Ninja ZX-6R Ninja ZX-6R ABS

Motorcycle

OWNER'S MANUAL

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.

KÁWASAKI HEAVY INDUSTRIES, LTD. Motorcycle & Engine Company

© 2014 Kawasaki Heavy Industries, Ltd.

Feb. 21, 2014. (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 180 through 185 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	GENERAL INFORMATION	24
Read Owner's Manual	13	Specifications	24
Training	13	Serial Number Locations	28
Daily Checks and Periodic		Location of Labels	29
Maintenance	13	Location of Parts	38
Loading and Accessories		Meter Instruments	41
Information	14	Tachometer	43
Passenger	15	Multifunction Meter	44
Baggage and Luggage	16	Indicator Lights	54
Accessories	16	Warning Indicator Lights	61
Other Load	17	Keys	65
If You are Involved in an Accident	17	Ignition Switch/Steering Lock	66
Safe Operation	18	Right Handlebar Switches	68
Carbon Monoxide Hazard	18	Left Handlebar Switches	69
Fueling	19	Brake Lever Adjuster	70
Never Ride with Drugs or Alcohol.	19	Fuel Tank Cap	70
Protective Gear and Clothing	19	Fuel Tank	71
Safe Riding Techniques	20	Side Stand	76
Additional Considerations for High		Seat	77
Speed Operation	22	Helmet Hooks	81

Tool Kit	81	Periodic Maintenance	. 111
Air Cleaner Intake	82	Engine Oil	116
Event Data Recorder	82	Coolant	
HOW TO RIDE THE MOTORCYCLE.	84	Air Cleaner	122
Break-In	84	Throttle Control System	126
Starting the Engine	85	Idle Speed	
Jump Starting	88	Clutch	
Moving Off	90	Drive Chain	131
Shifting Gears	91	Brakes	135
Braking	93	Brake Light Switches	138
Kawasaki Intelligent anti-lock		Suspension System	
Brake System (KIBS, For models		Front Fork	139
equipped with KIBS)	94	Rear Shock Absorber	142
Stopping the Engine	96	Setting Tables	145
Stopping the Motorcycle in an		Wheels	148
Emergency	97	Battery	151
Parking	98	Headlight	155
Kawasaki TRaction Control (KTRC).	99	Fuses	157
Power Mode	103	General Lubrication	. 158
KTRC and Power Mode		Cleaning Your Motorcycle	160
Combination	104	General Precautions	160
MAINTENANCE AND ADJUSTMENT	106	Washing Your Motorcycle	161
Daily Checks	108	APPENDIX	166

Storage	166	Reporting Safety Defects	176
Troubleshooting Guide	169	Environmental Protection	177
Your Warranty/Owner Satisfaction	170	MAINTENANCE RECORD	178

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

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.

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

Passenger

- 1. Never carry more than one passenger.
- 2. The passenger should only sit on the pillion.
- 3. Any passenger should be thoroughly familiar with motorcycle operation. The passenger can affect control of the motorcycle by improper positioning during cornering and sudden movements. It is important that the passenger sits still while the motorcycle is in motion and not interfere with the operation of the motorcycle. Do not carry animals on your motorcycle.

16 SAFETY INFORMATION

4. Do not carry passengers unless passenger footpegs are installed. Instruct any passenger before riding to keep his or her feet on the passenger footpegs and hold on to the operator or seat strap. Do not carry a passenger unless he or she is tall enough to reach the footpegs with their feet.

Baggage and Luggage

- 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.
- 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.
- 2. 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.

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

18 SAFETY INFORMATION

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

WARNING

Gasoline is extremely flammable and can be explosive under certain conditions

To avoid a possible fire or explosion, turn the ignition switch to "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 both the operator and passenger 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.

Eye 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.

Clothing

Wear protective clothing.

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

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

AWARNING

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.

Steerina

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.

Enaine 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 (134 in.)

DIMENSIONS

Overall Length 2 085 mm (82.09 in.)

Overall Width 705 mm (27.8 in.)

Overall Height 1 115 mm (43.90 in.)

Wheelbase 1 395 mm (54.92 in.)

Road Clearance 130 mm (5.12 in.)

Curb Mass (ZX636E) 192 kg (423 lb)

(ZX636F) 194 kg (428 lb)

ENGINE

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

Displacement 636 cm³ (38.8 cu in.)

Bore × Stroke 67.0 × 45.1 mm (2.64 × 1.78 in.)

Compression Ratio 12.9:1

Starting System Flectric 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)

12.5° BTDC @1 300 r/min (rpm) ~ 36.4° BTDC @4 **Ignition Timing**

(Electronically advanced) 800 r/min (rpm) Spark Plug Type NGK CR9E

> Gap $0.7 \sim 0.8 \text{ mm} (0.028 \sim 0.031 \text{ in.})$

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 3.6 L (3.8 US qt)

Coolant Capacity 2.5 L (2.6 US qt)

TRANSMISSION

Transmission Type 6-speed, constant mesh, return shift

26 GENERAL INFORMATION

Clutch Type		Wet, multi disc
Driving System		Chain drive
Primary Reduction Ratio		1.900 (76/40)
Final Reduction Ratio		2.688 (43/16)
Overall Drive Ratio		6.638 (Top gear)
Gear Ratio:	1st	2.846 (37/13)
	2nd	2.200 (33/15)
	3rd	1.850 (37/20)
	4th	1.600 (32/20)
	5th	1.421 (27/19)
	6th	1.300 (26/20)
FRAME		
Caster		23.5°
Trail		101 mm (3.98 in.)
Tire Size:	Front	120/70ZR17M/C (58W)
	Rear	180/55ZR17M/C (73W)

Rim Size: Front J17M/C × MT3.50

Rear J17M/C × MT5.50

Fuel Tank Capacity 17 L (4.5 US gal)

Brake Fluid: Front DOT4

Rear DOT4

ELECTRICAL EQUIPMENT

Battery 12 V 8 Ah (10 HR)

Headlight: High Beam 12 V 55 W

Low Beam 12 V 55 W

Tail/Brake Light LED

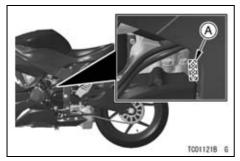
Even if one of LED (Light Emitting Diode) tail/brake light does not go on, consult with an authorized Kawasaki dealer.

Specifications are subject to change without notice.

Serial Number Locations

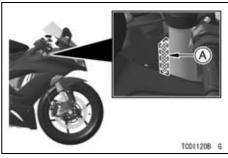
The engine and frame serial numbers are used to register the motorcycle. They are the only means of identifying your particular machine from others of the same model type. These serial numbers may be needed by your dealer when ordering parts. In the event of theft, the investigating authorities will 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

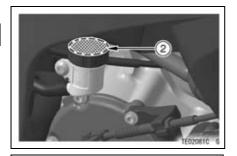
OThe sample warning labels in this section have part numbers to help

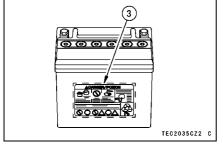
- you and your dealer obtain the correct replacement.
- O Refer to the actual vehicle label for model specific data grayed out in the illustration

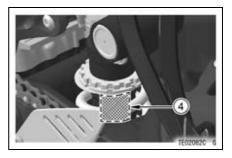


1. Brake Fluid (Front)

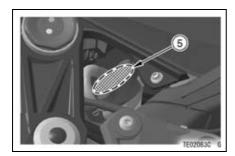
30 GENERAL INFORMATION

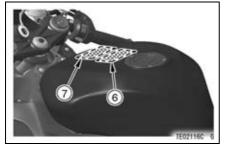






- Brake Fluid (Rear)
 Battery Poison/Danger
 Rear Shock Absorber Warning





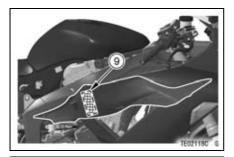


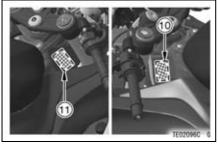
- 5. Radiator Cap Danger 6. Fuel Notice *7. Fuel Level

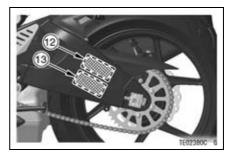
- 8. Vehicle Emission Control Information

*: only on California model

32 GENERAL INFORMATION







- *9. Vacuum Hose Routing Diagram
 10. Noise Emission Control Information
 11. Weight and Manufacture
 12. Important Drive Chain Information
 13. Tire and Load Data

*: only on California model

1) 3)



TE03527D S

2)



TE03528D S



34 GENERAL INFORMATION

4)

A WARNING

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

Do not incinerate, puncture or open.

A VERTISSEMENT

Gette 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)



6)



56030-0357

TE03172CN9 C

7) only on California model



56071-0158 TE03142C S

8)



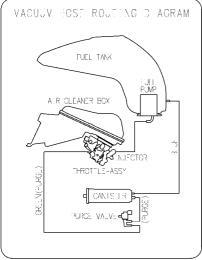
8) only on California model



TE03301D S

TE03300D S

9) only on California model

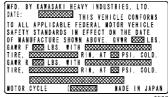


59465-0918 TE03565D S

10)

TE03304D S

11)



TE03303D S

IMPORTANT DRIVE CHAIN INFORMATION

le exercit di accident escha capes de lle exposizione fine si vir chier mast co secol y servicine di comune e liuri catale encercione con escal y servicine di comune e liuri catale encercione con escale del control del con

56033-0753

13)

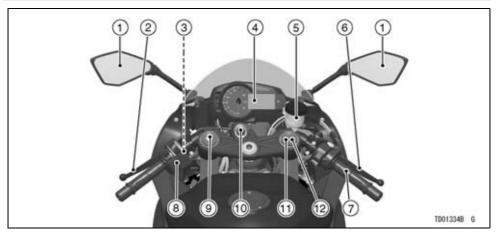
		F	AND LO	AD CAC	T A			
The stability and handling characteristics of this notocopile could become unsafe by the use of improcedure influence and attended to overloading. When the tread wears								
down to the unit, replace the tire with only the standard the Maintain the officion pressure specified.								
	Air Press.	re(Cold)	Size & Make Type	(Tubeless Tire)	Minimum Tread	Geoth		
fren:	up to 180kg .cod (397 ps)	250 kPa (2.50kg*/cm*.36bs)	SRIDGESTOKE 120/10/kt/MA/C (58K) EA:T: AK 520F J		1 mm (0.0/			
Year			BRICE-STON 1807/58/29(1947) (738) EXTICAN 5208 (up to 130 km/h(8099); Over 130 km/cs80MP+;			

56053-0651

TE03563D S

TE03564D S

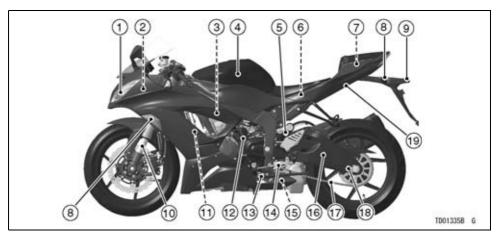
Location of Parts



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

- 8. Left Handlebar Switches

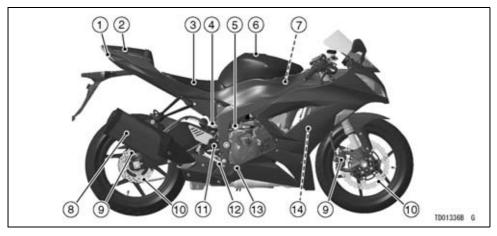
- 9. Spring Preload Adjuster
 10. Ignition Switch/Steering Lock
 11. Rebound Damping Force Adjuster
- 12. Compression Damping Force Adjuster



- 1. Headlight
- 2. Fuse Box
- 3. Spark Plugs
- 4. Fuel Tank
- 5. Compression Damping Force Adjuster
- 6. Battery

- 7. Tool Kit
- 8. Turn Signal Lights
- 9. License Plate Light
- 10. Front Fork
- 11. Radiator
- 12. Idle Adjust Screw
- 13. Side Stand Switch
- 14. Shift Pedal

- 15. Rebound Damping Force Adjuster
- 16. Swingarm
- 17. Drive Chain
- 18. Chain Adjuster
- 19. Seat Lock



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

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

Meter Instruments

- A. Tachometer
- B. RESET Button
- C. MODE Button
- D. Yellow Shift Up Indicator Light
- E. Yellow Engine Warning Indicator Light
- F. Amber Fuel Level Warning **Indicator Light**
- G. Blue High Beam Indicator Light
- H. Green Neutral Indicator Light
- I. Green Turn Signal Indicator Light
- J. Red Warning Indicator Light
- K. Multifunction Meter
- L. Yellow KTRC Warning **Indicator Light**



T602032C 6

(For models equipped KIBS)

- A. Tachometer
- **B. Reset Button**
- C. Mode Button
- D. Yellow Shift Up Indicator Light
- E. Yellow Engine Warning Indicator Light
- F. Amber Fuel Level Warning Indicator Light
- G. Blue High Beam Indicator Light
- H. Green Neutral Indicator Light
- I. Green Turn Signal Indicator Light
- J. Red Warning Indicator Light
- K. Multifunction Meter
- L. Yellow Warning Indicator Light
- M. Yellow ABS Indicator Light



T602033C 6

NOTE

○ For safety, do not operate the instrument buttons while riding the motorcycle.

Tachometer

The tachometer shows the engine speed in revolutions per minute (r/min, rpm). On the right side of the tachometer face is a portion called the "red zone." Engine r/min (rpm) in the red zone is above maximum recommended engine speed and is also above the range for good performance.

NOTICE

Engine r/min (rpm) should not be allowed to enter the red zone: operation in the red zone will overstress the engine and may cause serious engine damage.

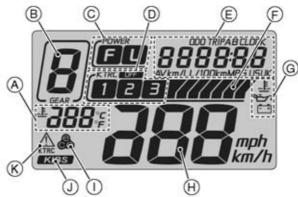


A. Tachometer B. Red Zone

When the ignition switch is turned on, the tachometer needle momentarily goes from the minimum to the maximum, then goes back from the maximum to the minimum reading to check its operation. If the tachometer does not operate correctly, have it checked by an authorized Kawasaki dealer.

Multifunction Meter

- A. Coolant Temperature Meter
- B. Gear Position Indicator
- C. Power Mode Indicator
- D. KTRC Mode Indicator
- E. Multifunction Display
 - Odometer
 - Trip Meter A/B
 - Current Mileage
 - Average Mileage
 - Clock
- F. KTRC Level Indicator
- G. Warning Symbols
- H. Speedometer
- I. Economical Riding Indicator
- J. KIBS Warning Symbol (for models equipped with KIBS)
- K. KTRC Warning Symbol (for models equipped with KIBS)



TG02035C G

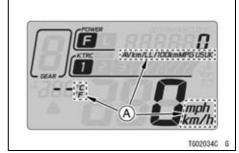
When the ignition switch is turned on, all LCD segments are displayed with opening display functions for few seconds, then the multifunction meter turns to operational mode.

Speedometer

The speedometer shows the speed of the vehicle in digital values.

Unit Setting

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



A. Meter Display Unit

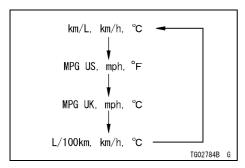
NOTE

ODo not operate the motorcycle with wrong unit (mph or km/h) of the speedometer.

To change the meter display units in the multifunction meter as follows:

- Display the odometer in the multifunction display.
- Push the RESET button while pushing the MODE button to select the

meter display units. The display units can be shifted in the following order.

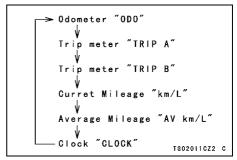


Multifunction Display

The multifunction display indicates the following modes.

- Odometer
- Trip Meter A
- Trip Meter B
- Current Mileage
- Average Mileage
- Clock

When the MODE button is pushed, the display modes can be shifted as follows.



NOTE

- For safety, do not operate the instrument buttons while riding the motorcycle.
- O The multifunction display is displayed in the unit depending on the unit mode setting, refer to the Unit Setting item in this section.

Odometer

The odometer shows the total distance in kilometers or miles that the vehicle has run. If the odometer is displayed, the "ODO" is displayed on the multifunction display. This meter cannot be reset.



A. Odometer B. "ODO"

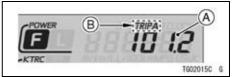
NOTE

- OThe data are maintained even if the battery is disconnected.
- When the figures come to 999999. the display is stopped and locked.

Trip Meter

The trip meter has two meters which distinguished between the "TRIP A" and "TRIP B". The trip meter shows the distance in kilometers or miles traveled since it was last reset to zero.

TRIP A: 0.0 ~ 9999.9 TRIP B: 0.0 ~ 9999.9



A. Trip Meter B. "TRIP A"

To reset the trip meter:

- Push the MODE button to select the trip meter A or B.
- Push the RESET button and hold it in.
- After two seconds, the figure display turns to 0.0, and then starts counting

when the vehicle is operated. The meter counts until it is next reset.

NOTE

- The data is maintained even if the battery is disconnect.
- When the trip meter reaches 9999.9 while riding, the meter resets to 0.0 and continues counting.

Current Mileage

This display mode shows the current mileage by numerical value. The current mileage display is renewed every 4 seconds.



A. Current Mileage

NOTE

○ The numerical value shows "— —.—" until 4 seconds have passed and the speedometer is rises to above 0 km/h (0 mph).

Average Mileage

This display mode shows the average mileage by numerical value counted from the start of measuring to present time. The average mileage display is renewed every 5 seconds.



A. Average Mileage

B. "AV"

 While the average mileage is displayed, push the RESET button and

hold it in until the average mileage values resets to "--.-".

NOTE

- OThe data is maintained by backup power if the ignition switch is turned off
- OWhen the battery is disconnected, the average mileage resets to "--.-".
- After resetting the average mileage, the numerical value is not displayed until 5 mL (0.2 US oz.) of fuel has been used and 100 m (328 ft) has been traveled

Clock

To adjust hours and minutes, do the followings while the motorcycle is at a stop.

- Turn the ignition switch on.
- Push the MODE button to select the clock.

 Push the RESET button for more than 2 seconds. Both the hour and minute displays start blinking.



 Push the RESET button. The hour display only blinks. Push the MODE button to advance the hours.



 Push the RESET button. The hour display stops blinking and the minute display starts blinking. Push the MODE button to advance the minutes.



- Push the RESET button. Both the hour and minute displays start blinking again.
- Push the MODE button. The displays stop blinking and the clock starts working.

NOTE

- O Pushing the MODE button momentarily advances the hour or minute step by step. Pushing and holding the button advances the hour or minute continuously.
- The clock works normally by the back -up power while the ignition switch is turned off.

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

Gear Position Indicator

The gear position indicator shows the corresponding gear positions where the transmission is shifted.

For example, when the transmission is in 6th gear, "6" is displayed.



A. Gear Position Indicator

NOTE

Off the gear position is in the neutral position, the gear position is disappears and the neutral indicator light goes on.

Coolant Temperature Meter

The coolant temperature meter indicates temperature of the engine coolant.



A. Coolant Temperature Meter

 If the coolant temperature is below 40° C (104° F), "---" is displayed.



When the coolant temperature rises to above 40°C (104°F), the numerical value of the coolant temperature at the present state 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 light and coolant temperature warning symbol also go on. This warns

the operator that the coolant temperature is high.



A. Coolant Temperature Warning Symbol B. Red Warning Indicator Light

If the coolant temperature rises to above 120°C (248°F), "HI" is displayed and starts blinking, the warning indicator light and coolant temperature warning symbol also go on. This warns the

operator that the coolant temperature is too high. Stop the engine and check the coolant level in the reserve tank after the engine cools down. Have the cooling system checked by an authorized Kawasaki dealer.



A. Coolant Temperature Warning Symbol B. Red Warning Indicator Light

NOTICE

Do not let the engine continue running when the coolant temperature shows "HI". Prolonged engine operation will result in severe engine damage overheating.

Economical Riding Indicator

When the operator is driving the motorcycle for optimum fuel-efficiency, 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

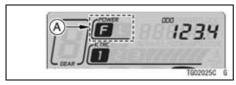
A WARNING

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 indicator shows the selected Power mode. For more detailed information about the Power mode, see

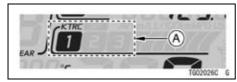
Power mode section in the HOW TO RIDE THE MOTORCYCLE chapter.



A. Power Mode Indicator

KTRC Mode Indicator

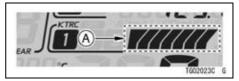
This indicator shows the selected KTRC mode. For more detailed information about the KTRC mode, see Kawasaki TRaction Control (KTRC) section in the HOW TO RIDE THE MOTORCYCLE chapter.



A. KTRC Mode Indicator

KTRC Level Indicator

The instantaneous strength and weakness of the KTRC operation can be checked with the KTRC level indicator in the multifunction meter while the motorcycle is running. The stronger the traction control works, the more the segments go on.



A. KTRC Level Indicator

Indicator Lights

Green Neutral Indicator Light

N: When the transmission is in neutral, the neutral indicator light goes on.

Blue High Beam Indicator Light

D: When the headlight is on high beam, the high beam indicator light goes on.

Green Turn Signal Indicator Light

♦♦ : When the turn signal switch is pushed to the left or right, the turn signal indicator light blinks.

Yellow Shift Up Indicator Light

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

When the engine speed reaches a pre-set speed, the shift-up indicator light goes on to indicate the timing for shifting up to prevent engine damage.

The shift-up indicator light has five modes, light off, blinking (fast), blinking (slow), light on (bright) and light on (dim). The shift-up indicator light timing

can be adjusted between 10 000 r/min (rpm) and 16 000 r/min (rpm).

To select a shift-up indicator light mode or adjust the shift-up engine speed setting in the tachometer, do the following while the engine is stopped:

- Push the MODE and RESET button simultaneously for more than 2 seconds. The previous shift-up engine speed setting will be displayed in the tachometer
- To change the shift-up indicator light mode, push the MODE button and the shift-up indicator light will shift between light off, blinking (fast), blinking (slow), light on (bright) and light on (dim). The shift-up engine speed can only be adjusted when the light is on
- To adjust the shift-up engine speed, press the RESET button and the shift -up engine speed timing advances in 250 r/min (rpm) increments up to 16

000 r/min (rpm). Once the reading reaches at 16 000 r/min (rpm) while advancing, it returns to 10 000 r/min (rpm) and begins advancing.



A. Yellow Shift Up Indicator Light B. Adjustable Range

 To complete the adjustment, push the MODE button and RESET button simultaneously for more than two seconds. The tachometer now operates normally.

A WARNING

Failing to properly observe the road ahead increases the chance of an accident. Do not concentrate on the shift-up indicator light 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.

NOTE

 Pushing and holding the RESET button advances the shift-up engine speed continuously. ○ The data is maintained even if the battery is disconnected.

NOTICE

Engine r/min (rpm) should not be allowed to enter the red zone; operation in the red zone will overstress the engine and may cause serious engine damage.

Yellow ABS Indicator Light (For models equipped with KIBS)

light goes on when the ignition switch is turned on and goes off shortly after the motorcycle starts moving. If the ABS is normal, it stays off. If the ABS indicator light shows any of the following, a fault or faults may have taken place in the ABS. You should have the ABS checked by an authorized Kawasaki dealer.

- The light does not go on when the ignition switch is turned on.
- The light remains lit after the motorcycle starts moving.
- The light goes on while riding.

Remember that the ABS does not function when the indicator light is on. If the ABS fails, the front and rear brakes work normally as a conventional brake system.

Status	Brake Condition	Yellow ABS Indicator Light	Yellow Warning Indicator Light	Multifunction Meter
Normal	KIBS	Goes off	Goes off	None
Engine information communication error	ABS	Goes off	Goes on	KIBS
Battery voltage decreases	Low voltage ABS	Blinks	Goes off	None
ABS error	Normal brake	Goes on	Goes off	None

NOTE

- OABS indicator light may come on under motorcycle riding condition. (ex. The front or rear wheel races.) In this case, first turn the ignition switch to off, and then back to on, and run the motorcycle at the speed of approx. 5 km/h (3.1 mph) or above. ABS indicator light goes off by this operation, but if it remains lit, you should have the ABS checked by an authorized Kawasaki dealer.
- OWhen the ABS indicator light is blinking, the ABS has been in the low voltage mode (insufficient battery voltage). When it is in the low voltage mode, the KIBS system does not function, but the ABS functions. To recover the KIBS system, turn the ignition switch OFF and charge the battery. If the battery is fully charged

and the low voltage mode continues, you should have the KIBS checked by an authorized Kawasaki dealer.

Warning Indicator Lights

Yellow Engine Warning Indicator Light

: The engine warning indicator light goes on when the ignition switch is turned on and goes off soon after ensuring that its circuit functions properly. This light also goes on or blinking whenever the troubles occur in digital fuel injection (DFI) system.

The blinking of this light indicates the condition that the engine cannot be started.

Refer to the Stopping the Engine section in the HOW TO RIDE THE MO-TORCYCLE chapter for more information. If this light goes on, have the DFI system checked by an authorized Kawasaki dealer.

Yellow KTRC Warning Indicator Light

: The KTRC warning indicator light goes on and the KTRC mode indicator and Power mode indicator blink whenever the trouble occurs in the KTRC system. At this time, the KTRC system does not function. If the KTRC warning indicator light goes on, have the KTRC system checked by an authorized Kawasaki dealer.

Yellow Warning Indicator Light (For models equipped KIBS)

 ⚠ : This warning indicator light functions as the KTRC warning indicator light and KIBS warning indicator light.

The yellow warning indicator light and the KTRC warning symbol go on and the KTRC mode indicator and Power mode indicator blink whenever the trouble occurs in the KTRC system.

The yellow warning indicator light and the KIBS warning symbol go on whenever the trouble occurs in the KIBS system. For more detail information about the lighting pattern of the KIBS system, see the Yellow ABS Indicator Light in this chapter.

If the yellow warning indicator light goes on, have the KTRC system and/or KIBS system checked by an authorized Kawasaki dealer.

Amber Fuel Level Warning Indicator Light

➡: The fuel level warning indicator light goes on and "FUEL" blinks in the multifunction display, when approximately 3.5 L (0.9 US gal) of usable fuel remains. Refuel at the earliest opportunity when the fuel level warning indicator light goes on and "FUEL" blinks.

When vehicle stands with Side Stand, Fuel Level Warning Indicator Light cannot show the amount of fuel in the fuel tank exactly. Stand upright the vehicle to check the fuel level.



A. Yellow Fuel Level Warning Indicator Light B. "FUEL"

NOTE

 When pushing the mode button while "FUEL" is displayed, the display can be shifted to the odometer mode.

The Fuel level warning indicator light and "FUEL" will blink in case of the open or short of the wiring. Have the wiring inspected by an authorized Kawasaki dealer immediately.

Red Warning Indicator Light

This warning indicator light and the oil pressure warning symbol () should go on whenever the ignition switch is turned on and go off after starting the engine.



A. Warning Symbols **B. Red Warning Indicator Light**

This warning indicator light has the three warning functions: engine oil pressure warning, coolant temperature warning and battery warning. This warning indicator light goes on with each warning symbols: engine oil pressure warning symbol (), coolant temperature warning symbol (4) and battery warning symbol

If the red warning indicator light goes on with the engine running, have its cause checked by an authorized Kawasaki dealer.

Oil Pressure Warning Symbol

The red warning indicator light and the oil pressure warning symbol () goes on whenever the oil pressure is dangerously low or the ignition switch is in the "ON" position with the engine not running, and go off when the engine oil pressure is high enough. Refer to the MAINTENANCE AND ADJUSTMENT chapter for more detailed engine oil information.

Coolant Temperature Warning Symbol

★ : The red warning indicator light and the coolant temperature warning symbol go on whenever the coolant temperature rises to about 115°C

(239°F) when the motorcycle is in operation. If they go on, stop the engine and check the coolant level in the reserve tank after the engine cools down. Have the cooling system checked by an authorized Kawasaki dealer.

NOTICE

Do not let the engine continue running when the coolant temperature warning symbol goes on. Prolonged engine operation will result in severe damage from overheating.

Battery Warning Symbol

: The red warning indicator light and the battery warning symbol () go on whenever the battery voltage is less than 11.0 V or more than 16.0 V. If they go on, have the battery voltage

checked by an authorized Kawasaki dealer.

NOTE

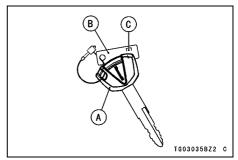
O When the all indicator lights and display of the multifunction meter go off, the battery voltage is insufficient. Have the machine checked by an authorized Kawasaki dealer promptly because the engine might stop suddenly when keeping running in that condition.

Kevs

This motorcycle has a combination key, which is used for the ignition switch, steering lock, seat lock, and fuel tank cap.

Included with the key is a key number, which may be stamped on a separate plate. Record the key number in

the space provided and store the number in a safe place. If your keys came with a plate, store it in a safe place as well.



- A. Ignition Key
- B. Tag
- C. Kev Number

Write your key number here.

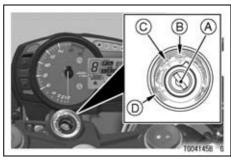
In the event you lose your keys, you will need the key number to have a duplicate made. If you cannot locate your key number, contact the dealer where you purchased your Kawasaki motorcycle. It's possible the dealer may have the number in its records. If the key number is lost completely, you will need to replace the ignition switch and all other locks operated by that key.

Contact your Kawasaki dealer to purchase additional spare keys either using your original key as a master or using the key code on the tag or your key. Store one key at home and keep another spare in your wallet or riding gear, in case the original is lost.

Ignition Switch/Steering Lock

This is a three-position, key-operated switch. The key can be removed from

the switch when it is in the "OFF" or "LOCK" position.



- A. Ignition Switch/Steering Lock
- **B. ON position**
- C. OFF position
- D. LOCK position

OFF	Engine off. Electrical circuits off.		
ON	Engine on. All electrical equipment can be used.		
LOCK	Steering locked. Engine off. Electrical circuits off.		

NOTE

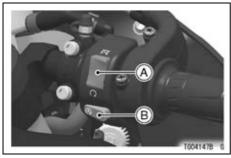
○ The tail, city and license plate lights are on whenever the ignition key is in the "ON" position. Headlights go on when the starter button is released after starting the engine. To avoid battery discharge, always start the engine immediately after turning the ignition key to "ON."

Olf you leave the key in the "ON" position on for a long time, the battery may become totally discharged.



TG04128BZ2 C

Right Handlebar Switches



A. Engine Stop Switch B. Starter Button

Engine Stop Switch

In addition to the ignition switch, the engine stop switch must be in the Ω position for the motorcycle to operate.

The engine stop switch is for emergency use. If required, move the switch to the \bowtie position.

NOTE

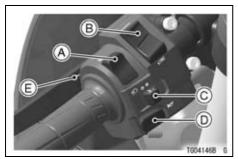
O Although the engine stop switch stops the engine, it does not turn off all the electrical circuits. Ordinarily, the ignition switch should be used to stop the engine.

Starter Button

The starter button operates the electric starter when the transmission is in neutral.

Refer to the Starting the Engine section in the "How to Ride the Motorcycle" chapter for starting instructions.

Left Handlebar Switches



- A Dimmer Switch
- B. Power/KTRC Button
- C. Turn Signal Switch
- D. Horn Button
- E. Passing Button

Dimmer Switch

High or low beam can be selected with the dimmer switch. When the headlight is on high beam (
□), the high beam indicator light goes on.

High beam.....(≣□)

NOTE

OWhen the headlight is on high beam, both headlights go on. When the headlight is on low beam, only one headlight goes on.

Turn Signal Switch

When the turn signal switch is pushed to the left (&) or right ♦), the corresponding turn signals blink on and off.

To stop blinking, push the switch in.

Horn Button

When the horn button is pushed, the horn sounds.

Passing Button

When the passing button is pushed, the headlight high beam (passing

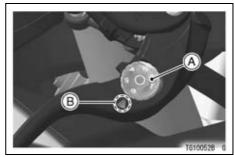
beam) goes on to signal the driver of the vehicle ahead that you are about to pass. The passing light is shut off as soon as the button is released.

Power/KTRC Button

Refer to the KTRC or Power mode system instructions of the "How to Ride the Motorcycle" chapter for operations.

Brake Lever Adjuster

There is an adjuster on the brake lever. The adjuster has 6 positions so that the released lever position can be adjusted to suit the operator's hands. Push the lever forward and turn the adjuster to align the number with the mark on the lever holder. The distance from the grip to the released lever is minimum at Number 6 and maximum at Number 1.



A. Adjuster B. Mark

Fuel Tank Cap

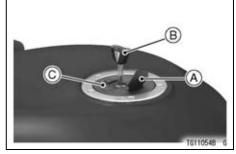
To open the fuel tank cap, pull up the key hole cover. Insert the ignition key into the fuel tank cap and turn the key to the right.

To close the cap, push it down into place with the key inserted. The key can be removed by turning it to the left

to the original position. Close the key hole cover.

NOTE

- The fuel tank cap cannot be closed without the key inserted, and the key cannot be removed unless the cap is locked properly.
- ODo not push on the key to close the cap, or the cap cannot be locked.



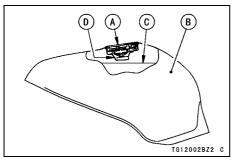
A. Key Hole Cover

B. Ignition Key

C. Fuel Tank Cap

Fuel Tank

The following octane rating gasoline is recommended for the fuel tank. Avoid filling the tank in the rain or where heavy dust is blowing so that the fuel does not get contaminated.



- A. Tank Cap B. Fuel Tank
- C. Top Level
- D. Filler Neck

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.

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 and engine hesitation and in compliance with the emission regulation.

Fuel Requirement

Fuel Type

Use clean, fresh unleaded gasoline with a minimum Antiknock Index of 90. 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.

Octane Rating Method		Minimum Rating
Antiknock Index	(RON + MON) 2	90

NOTICE

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

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.

Fuels Containing Oxygenates

Gasoline frequently contains oxygenates (alcohols and ethers) especially in areas of the U.S. and Canada which are required to sell such reformulated fuels as part of a strategy to reduce exhaust emissions.

The types and volume of fuel oxygenates approved for use in unleaded gasoline by the U.S. Environmental Protection Agency include a broad range of alcohols and ethers, but only two components have seen any significant level of commercial use.

Gasoline/Alcohol Blends - Gasoline containing up to 10% ethanol (alcohol produced from agricultural products such as corn), also known as "gasohol" is approved for use.

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.

Gasoline/Ether Blends - The most common ether is methyl tertiary butyl ether (MTBE). You may use gasoline containing up to 15% MTBE.

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.

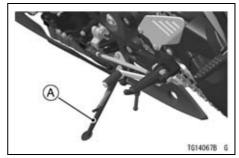
Certain ingredients of gasoline may cause paint fading or damage. Be extra careful not to spill gasoline or gasoline oxygenate blends during refueling.

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.

Never store this product with "gasohol" in the fuel system. Before storage it is recommended that you drain all fuel from the fuel system. See the Storage section in this manual.

Side Stand

The motorcycle is equipped with the side stand.



A. Side Stand

NOTE

 When using the side stand, turn the handlebar to the left.

Do not sit on the motorcycle while it is on its side stand. Always kick the stand fully up before sitting on the motorcycle.

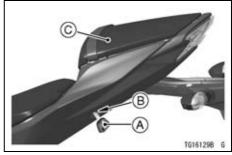
NOTE

○ 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

Seat

Passenger's Seat Removal

- Insert the ignition key into the seat lock
- Remove the passenger's seat upward while turning the key clockwise.

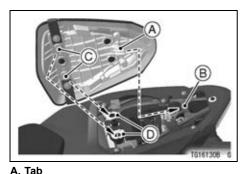


- A. Ignition Key B. Seat Lock
- C. Passenger's Seat

Passenger's Seat Installation

- Insert the tab on the rear of the passenger's seat into the slot in the frame
- Insert the projections at the front of the passenger's seat into the holes on the frame.
- Push down the front part of the passenger's seat until the lock clicks.

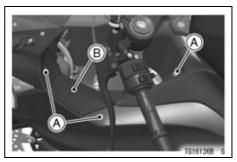
78 GENERAL INFORMATION



- B. Slot
- D. 310
- C. Projections
- D. Holes
- Pull up the front and rear ends of the passenger's seat to make sure they are securely locked.

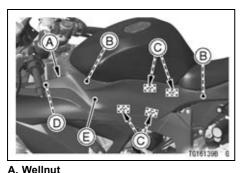
Rider's Seat Removal

 Remove the bolts and washers on the inner cover. Remove the inner cover.

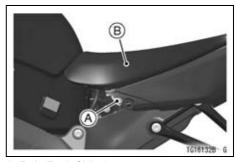


A. Bolts and Washers

- B. Inner Cover
- Remove the wellnut.
- Pull out the side cover out slowly to clear the projections and the hook -and-loop fasteners.
- Clear the hook and remove the side cover.



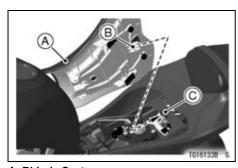
- **B. Projections**
- C. Hook-and-Loop Fasteners
- D. Hook
- E. Side Cover
- Remove the other side of the inner. cover and side cover in the same way.
- Remove the bolts and pull off the seat upward.



A. Bolt (Both Sides) B. Rider's Seat

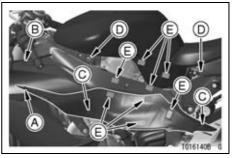
Rider's Seat Installation

• Insert the tab on the rear of the rider's seat into the slot in the frame and tighten the bolts.



A. Rider's Seat

- B. Tab
- C. Slot
- When install the side cover, insert the hook into the slot, and then insert the projections into the holes and attach the hook-and-loop fasteners.
- Install the wellnut.



A. Hook

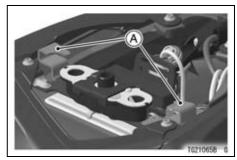
- B. Slot
- C. Projections
- D. Holes
- E. Hook-and-Loop Fasteners
- Install the inner cover.
- Install the bolts and washers.
- Install the other side of the inner cover and side cover in the same way.

Helmet Hooks

Helmets can be secured to the motorcycle using the helmet hooks. The helmet hooks are located under the passenger's seat.

WARNING

Riding with helmets attached to the hooks could cause an accident by distracting the operator or interfering with normal vehicle operation. Do not ride the motorcycle with helmets attached to the hooks.

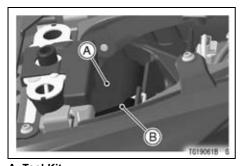


A. Helmet Hooks

Tool Kit

The tool kit is located under the passenger's seat.

The kit contains tools that can be helpful in making roadside repairs, adjustments, and some maintenance procedures explained in this manual. Keep the tool kit in the original place.



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

This vehicle is equipped at the factory with an event data recorder (EDR). The main purpose of this device is to record data that assists with understanding of how a vehicle's systems performed during a short period of time. Among other things, this data can help provide a better understanding of the

circumstances in which crashes occur. 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 such data as: vehicle speed, engine crankshaft

rotational speed, throttle opening. To read the data recorded by the EDR, special equipment is required, and access to the vehicle or EDR is necessary. In addition to Kawasaki, other parties, such as law enforcement that have special equipment, can read the information if they have access to the EDR. Kawasaki does not access the EDR information without obtaining consent, unless pursuant to court order or where required by law enforcement, other government authorities, or other third parties acting with lawful authority. Other parties may seek to access the recorded data independently of Kawasaki

HOW TO RIDE THE MOTORCYCLE

Break-In

The first 1 600 km (1 000 mi) 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 mi)	4 000 r/min (rpm)
800 ~ 1 600 km (500 ~ 1 000 mi)	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.

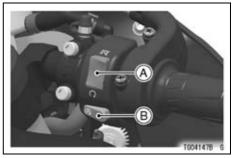
WARNING

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 mi) it is extremely important that the owner has the initial maintenance service performed by a competent mechanic following the procedures in the Service Manual

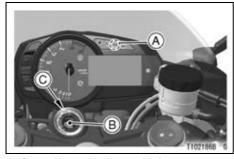
Starting the Engine

 Check that the engine stop switch is in the a position.



A. Engine Stop Switch

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



A. Green Neutral Indicator Light

- **B.** Ignition Switch
- C. ON position

NOTE

 The motorcycle is equipped with a vehicle-down sensor which causes the engine to stop automatically if the motorcycle falls down. The engine warning indicator light () blinks when the starter button is pressed if the engine cannot be started. 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.

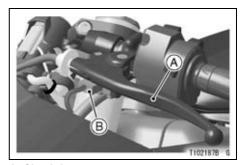
NOTE

O While the engine is cold, the fast idle system automatically raises the engine idling speed. At this time, the engine warning indicator light may go on if you operate the throttle grip unnecessarily.

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 five minutes, or engine overheating and damage may occur.

Jump Starting

If your motorcycle battery is "run down", it should be removed and charged. If this is not practical, a 12 volt booster battery and jumper cables may be used to start the engine.

A DANGER

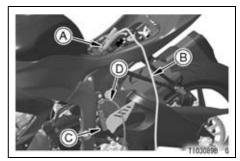
Battery acid generates hydrogen gas which is flammable and explosive under certain conditions. It is present within a battery at all times, even in a discharged condition. Keep all flames and sparks (cigarettes) away from the battery. Wear eye protection when working with a battery. In the event of battery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

Connecting Jumper Cables

- Make sure the ignition switch is turned off.
- Remove the side cover and rider's seat.

- Slide the red cap from the positive (+) terminal.
- Connect a jumper cable from the positive (+) terminal of the booster battery to the positive (+) terminal of the motorcycle battery.

Be careful not to contact the jumper cable slip on the positive battery terminal to the frame, or it will cause a short circuit.



- A. Motorcycle Battery Positive (+) Terminal
- B. From Booster Battery Positive (+) Terminal
- C. Shift Pedal Bracket
- D. From Booster Battery Negative (-) **Terminal**
- Connect another jumper cable from the negative (-) terminal of the booster battery to your motorcycle shift pedal bracket or other unpainted metal surface. Do not use the negative (–) terminal of the battery.

A DANGER

Batteries contain sulfuric acid that can cause burns and produce hydrogen gas which is highly explosive. Do not make this last connection at the fuel system or battery. Take care not to touch the positive and negative cables together, and do not lean over the battery when making this last connection. Do not connect to a frozen battery. It could explode. Do not reverse polarity by connecting positive (+) to negative (-), or a battery explosion and serious damage to the electrical system may occur.

 Follow the standard engine starting procedure.

NOTICE

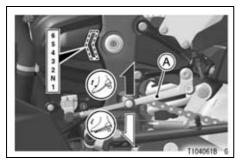
Do not operate the starter continuously for more than 5 seconds or the starter will overheat and the battery power will drop temporarily. Wait 15 seconds between each operation of the starter to let it cool and the battery power recover.

- After the engine has started, disconnect the jumper cables. Disconnect the negative (–) cable from the motorcycle first.
- Reinstall the parts removed.

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.



A. Shift Pedal

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
- Shift into the next higher or lower gear.
- 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)
$\mathbf{1st} \to \mathbf{2nd}$	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)
$3rd \rightarrow 2nd$	15 (9)
2nd → 1st	15 (9)

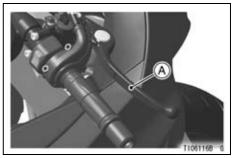
NOTE

O 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

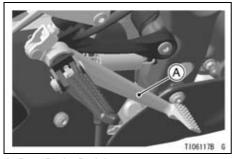
- Close the throttle completely, leaving the clutch engaged (except when shifting gears) so that the engine will help slow down the motorcycle.
- Shift down one gear at a time so that you are in 1st gear when you come to a complete stop.
- When stopping, always apply both brakes at the same time. Normally 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
- 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.
- For emergency braking, disregard downshifting, and concentrate on applying the brakes as hard as possible without skidding.



A. Front Brake Lever

94 HOW TO RIDE THE MOTORCYCLE



A. Rear Brake Pedal

Kawasaki Intelligent anti-lock Brake System (KIBS, For models equipped with KIBS)

KIBS regulates anti-lock braking performance with more precision during sports riding compared to a conventional ABS system. KIBS is designed to help prevent the wheels from locking up when the brakes are applied hard while riding straight. 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 stopping.

KIBS helps provide stability while stopping by preventing wheel lock-up, but you should be aware of the following:

- To apply the brakes effectively, use the front brake lever and rear brake pedal simultaneously in the same manner as a conventional motorcycle brake system.
- KIBS cannot compensate for adverse road conditions, misjudgment or improper application of brakes.
 You must use the same discretion

- as you would with motorcycles not equipped with KIBS.
- KIBS is not designed to shorten the braking distance. On loose, uneven or downhill surfaces, the stopping distance of a motorcycle with KIBS may be longer than that of an equivalent motorcycle without KIBS. Use special caution in such areas.
- KIBS 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 a 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.

 KIBS will not prevent the rear wheel lifting.

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.

 The computers integrated in the KIBS compares vehicle speed with wheel speed. Since non-recommended tires can affect wheel speed, they may cause the computers to make incorrect calculations that can extend braking distance.

A WARNING

Use of non-recommended tires can cause the KIBS to malfunction and lead to extended braking distance, resulting in a crash causing serious injury or death. Always use the recommended standard tires for this motorcycle.

NOTE

- OWhen the KIBS is functioning, you may feel a pulsing in the brake lever and/or pedal. This is normal. Maintain pressure on the lever and/or pedal for most effective braking.
- KIBS does not function below speeds of approx. 5 km/h (3.1 mph).

O KIBS does not function if the battery is discharged. When riding with an insufficiently charged battery, KIBS may not function. Keep the battery in good condition according to the "Battery Maintenance" section.

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.

NOTE

The motorcycle is equipped with a vehicle-down sensor which causes the engine to stop automatically if the motorcycle falls down. The engine warning indicator light () blinks when the starter button is pressed if the engine cannot be started. After righting the motorcycle, first turn the ignition key to "OFF" and then back to "ON" before starting the engine.

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:

- 1. An improperly serviced or clogged air cleaner may allow dirt and dust to enter the throttle body and stick the throttle open.
- 2. 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.

AWARNING

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 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 to "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.

Kawasaki TRaction Control (KTRC)

KTRC is an intelligent system that calculates the slip level of the rear wheel (wheelspin) during acceleration and controls the optimum slip ratio to suit the riding conditions. KTRC can contribute to a stable ride not only for sports riding but also when riding on a rough or slippery road surface.

KTRC is designed for use on public roads. KTRC cannot respond to every condition. Acceleration may be delayed under certain conditions.

A WARNING

KTRC cannot protect the rider from all possible hazards and is not a substitute for safe riding practices. All riders must be aware of how the KTRC system operates and its limitations. It is still your responsibility to ride at appropriate speeds and throttle control for weather, road surface and traffic conditions.

If a wheelie occurs due to excessive acceleration, KTRC will control the engine output to make the front wheel contact the road surface. In this case, slightly release the throttle grip so that the front wheel stays in contact with the road surface.

A WARNING

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

KTRC determines the traction control characteristics with three mode selections. KTRC can also be set to OFF.

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 KTRC and the Power mode, refer to KTRC and Power Mode Combination section.

Mode 1:

KTRC least intervenes among the three modes. This mode gives maximum acceleration for sport riding.

Mode 2:

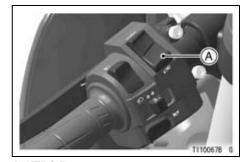
KTRC intervention is at the intermediate level between the mode 1 and mode 3.

Mode 3:

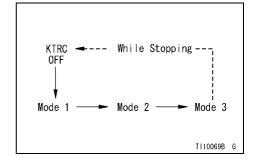
KTRC intervenes early enough to prevent the rear wheel from spinning whenever possible. This mode is used in low grip situations.

KTRC mode setting

- Close the throttle grip completely.
- Hold down (0.3 ~ 0.4 seconds) the KTRC button on the left handlebar switch to change the mode.

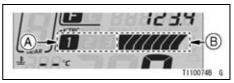


A. KTRC Button



NOTE

- OWhen 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 KTRC is OFF because wheelspin of the rear wheel cannot be controlled.
- Check the indicator to make sure that the mode has been changed. When the traction control is activated rear wheel starts to break traction, the segment(s) of the KTRC level indicator goes on.



A. KTRC Mode Indicator
B. KTRC Level Indicator

For information about the KTRC warning indicator light, see Warning Indicator Light section in the GENERAL INFORMATION chapter.

NOTE

- O In the KTRC mode 1-3, the selected mode is maintained even when the ignition switch is turned to "OFF" position, or the battery is discharged or removed.
- O In the KTRC "OFF", the mode is automatically switched to 1, whenever the ignition switch is turned to "OFF" position. Also, the mode is automatically switched to 1, when the ignition

switch is turned to "ON" position after the battery is discharged or removed.

Power Mode

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

The Power mode and the KTRC 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 KTRC, refer to KTRC and Power Mode Combination section.

Mode F (Full Power):

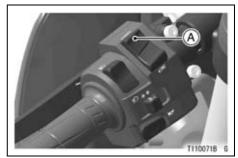
The highest engine power output is achieved. The rider can feel the full throttle response of the engine.

Mode L (Low Power):

About 80% of the highest engine power output is achieved. The throttle response is milder than F mode.

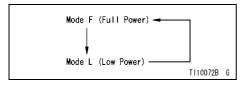
Power mode setting

- Close the throttle grip completely.
- \bullet Hold down (0.3 \sim 0.4 seconds) the Power button on the left handlebar switch to change the mode.



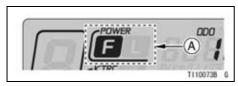
A. Power Button

104 HOW TO RIDE THE MOTORCYCLE



NOTE

- OWhen changing the mode, stop the motorcycle.
- The mode can be changed only when the throttle grip is closed completely.
- Check the indicator to make sure that the mode has been changed.



A. Power Mode Indicator

NOTE

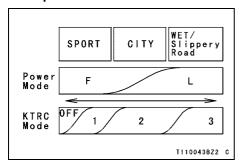
 The Power mode setting is maintained if the ignition switch is turned to "OFF" position, or if the battery is disconnected

KTRC and Power Mode Combination

By combining the KTRC mode and Power mode, the eight-pattern settings are available to suit the various conditions. For example, on a slippery road surface, combining the Power mode "L" with the KTRC mode "3" 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



MAINTENANCE AND ADJUSTMENT

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	116
Tires	
Air pressure (when cold), install the air valve cap	148
Tire wear	149
Drive Chain	
Slack	132
Lubricate if dry	131

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	_
Brakes	
Brake pad wear	137
Brake fluid level	136
No brake fluid leakage	_
Throttle	
Throttle grip play	126
Clutch	
Clutch lever play	129
Clutch lever operates smoothly	_
Coolant	
No coolant leakage	_

Operation				
Coolant level between level lines (when engine is cold)	119			
Electrical equipment				
All lights (head, tail/brake, turn signal, 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

Q: Inspection

Change or Replace

Lubrication

Q.

Dealer Inspection



Dealer Change or Replace



Dealer Lubrication

		Odometer Reading (*B) year × 1 000 km (× 1 000 mile)						See
	Items	(*A)	1 (0.6)	6 (3.8)	12 (7.6)	18 (11.4)	24 (15.2)	Page
0	Air cleaner element (*C)					9		122
0	Idle speed		σ		Q		Q	128
0	Throttle control system (play, smooth return, no drag)	Q :1	Q		Q		ď	126
0	Engine vacuum synchronization				Q		Ø	1
	Fuel system	Q:1	Ø		Q		0	-
	Fuel hose	% :5						-
0	Evaporative emission control system (*D)			Q	Q	Q	0	1
	Coolant level		ď		Q		Q	119
	Cooling system	Q:1	Q		Q		0	_

		Odometer Reading (*B year × 1 000 km (× 1 000 mile						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	6	ı				
0	Valve clearance						Q	-
0	Air suction system				Q		Q	1
	Clutch operation (play, engagement, disengagement)		Q		Q		ď	129
	Engine oil and oil filter (*C)	8	\mathfrak{G}		3		3	117
	Tire air pressure	$\mathbf{Q}_{:1}$			Q		q	148
	Wheels and tires	$Q_{:1}$			Q		Q	148
	Wheel bearing damage	Q:1			Q		Q	_
	Drive chain lubrication condition (*C)		Q : every 600 km (400 mile)					131

	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)		,	131				
Drive chain wear (*C)				Q		Q	-
Drive chain guide wear				Q		Q	_
Brake system	Q:1	Q	Q	Q	Q	Q	_
Brake fluid level	Q :0.5	Q	Q	Q	Q	Q	136
Brake fluid (front and rear)	\$:2					3	-
Brake hose/rubber parts of brake master cylinder and caliper	€5:4						-
Rubber parts of master cylinder and caliper	Ĝ:4	©: every 48 000 km (30 000 mile)					_
Brake pad wear (*C)			Q	Q	Q	Q	137

		Odometer Reading (*B) year × 1 000 km (× 1 000 mile)						See
	Items	(*A)	1 (0.6)	6 (3.8)	12 (7.6)	18 (11.4)	24 (15.2)	Page
	Brake light switch operation		Q	Q	Q	Q	Q	138
	Suspension system	Q:1			Q		Q	_
	Steering play	Q:1	Q		Q		Q	_
	Steering stem bearings	7:2					D	_
	Electrical system	Q:1			Q		Q	_
0	Spark plugs				3		6	_
	Chassis parts	0:1			8		0	_
	Condition of bolts, nuts and fasteners		Q		Q		Q	_

Engine Oil

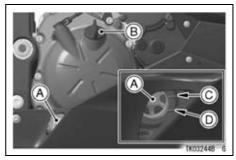
Oil Level Inspection

- 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.



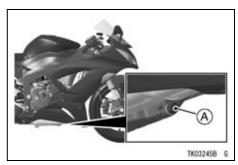
- A. Oil Level Inspection Window
- B. Oil Filler Cap
- C. Upper Level Line
- D. Lower Level Line
- If the oil level is too high, remove the excess oil through the oil filler opening using a syringe or some other suitable device.
- If the oil level is too low, add oil to reach the correct level. Use the 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:

SAE10W-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

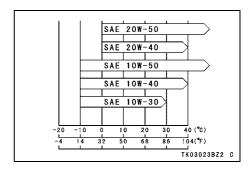
Capacity: 2.8 L (3.0 US qt)

[when filter is not removed]

3.1 L (3.3 US qt)

[when filter is removed]

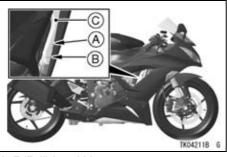
Although 10W-40 engine oil is the recommended oil for most conditions, the oil viscosity may need to be changed to accommodate atmospheric conditions in your riding area.



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

 Remove the cap from the reserve tank and add coolant through the filler opening to the F (Full) level line.



A. Reserve Tank Cap

NOTE

OIn 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.

Coolant Change

Have the coolant changed by an authorized Kawasaki dealer

Coolant Requirement



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

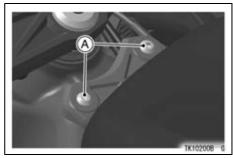
○ A permanent type of antifreeze is installed in the cooling system when shipped. It is mixed at 50% and has the freezing point of −35°C (−31°F).

Air Cleaner

This motorcycle's air cleaner element consists of a wet paper filter, which cannot be cleaned.

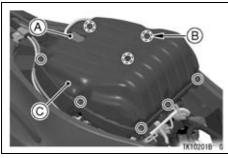
Element Replacement

 Remove the side covers and rider's seat. Remove the fuel tank bracket bolts.



A. Fuel Tank Bracket Bolts

- Raise the front of the fuel tank.
- Disconnect the connector.
- Remove the air cleaner housing cover screws and remove the cover.



- A. Connector
- B. Screws
- C. Air Cleaner Housing Cover
- Put a clean, lint-free towel over the air cleaner housing ducts to keep dirt or other foreign material from entering.

MARNING

If dirt or dust is allowed to pass through into the throttle body assembly, the throttle may become stuck, possibly causing accident. Be sure to keep the dust from entering during cleaning.

NOTICE

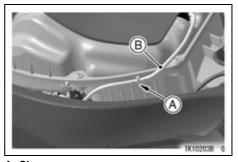
If dirt gets through into the engine, excessive engine wear and possibly engine damage will occur.

• Replace the air cleaner element with a new one.



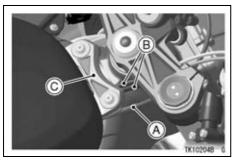
A. Air Cleaner Element

- Install the air cleaner housing cover and tighten the screws.
- Connect the connector and hold the harness with the clamp of the air cleaner housing.



A. Clamp B. Harness

 Run the throttle cables and clutch cable under the fuel tank bracket and tighten the fuel tank bracket bolts securely.



- A. Clutch Cable
- **B. Throttle Cables**
- C. Fuel Tank Bracket

WARNING

Do not pinch the cables between the bracket and the frame. Operation with incorrectly routed or damaged cables could result in an unsafe riding condition. Be sure the cables are routed correctly and not damaged.

Oil Draining

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



A. Reservoir

 If there is any oil in the reservoir, remove the reservoir from the lower end of the drain hose and drain the oil

A WARNING

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.

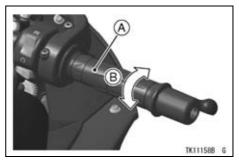
Throttle Control System

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 Play

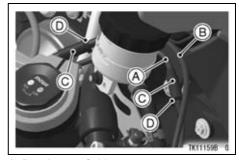
Throttle Grip Play

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

• If there is improper play, adjust it.

Throttle Grip free play Adjustment

- Loosen the locknuts at the lower ends of the throttle cables, and screw both throttle cable adjusters in completely so as to give the throttle grip plenty of play.
- Turn out 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 out the accelerator cable adjuster until 2 \sim 3 mm (0.08 \sim 0.12 in.) of throttle grip play is obtained. Tighten the locknut.
- If the throttle cables cannot be adjusted with the adjuster 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 handlebar 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 idling.

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

Idle Speed Adjustment

- Start the engine, and warm it up thoroughly.
- Adjust the idle speed by turning the idle adjusting screw.

NOTE

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

Idle Speed

1 250 ~ 1 350 r/min (rpm)



A. Idle Adjusting Screw

- Open and close the throttle a few times to make sure that the idle speed does not change. Readjust if necessary.
- With the engine idling, turn the handlebar 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.

MARNING

Operation with damaged cables could result in an unsafe riding Replace damaged condition. control cables before operation.

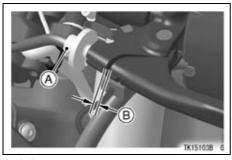
Clutch

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 play as shown

Clutch Lever Play

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



A. Adjuster
B. Clutch Lever Play

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

Clutch Cable Free Play Adjustment

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

A WARNING

Too much cable play can prevent clutch disengagement and cause an accident resulting in serious injury or death. When adjusting the clutch or replacing the cable, be sure the upper end of the clutch outer cable is fully seated in its fitting, or it could slip into place later, creating enough cable play to prevent clutch disengagement.

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

NOTE

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

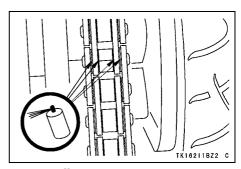
Drive Chain

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

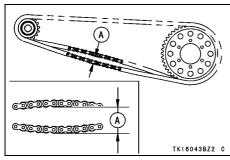


 Wipe off any lubricant that gets on the tire surface.

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

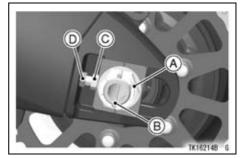
 If the drive chain is too tight or too loose, adjust it so that the chain slack is within the standard value.

Drive Chain Slack

Standard: 30 ~ 40 mm (1.2 ~ 1.6 in.)

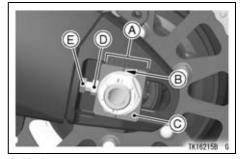
Drive Chain Slack Adjustment

- 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

○ Wheel alignment can also 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.

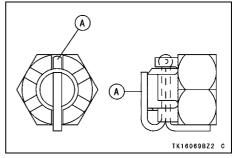
Tightening Torque

Axle Nut: 127 N·m (13.0 kgf·m, 94 ft·lb)

NOTE

Of 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.

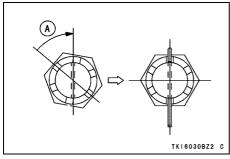


A. Cotter Pin

NOTE

O 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.
- 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

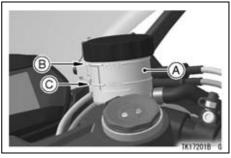
If you feel there is something wrong when applying the brakes, have the brake system checked by an authorized Kawasaki dealer immediately.

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.

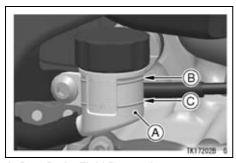
Brake Fluid Level Inspection

 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
- C. Lower Level Line

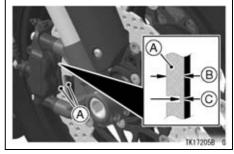


A. Rear Brake Fluid Reservoir

- 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.

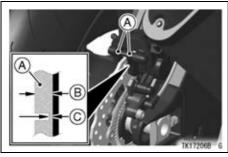
Brake Pad Wear Inspection

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.)



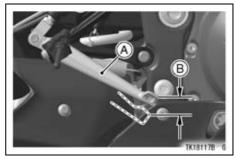
- A. Rear Brake Pads B. Lining Thickness
- C. 1 mm (0.04 in.)

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.



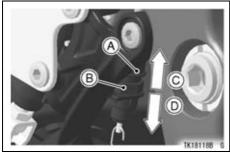
- A. Brake Pedal
- B. 10 mm (0.4 in.)
- If the light does not come on, adjust the rear brake light switch.

Brake Pedal Travel

10 mm (0.4 in.)

Brake Light Switch Adjustment

 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.

Suspension System

Front Fork

NOTICE

Do not force to turn the rebound and compression damping force adjuster from the fully seated position, at the adjusting mechanism may be damaged.

Spring Preload Adjustment

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

Standard

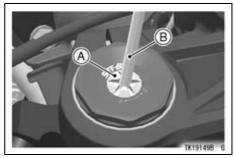
5 turns in

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.

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 top of the right front fork leg.

Standard

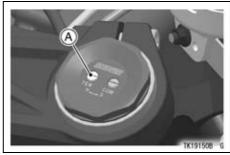
4.5 turns out

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

- Turn the adjuster clockwise with a 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 top of the right front fork leg.

Standard

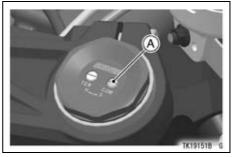
6 turns out

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

- Turn the adjuster clockwise with a 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

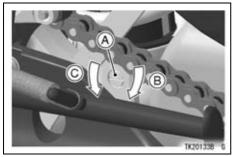
Spring Preload Adjustment

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



- A. Rebound Damping Force Adjuster
- B. To increase damping force
- C. To decrease damping force

Standard

1.5 turns out

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

- Turn the adjuster clockwise to increase rebound damping force.
- Turn the adjuster counterclockwise to decrease rebound damping force.

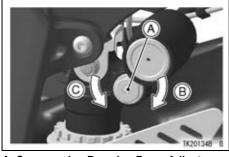
NOTICE

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

Compression Damping Force Adjustment

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

144 MAINTENANCE AND ADJUSTMENT



A. Compression Damping Force Adjuster

- B. To increase damping force
- C. To decrease damping force

Standard

2.5 turns out

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

- Turn the adjuster clockwise to increase compression damping force.
- Turn the adjuster counterclockwise to decrease compression damping force.

NOTICE

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

Setting Tables

Front Fork Spring Preload Setting

	Softest setting limit	Standard	Hardest setting limit
Adjuster Position	0*	5 turns in**	20 turns in**
Spring Action	Weak	\longleftrightarrow	Strong
Setting	Soft	$\leftarrow \rightarrow$	Hard
Load	Light	\longleftrightarrow	Heavy
Road	Good	$\leftarrow \rightarrow$	Bad
Speed	Low	\longleftrightarrow	High

^{*:} This position is the fully seated position (turned fully counterclockwise).

^{**:} 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.

146 MAINTENANCE AND ADJUSTMENT

Front Fork Damping Force Settings

		Softest setting limit	Standard	Hardest setting limit
Adjuster Desition:	Rebound	5.5 turns out**	4.5 turns out**	0*
Adjuster Position:	Compression	7 turns out**	6 turns out**	0*
Damping Force		Weak	\longleftrightarrow	Strong
Setting		Soft	\longleftrightarrow	Hard
Load		Light	\longleftrightarrow	Heavy
Road		Good	\longleftrightarrow	Bad
Speed		Low	\longleftrightarrow	High

^{*:} This position is the fully seated position (turned fully clockwise).

^{**:} 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	3 turns out**	1.5 turns out**	0*
Position:	Compression	5 turns out**	2.5 turns 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		ed Low ←→		High

^{*:} This position is the fully seated position (turned fully clockwise).

^{**:} 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.

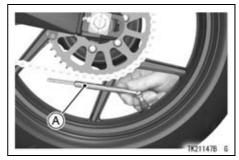
Wheels

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

- OMeasure the tire pressure when the tires are cold (that is, when the motorcycle has not been ridden more than a 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.

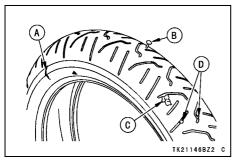


A. Tire Depth Gauge

Minimum Tread Depth

Front	_	1 mm (0.04 in.)
Rear	Under 130 km/h (80 mph)	2 mm (0.08 in.)
	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: BRIDGESTONE, BATTLAX HYPERSPORT S20F J Size: 120/70ZR17M/C (58W)
Rear	Make, Type: BRIDGESTONE, BATTLAX HYPERSPORT S20R J Size: 180/55ZR17M/C (73W)

▲ 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.

MARNING

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	Yuasa Battery
Туре	YTX9-BS

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

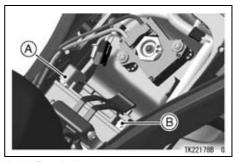
Battery acid generates hydrogen gas which is flammable and explosive under certain conditions. It is present within a battery at all times, even in a discharged condition. Keep all flames and sparks (cigarettes) away from the battery. Wear eye protection when working with a battery. In the event of battery 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 side covers and the rider's seat. Refer to the Seats section in the GENERAL INFORMA-TION chapter.
- Disconnect the cables from the battery, first from the (–) terminal and then the (+) terminal.
- Remove the band.



- A. (+) Terminal
- B. (-) Terminal
- C. Band
- Take the battery out of the 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 capped cable to the (+) terminal, and then connect the black cable to the (-) terminal.

NOTE

O 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 its protective cap.
- Reinstall the parts removed.

Headlight

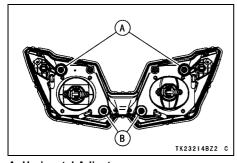
Headlight aiming should be done by an authorized Kawasaki dearer.

Horizontal Adjustment

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

 Turn the horizontal adjuster in or out until the beam points straight ahead.

156 MAINTENANCE AND ADJUSTMENT



A. Horizontal Adjuster B. Vertical Adjuster

Vertical Adjustment

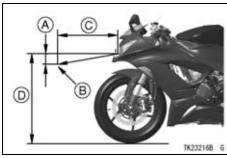
The headlight beam is adjustable vertically. If adjusted too low, neither low nor high beam will illuminate the road

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.

 Turn the vertical adjuster in or out to adjust the headlight vertically.

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

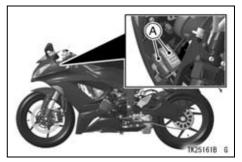
Fuses

Fuses are arranged in the fuse boxes located under left inner cover. The main fuse is located under the fuel tank 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.

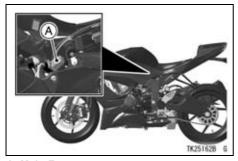
If the fuse fails repeatedly, there is something wrong with the electrical system. Have the motorcycle checked by an authorized Kawasaki dealer.

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



A. Fuse Box

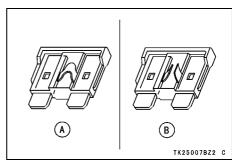
158 MAINTENANCE AND ADJUSTMENT



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.

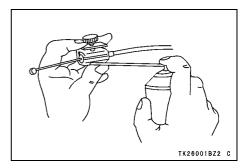
Before lubricating each part, clean off any rusty spots with rust remover and wipe off any grease, oil, dirt, or grime.

Apply engine 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

OAfter connecting the cables, adjust them

Cleaning Your Motorcycle

General Precautions

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

AWARNING

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.
- Avoid applying degreaser to seals, brake pads, and tires.
- Avoid all harsh chemicals, solvents, detergents, and household cleaning products such as ammonia-based window cleaners
- 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.
- Use care when washing the windshield, headlight lens, and other plastic parts as they can easily be scratched
- Avoid using pressure washers: water can penetrate seals and electrical components and damage your motorcycle.

 Avoid spraying water in delicate areas such as in air intake, fuel system, brake component, electrical components, muffler outlet, and fuel tank openings.

Washing Your Motorcycle

- Rinse your bike 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 motorcycle. If needed, use a mild degreaser to remove any oil or grease build up.
- After washing, rinse your motorcycle thoroughly with clean water to remove any residue (residue from the

162 MAINTENANCE AND ADJUSTMENT

- detergent can damage parts of your motorcycle).
- Use a soft cloth to dry your motorcycle. As you dry, inspect your motorcycle for chips and scratches. Do not let the water air dry as this can damage the painted surfaces.
- Start the engine and let it idle for several minutes. The heat from the engine will help dry moist areas.
- Carefully ride your motorcycle at a slow speed and apply the brakes several times. This helps dry the brakes and restores them to normal operating performance.
- Lubricate the drive chain to prevent rusting.

NOTE

O After riding in an area where the roads are salted or near the ocean,

- immediately wash your motorcycle 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 motorcycle or 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.

Semi-gloss Finish

To clean the semi-gloss finish;

• When washing the motorcycle, always use a mild neutral detergent

- and water.The semi-gloss finish effect may be lost when the finish is excessively
- rubbed.

 If any doubt, consult an authorized

 Kawasaki dealer

Windshield and Other Plastic Parts

After washing use a soft cloth to gently dry plastic parts. When dry, treat the windshield, headlight lens, and other nonpainted 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/aluminum polish. Coated aluminum

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 motorcycle 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 motorcycle, 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.

A WARNING

Rubber protectants can be slippery and, if used on the tread area, cause loss of traction resulting in accident causing injury or death. Do not apply rubber protectant to any tread area.

APPENDIX

Storage

Preparation for Storage

- Clean the entire vehicle thoroughly.
- Run the engine for about five minutes to warm the oil, shut it off, and drain the engine oil.

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 by the pump or siphon.

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

• Empty the fuel system by running the engine at idle speed until the engine stalls (If left in for a long time, the fuel will break down and could clog the fuel system).

A WARNING

An air/oil mist may be forcibly ejected from the spark plug holes and could get into your eyes. Do not lean over the engine when performing this procedure. If you do get oil in your eyes, wash them immediately with liberal amounts of clean, fresh water and consult a physician as soon as possible.

- Reduce tire pressure by about 20%.
- Set the motorcycle on a box or 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.)

168 APPENDIX

- 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 bags 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 bags from the muffler.
- Install the battery in the motorcycle and charge the battery if necessary.
- Fill the fuel tank with fuel.
- Check all the points listed in the Daily Checks section.
- Lubricate the pivots, bolts, and nuts.

Troubleshooting Guide

Engine Does Not Start

Starter Motor Won't Turn

- Engine stop switch off
- Transmission not in neutral
- Fuse blown
- Battery leads do not make good electrical contact with battery terminals
- Battery discharged

Engine Cranks, But Won't Start

- No fuel in tank
- Fuel line clogged
- Fuel broken down
- Engine flooded
- Spark plugs not in good contact
- Spark plugs fouled or wet
- Incorrect spark plug gap
- Incorrect valve clearance
- No first turning the ignition switch to "OFF" when the motorcycle falls down.

170 APPENDIX

Engine Stalls

Just When Shifting Into 1st Gear

- Side stand has been left down
- Clutch does not properly disengage

While Riding

- No fuel in tank
- Fuel tank air vent is obstructed
- Overheating
- Battery discharged

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 Good Times Protection Plan?

Much of the warranty coverage offered by the limited warranty can be extended by purchasing Kawasaki's Good Time $^{\text{TM}}$ Protection Plan (GTPP). See your Kawasaki dealer or go to Kawasaki.com for more information if you don't already have the GTPP.

What Am I Responsible For?

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

172 APPENDIX

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.

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.

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

ZX636EF/FF



Printed in Japan

