, always use a mild neutral detergent and water.
- Avoid applying all harsh chemicals, solvents, degreaser, oil remover, electrical contact cleaner, and household cleaning products such as ammonia-based window cleaners. They will damage or deteriorate painted parts, plastic parts, rubber parts and other synthetic parts including covers and headlight lens.
- Avoid applying degreaser to seals, brake pads, and tires.
- Gasoline, brake fluid, and coolant will damage the finish of painted and plastic surfaces: wash them off immediately.
- Avoid wire brushes, steel wool, and all other abrasive pads or brushes.

 Take care when washing the headlight lens and other plastic parts as they can easily be scratched.

#### NOTE

- O After riding in an area where the roads are salted or near the ocean, immediately wash your vehicle with cold water. Do not use warm water as it accelerates the chemical reaction of the salt. After drying, apply a corrosion protection spray on all metal and chrome surfaces to prevent corrosion.
- O Condensation may form on the inside of the headlight lens after riding in the rain, washing the vehicle or in humid weather. To remove the moisture, start the engine and turn on the headlight. Gradually the condensation on the inside of the lens will clear off.

### Radiator

Clean off any obstructions with a stream of low-pressure water.

## **NOTICE**

Using high-pressure water, as from a car wash facility, could damage the radiator fins and impair the radiator's effectiveness. Do not obstruct or deflect airflow through the radiator by installing unauthorized accessories in front of the radiator or behind the cooling fan. Interference with the radiator airflow can lead to overheating and consequent engine damage.

#### Matte Paint Parts

- When washing the vehicle, always use a mild neutral detergent and water, or cleaners for matte paint.
- The matte paint effect may be lost when the paint is excessively rubbed.
- If any doubt, consult an authorized Kawasaki dealer.

### Plastic Parts

After washing, use a soft cloth to gently dry plastic parts. When dry, treat the headlight lens and other non painted plastic parts with an approved plastic cleaner/polisher product.

### NOTICE

Plastic parts may deteriorate and break if they come in contact with chemical substances or household cleaning products such as gasoline, brake fluid, window cleaners, thread-locking agents, or other harsh chemicals. If a plastic part comes in contact with any harsh chemical substance, wash it off immediately with water and a mild neutral detergent, and then inspect for damage. Avoid using abrasive pads or brushes to clean plastic parts, as they will damage the part's finish.

### Chrome and Aluminum

Chrome and uncoated aluminum parts can be treated with a chrome/alu-Coated aluminum minum polish.

should be washed with a mild neutral detergent and finished with a spray polish. Aluminum wheels, both painted and unpainted can be cleaned with special non-acid based wheel spray cleaners

## Leather, Vinyl, and Rubber

If your vehicle has leather accessories, special care must be taken. Use a leather cleaner/treatment to clean and care for leather accessories. Washing leather parts with detergent and water will damage them, shortening their life.

Vinyl parts should be washed with the rest of the vehicle, then treated with a vinyl treatment.

The sidewalls of tires and other rubber components should be treated with a rubber protectant to help prolong their useful life.

### Where to be Careful

Avoid spraying water with any great force near the following places.

- Disc brake master cylinder and caliper.
- Under the seat and left inner cover

   if water gets into the fuse box or
   battery, it can ground out the spark.

   When this happens the vehicle will
   not operate properly and the affected
   parts must be wiped dry.

### NOTICE

Coin operated, high pressure spray washers are not recommended. Water may be forced into bearings and other components causing eventual failure from rust and corrosion. Some soaps are highly alkaline and may leave a residue or cause spotting.

#### NOTE

 Abrasive cleanser or high pressure washer will damage the surface finish on the bodywork.

# Washing Your Vehicle

 Before washing, precautions must be taken to keep water off the following parts. Muffler rear opening - cover with a plastic bag.

Ignition switch - cover the keyhole with tape.

- Rinse your vehicle with cold water from a garden hose to remove any loose dirt.
- Mix a mild neutral detergent (designed for motorcycles or automobiles) and water in a bucket. Use a soft cloth or sponge to wash your vehicle.
- After washing, rinse your vehicle thoroughly with clean water to remove any residue (residue from the

detergent can damage parts of your vehicle).

- Remove the plastic bag and tape.
- Use a soft cloth to dry your vehicle. As you dry, inspect your vehicle for chips and scratches. Do not let the water air dry as this can damage the painted surfaces.
- Carefully ride your vehicle at a slow speed and apply the brakes several times. This helps dry the brakes and restores them to normal operating performance.

# **APPENDIX**

# **Storage**

Whenever your motorcycle will not be in use for a long period, proper storage is essential.

It consists of checking and replacing missing or worn parts; lubricating parts to ensure that they do not corrode and, in general, preparing the motorcycle so that when the time comes to use it again, it will be in top condition.

See your authorized Kawasaki dealer for this service or do the following.

## Preparation for Storage

Make sure the area is well ventilated and free from any source of flame.

# **A** DANGER

Exhaust gas contains carbon monoxide, a colorless, odorless poisonous gas. Inhaling carbon monoxide can cause serious brain injury or death. DO NOT run the engine in enclosed areas. Operate only in a well-ventilated area.

# **A** WARNING

Gasoline is extremely flammable and can be explosive under certain conditions, creating the potential for serious burns.

- Turn the ignition key off.
- Do not smoke.
- Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

# **A** WARNING

Gasoline is a toxic substance. Dispose of gasoline properly. Contact your local authorities for approved disposal methods.

- Clean the entire vehicle thoroughly.
- Run the engine for about five minutes to warm the oil, shut it off, and drain the engine oil. (see Engine Oil section in the MAINTENANCE AND ADJUSTMENT chapter)

# **A** WARNING

Engine oil is a toxic substance. Dispose of used oil properly. Contact your local authorities for approved disposal methods or possible recycling.

- Put in fresh engine oil.
- Empty the fuel from the fuel tank using a pump or syphon.
- Remove the spark plugs and add fogging oil into the combustion chambers. If the spark plugs cannot be removed, take the motorcycle to an authorized Kawasaki dealer.
- Set the motorcycle on a stand so that both wheels are raised off the ground. (If this cannot be done, put boards under the front and rear wheels to keep dampness away from the tire rubber.)
- Spray oil on all unpainted metal surfaces to prevent rusting. Avoid getting oil on rubber parts or in the brakes.
- Lubricate the drive chain and all the cables.
- Remove the battery, and store it where it will not be exposed to direct sunlight, moisture, or freezing temperatures. During storage it should be given a slow charge (one ampere or less) about once a month. Keep the battery well charged especially during cold weather.
- Tie plastic bag over the muffler to prevent moisture from entering.
- Put a cover over the motorcycle to keep dust and dirt from collecting on it.

# Preparation after Storage

- Remove the plastic bag from the muffler.
- Charge the battery if necessary and install the battery in the motorcycle.
- Fill the fuel tank with fresh fuel.
- Check all the points listed in the Daily Checks section.
- Lubricate the pivots, bolts, and nuts.

# **Troubleshooting Guide**

#### If a Problem Occurs

Performing daily checks and periodic maintenance prevents unexpected troubles from occurring. In case of a breakdown, take emergency measures and contact your Kawasaki dealer to request repair. For safety, inspection and maintenance should be done within your knowledge and ability. If you are not confident in completing an inspection or maintenance, ask an authorized Kawasaki dealer to do the work.

# **A** WARNING

- When carrying out an inspection, follow the precautions below.
- Secure a place where you can work in safety without obstructing traffic around you. Do not carry out any inspection unless it is safe.
- Support the motorcycle on a firm, level surface with the stand.
- The engine and muffler will become hot during operation. To avoid burns etc., do not touch the hot engine or muffler just after the engine has stopped.
- Exhaust gas contains harmful substances such as carbon monoxide.
   Do not run the engine in an enclosed garage or poorly ventilated area.
- Wait until the engine cools down before carrying out inspection and maintenance or replenishing fuel. Make sure the area is well ventilated and free from any source of flame or sparks. Do not place any appliance with a pilot light nearby.
- If a test ride is needed, ride in a safe area and pay close attention to traffic around you.

When any of warning indicators go on or blink, have the motorcycle inspected by an authorized Kawasaki dealer immediately.

### If the Engine Does Not Start

When the engine turns over but the engine does not start, inspect as follows.

- Check the fuel level in the fuel tank. If only a small quantity of fuel remains in the bottom, replenish the fuel tank. (Fuel in the tank cannot be completely consumed.)
- Leaving the motorcycle unused for a long time may cause fuel in the tank to deteriorate. In that case, ask an authorized Kawasaki dealer for inspection.
- When the engine warning indicator on the meter goes on and stays on, there may be a problem with the fuel injection system. Ask an authorized Kawasaki dealer for inspection and maintenance.
- The motorcycle is equipped with a vehicle-down sensor which stops the engine automatically when the motorcycle falls down. When the starter button is pressed after the motorcycle has fallen down, the engine does not start. To start the engine, switch the ignition key to the "OFF" position and then back to the "ON" position.

If the engine will not start after completing the above inspection and maintenance, there may be something wrong with another system such as the ignition system. Ask an authorized Kawasaki dealer for inspection and maintenance.

When the starter motor does not rotate, inspect as follows.

- Check the position of the engine stop switch. Push the engine stop switch in the position if it is in the position.
- Make sure that the gear position is in the neutral position. If not, shift the transmission into neutral.

#### 194 APPENDIX

• Inspect the fuse condition. If any fuse has blown, replace it with a new one of the same amperage.

# **A** WARNING

Substituting fuses can cause wiring to overheat, catch fire and/or fail. Use only standard fuses of the correct capacity and specifications.

- Check the battery cable connections etc. (see page 174). If necessary, tighten
  the connecting bolts to securely connect them.
- In case of slow blinking of the turn signal lights, low volume of the horn sound, or when you press the starter button and hear a click but the starter motor does not rotate, battery charging status is not good. Refresh the battery's charge (see page 173) and check if the starter motor rotates.
- Even after a refresh charge, if the starter motor stops rotating the engine properly the battery may have deteriorated. Have the battery inspected by an authorized Kawasaki dealer.

If the starter motor will not start after completing the above inspection and maintenance, there may be something wrong with another part such as the starter motor. Ask an authorized Kawasaki dealer for inspection and maintenance.

### If the Engine Stalls or Runs Poorly

- Check the fuel level in the fuel tank. If only a small quantity of fuel remains, replenish the fuel tank. (Fuel in the tank cannot be completely consumed.)
- Raise the side stand fully up before starting the engine. (If you try to move off with the side stand is still down, the engine will stop.)
- Make sure that correct fuel is used. If not, replace the fuel the correct type (see page 87).
- Due to too much play in the clutch lever, the clutch may not disengage. If there is any problem, adjust the clutch lever free play correctly.
- In case of slow blinking of the turn signal lights, low volume of the horn sound, or when you press the starter button and hear a click but the starter motor does not rotate, the battery is discharged. Check the connections of the battery terminals for looseness (see page 174). If necessary, tighten the bolts to remove the looseness. If the above methods cannot solve the problems, ask an authorized Kawasaki dealer for inspection and maintenance.
- If the warning indicator goes on and coolant temperature warning indicator is displayed, the engine may have overheated. Check the coolant level in the reserve tank after the engine cools down. If the coolant quantity is less than the lower level, replenish the coolant or soft water up to the upper level (see page 135). Ask an authorized Kawasaki dealer to identify the cause of the overheat immediately.

#### 196 APPENDIX

When the engine warning indicator on the meter goes on and stays on, there
is something wrong with the fuel injection system. Ask an authorized Kawasaki
dealer for inspection and maintenance.

If the engine stalls after completing the above inspection and maintenance, there may be something wrong with other system. Ask an authorized Kawasaki dealer for inspection and maintenance.

# Your Warranty/Owner Satisfaction

Welcome to the Kawasaki family!

Congratulations on buying your Kawasaki vehicle. You've chosen a great, high-quality product with state-of-the-art features and built to Kawasaki's high standards. Your satisfaction is important to your authorized Kawasaki dealer and to Kawasaki Motors Corp., U.S.A. Here is some important information regarding your vehicle's limited warranty.

# Frequently Asked Questions

### What is a Limited Warranty?

The most important thing to know about your warranty is that it protects you from manufacturing defects in material or workmanship during the warranty period. You can find the warranty period in the Kawasaki Limited Warranty Certificate your Kawasaki dealer provided to you at the time of sale. The warranty does not

cover the cost of regularly-scheduled maintenance. The warranty also does not apply to the normal wear of items such as tires, brake pads, transmission drive belts, chains, sprockets, etc.

#### What is the Kawasaki Protection Plus?

Much of the warranty coverage offered by the limited warranty can be extended by purchasing the Kawasaki Protection Plus (KPP). See your Kawasaki dealer or go to Kawasaki.com for more information if you don't already have the KPP.

### What Am I Responsible For?

You are responsible for maintaining your vehicle according to the maintenance schedule shown in this owner's manual.

You are responsible for notifying your dealer immediately if there is a problem, and you, as the owner, will need to authorize the dealer to inspect the unit.

You will be responsible for paying for routine maintenance, including the first scheduled service. You can have the required servicing done by your Kawasaki dealer (recommended) or an equally-qualified service facility. You can also do your own maintenance work if you have the proper tools, service references, and mechanical skills. However, if a failure is found to be caused by improper servicing, it would not be covered by the limited warranty.

#### 198 APPENDIX

You may purchase a Kawasaki Service Manual and any necessary special tools directly from your Kawasaki dealer.

You will be responsible for paying for repairs needed because of an accident, to replace worn parts such as tires, chains, brakes, and for repairs needed because of a lack of maintenance, misuse or racing.

Whether you do it yourself or take your vehicle to a Kawasaki dealer, be sure to record your service in the Maintenance Record section of this Owner's Manual. Keep all receipts for the service and/or items necessary to perform the maintenance so that in the event of a failure you can document the service history.

# What Are The Dealership's Responsibilities?

Your Kawasaki dealer offers a wide range of services, parts, accessories, and information on your product and on Kawasaki.

Each dealer is independently owned and operated and is responsible for the dealership's operations, its repair, warranty, and service work, and its personnel.

Your dealer is responsible for completing the set up and pre-delivery service of your new Kawasaki vehicle. The dealership should also explain its operation, maintenance, and warranty provisions so you understand them at the time of purchase or at any other time you have questions.

The dealership is responsible for inspecting your Kawasaki vehicle if there is a failure, investigating the cause of the problem, and getting any needed authorization from Kawasaki if the repair is one that will be covered by the limited warranty. The dealership will also file all necessary paperwork. The dealership is responsible for correctly completing any necessary repairs, whether they are covered by the limited warranty or not.

### **How Do I Get Warranty Service?**

If there is a problem with your vehicle within the limited warranty period, you will need to schedule a service appointment and provide any maintenance records to an authorized Kawasaki dealer for inspection and diagnosis. You can go to any Kawasaki dealer for warranty repairs. Your Kawasaki dealer will inspect your vehicle and give you the results of the inspection. The dealer will perform the repairs at no cost to you if it is determined that the problem is covered by the warranty.

#### 200 APPENDIX

Kawasaki will work with your dealer to resolve any warranty issues. No authorization for warranty work can be given until your vehicle has been inspected by a Kawasaki dealer.

## What if I am not Satisfied With My Warranty Service?

If you aren't satisfied with your dealership's repair work or operations, it is best to discuss the situation with the appropriate dealership manager. If you have already done this, then contact the dealership's owner or general manager to request a review of the issue.

If you are unable to resolve a problem after consulting with the dealership management and need further assistance, contact Kawasaki Motors Corp., U.S.A. at the address below. Please be certain to provide the model, vehicle identification number (VIN), mileage or hours of use, accessories, dates that events occurred and what action has been taken by both you and your dealer. Include the name and address of the dealership. To assist us in resolving your inquiry, please include copies of related receipts and any other pertinent information including the name of the dealership personnel with whom you have been working. Upon receipt of your correspondence, Kawasaki Motors Corp., U.S.A. will contact the dealership and work with it in resolving your problem.

#### Want to Contact Kawasaki?

This owner's manual should answer most of your questions about your Kawasaki. Your Kawasaki dealer should either be able to answer any other questions you might have immediately or be able to find the answer for you.

Please send your correspondence to: Consumer Services Kawasaki Motors Corp., U.S.A. P.O. Box 25252 Santa Ana, CA 92799-5252 (949) 460-5688

# **Reporting Safety Defects**

(For Products Sold in the United States of America, District of Columbia, and U.S. Territories Only)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Kawasaki Motors Corporation, U.S.A.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Kawasaki Motors Corporation, U.S.A.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800 -424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

## **Environmental Protection**

To help preserve the environment, properly discard used batteries, tires, oils and fluids, or other vehicle components that you might dispose of in the future. Consult your authorized Kawasaki dealer or local environmental waste agency for their proper disposal procedure. This also applies to disposal of the entire vehicle at the end of its life.

Owner Name
Address
Phone Number
Engine Number
Vehicle Number
Key Code
Selling Dealer Name
Phone Number
Warranty Start Date

Date	Odometer Reading	Maintenance Performed	Dealer Name	Dealer Address

Date	Odometer Reading	Maintenance Performed	Dealer Name	Dealer Address

Date	Odometer Reading	Maintenance Performed	Dealer Name	Dealer Address

Date	Odometer Reading	Maintenance Performed	Dealer Name	Dealer Address

Date	Odometer Reading	Maintenance Performed	Dealer Name	Dealer Address

Date	Odometer Reading	Maintenance Performed	Dealer Name	Dealer Address

# **ZX1000ZJ**



Printed in Japan

