Ninja H2 SX

OWNER'S MANUAL

⚠ Read this manual carefully. It contains safety information.

Kawasaki

⚠ WARNING

Operating, servicing and maintaining a passenger vehicle or off-road vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65warnings.ca.gov/passenger-vehicle.

Quick Reference Guide

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

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.

⚠ DANGER

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

⚠ 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.*

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.

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

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

KAWASAKI HEAVY INDUSTRIES, LTD.
Motorcycle & Engine Company

 Apr. 12, 2019 (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 228 through 233 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

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.

⚠ 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.

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

⚠ 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 195 kg (430 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

○ *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.

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 grab rail. Do not carry a passenger unless he or she is tall enough to reach the footpegs with their feet.

Baggage and Luggage

1. All baggage should be carried as low as possible to reduce the effect on the motorcycle's center of gravity. Baggage weight should also be distributed equally on both sides of the motorcycle. Avoid carrying baggage that extends beyond the rear of the motorcycle.
2. Baggage should be securely attached. Make sure that the baggage will not move around while you are riding. Recheck baggage security as often as possible (not while the motorcycle is in motion) and adjust as necessary.
3. 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

1. 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 handlebars 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

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

⚠ 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 prevent fire or explosion, turn the ignition key off. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

Never Ride with Drugs or Alcohol

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

Protective Gear and Clothing

Helmet

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

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

Boots

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

Safe Riding Techniques

Keep Hands on Handlebars

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

Look Over Your Shoulder

Before changing lanes, look over your shoulder to make sure the way is clear. Do not rely solely on the rear

view mirror; you may misjudge a vehicle's distance and speed, or you may not see it at all.

Accelerate and Brake Smoothly

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

Select Correct Gear Speeds

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

Use Both Front and Rear Brakes

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

Use Engine Brake

When going down long slopes, help control vehicle speed by closing the throttle so that the engine can act as an auxiliary brake. Use the front and rear brakes for primary braking.

Riding in Wet Conditions

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

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

⚠ WARNING

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

Brakes

The importance of the brakes, especially during high speed operation, cannot be overemphasized. Check to see that they are correctly adjusted and functioning properly.

Steering

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

Tires

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

Fuel

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

Engine Oil

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

Coolant

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

Electrical Equipment

Make sure that the headlight, brake/tail 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	3.1 m (10.2 ft)
DIMENSIONS	
Overall Length	2 135 mm (84.05 in.)
Overall Width	775 mm (30.5 in.)
Overall Height	1 260 mm (49.61 in.)
Wheelbase	1 480 mm (58.27 in.)
Road Clearance	130 mm (5.12 in.)
Curb Mass	262 kg (578 lb)
ENGINE	
Type	DOHC, 4-cylinder, 4-stroke, liquid-cooled
Displacement	998 cm^3 (60.9 cu in.)
Bore × Stroke	76.0 × 55.0 mm (2.99 × 2.17 in.)
Compression Ratio	11.2:1

Starting System		Electric starter
Cylinder Numbering Method		Left to right, 1-2-3-4
Firing Order		1-2-4-3
Fuel System		FI (Fuel Injection)
Ignition System		Battery and coil (transistorized ignition)
Ignition Timing (Electronically advanced)		10° BTDC @1 100 r/min (rpm) ~ 48° BTDC @6 000 r/min (rpm)
Spark Plug:	Type	NGK SILMAR9E9
	Gap	0.8 ~ 0.9 mm (0.031 ~ 0.035 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	4.7 L (5.0 US qt)
Coolant Capacity		2.9 L (3.1 US qt)

TRANSMISSION

Transmission Type	6-speed, constant mesh, return shift
Clutch Type	Wet, multi disc

Driving System		Chain drive
Primary Reduction Ratio		1.480 (74/50)
Final Reduction Ratio		2.444 (44/18)
Overall Drive Ratio		4.876 (Top gear)
Gear Ratio:	1st	3.077 (40/13)
	2nd	2.471 (42/17)
	3rd	2.045 (45/22)
	4th	1.727 (38/22)
	5th	1.524 (32/21)
	6th	1.348 (31/23)

FRAME

Caster		24.7°
Trail		103 mm (4.06 in.)
Tire Size:	Front	120/70ZR17 M/C (58W)
	Rear	190/55ZR17 M/C (75W)
Rim Size:	Front	17M/C × MT3.50
	Rear	17M/C × MT6.00

Fuel Tank Capacity		19 L (5.0 US gal)
Brake Fluid:	Front	DOT4
	Rear	DOT4

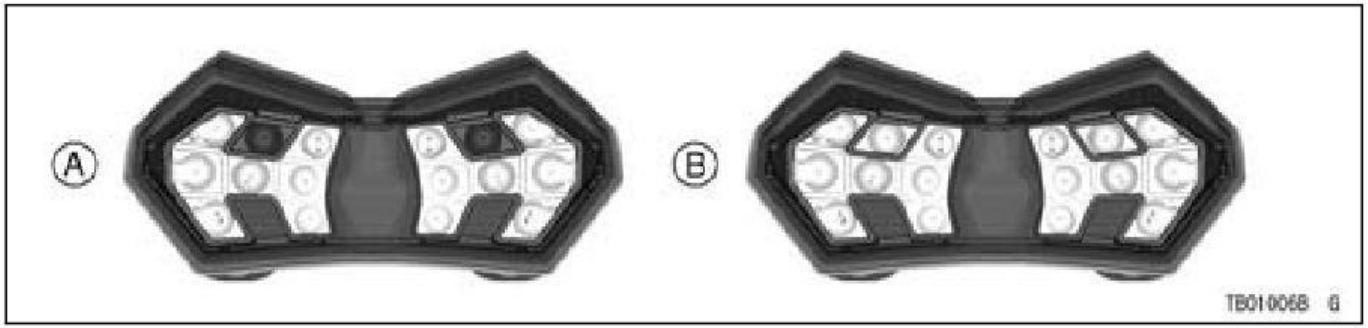
ELECTRICAL EQUIPMENT

Battery		12 V 8.6 Ah (10 HR)
Headlight:	High Beam	LED
	Low Beam	LED
City Light		LED
Cornering Light		LED
Brake/Tail Light		LED
Turn Signal Light		LED
License Plate Light		LED

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

Brake/Tail Light

The brake/tail light goes on as below.



A. When the ignition switch is turned on.
B. When the brakes are applied.

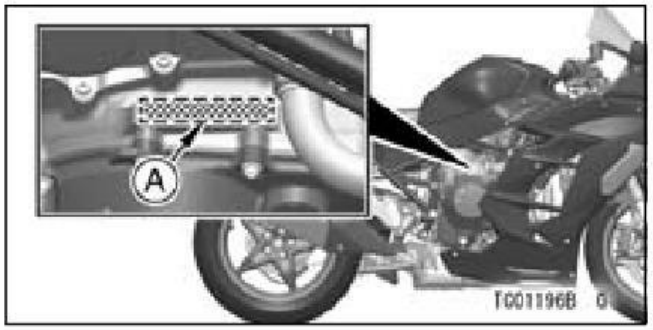
When the ignition switch is turned on, some LED does not go on, however, it is normal.

Specifications are subject to change without notice.

Serial Number Locations

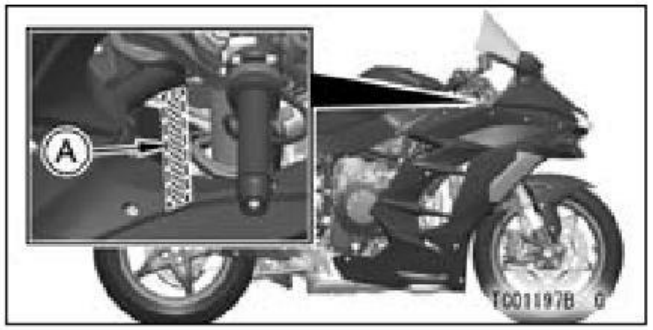
The engine and frame serial numbers are used to register the motorcycle. They are the only means of identifying your particular machine from others of the same model type. These serial numbers may be needed by your dealer when ordering parts. In the event of theft, the investigating authorities will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

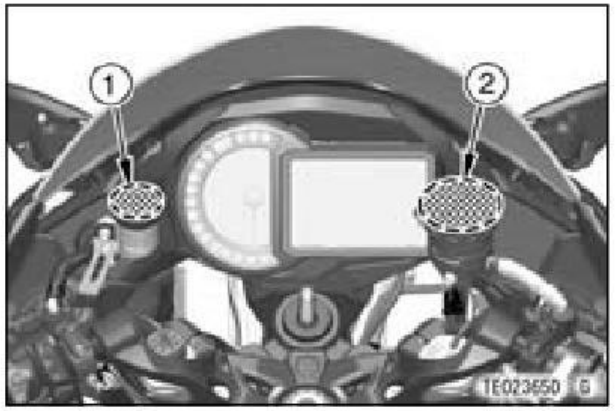
Location of Labels

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.

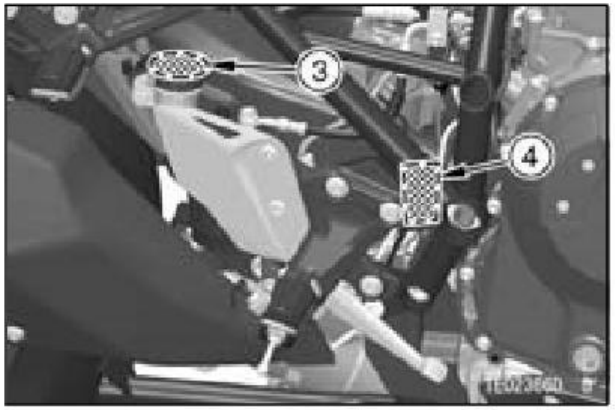
NOTE

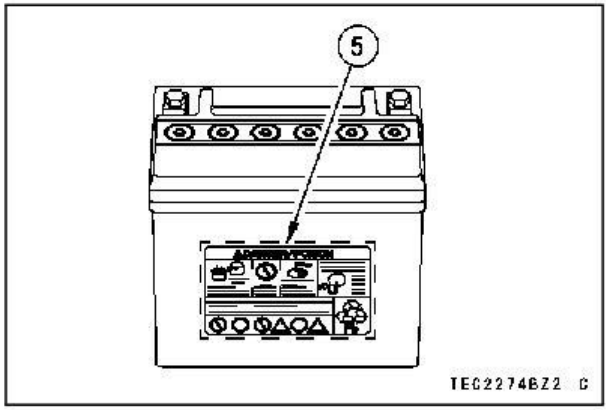
○ *The sample warning labels in this section have part numbers to help you and your dealer obtain the correct replacement.*

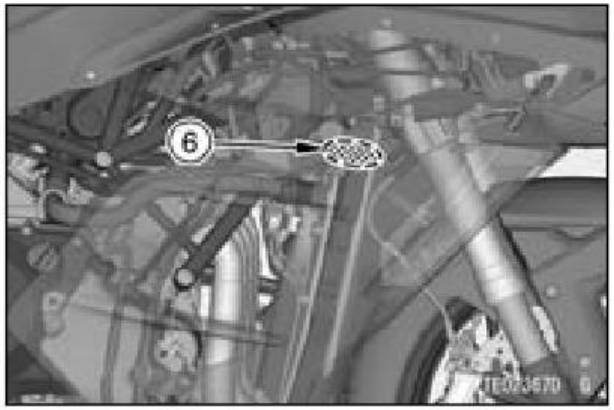
○ *Refer to the actual vehicle label for model specific data grayed out in the illustration.*



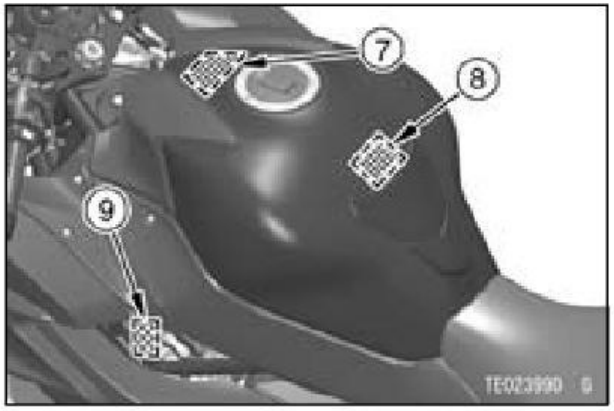
1. Clutch Fluid
2. Brake Fluid (Front)

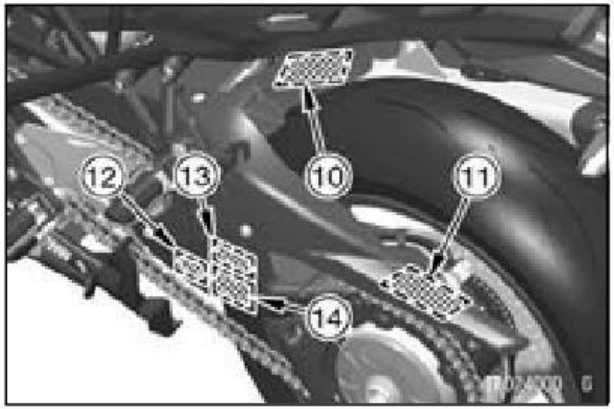






3. Brake Fluid (Rear)
4. Rear Shock Absorber Warning
5. Battery Poison/Danger
6. Radiator Cap Danger

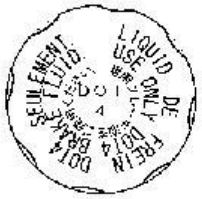




*1 7. Fuel Level
8. Fuel Notice
9. Weight and Manufacture
10. Tire and Load Data
11. Important Drive Chain Information
*1 12. Vacuum Hose Routing Diagram
13. Noise Emission Control Information
14. Vehicle Emission Control Information

*1: only on California model

1)



TE03528D S

2)

TE03133F S

3)

TE03879DN9 C

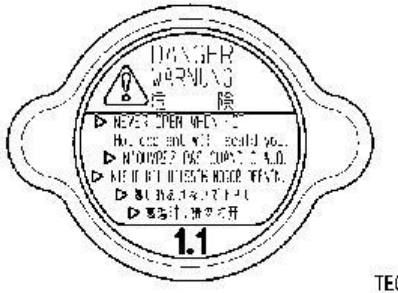
4)

TE03460DN7 C

5)

TE03498E S

6)



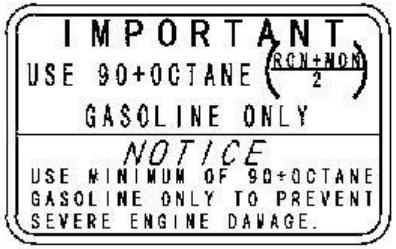
TE03772E S

7) only on California model

56071-0158

TE03142C S

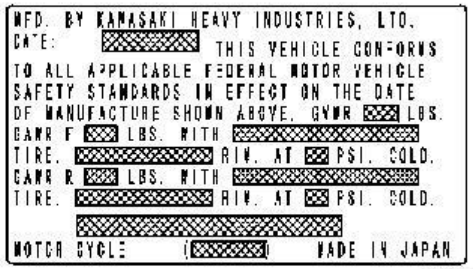
8)



56030-0357

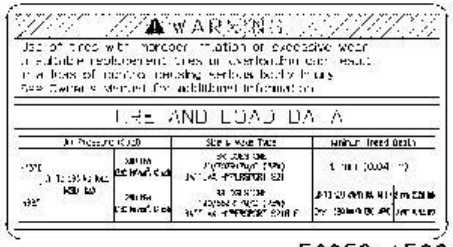
TE03172GN9 C

9)



TE03303D S

10)



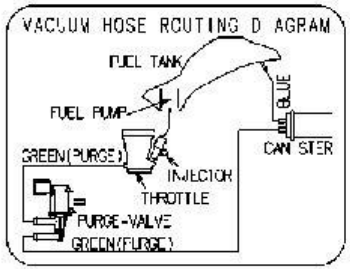
56053-1566

TE03999E S

11)

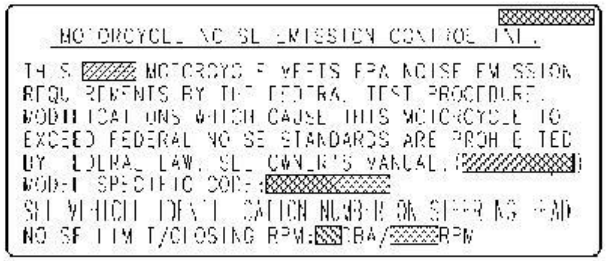
TE03491E S

12) only on California model



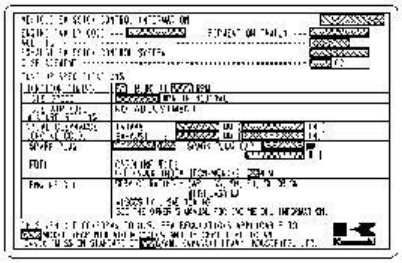
TE03218E S

13)



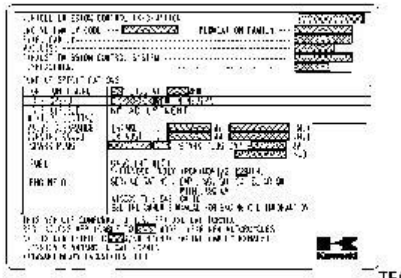
TE03304D S

14)



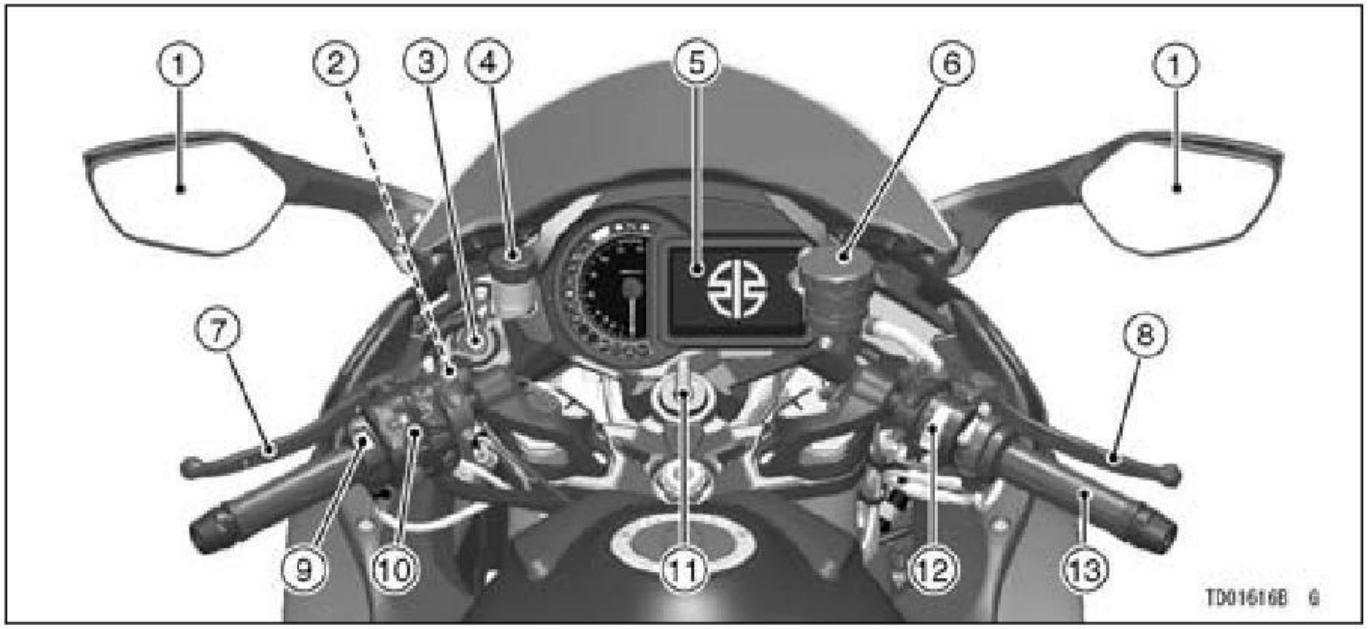
TE03300D S

14) only on California model

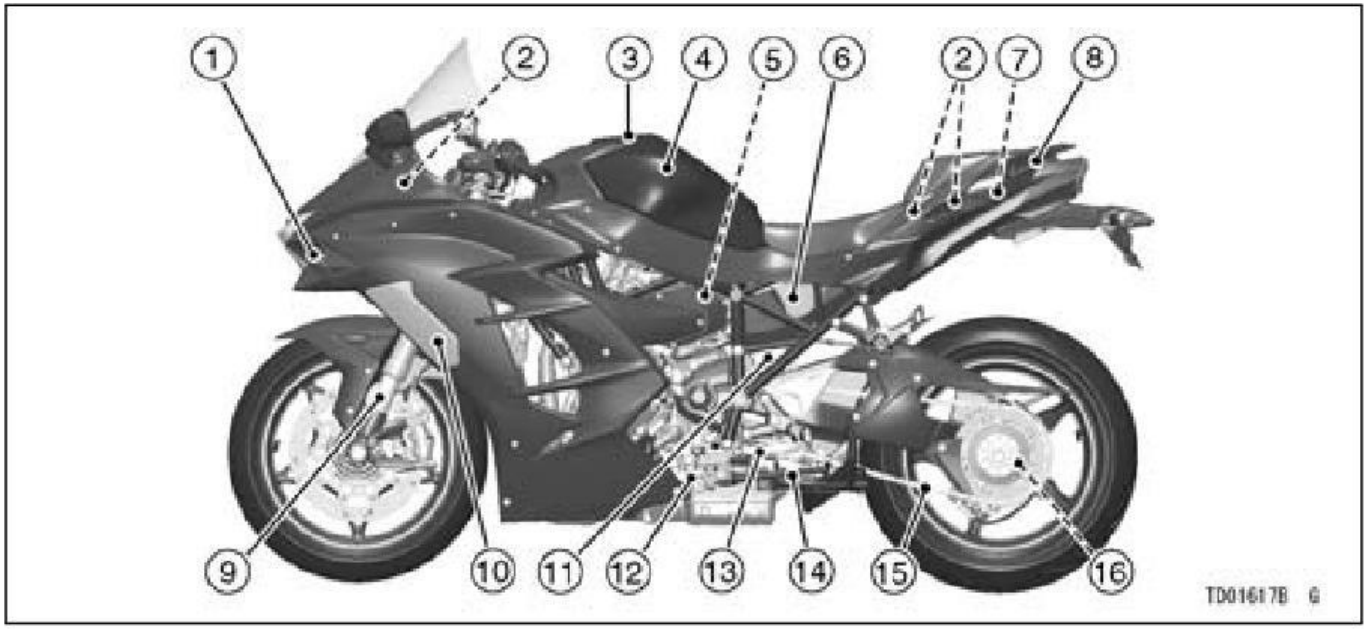


TE03301D S

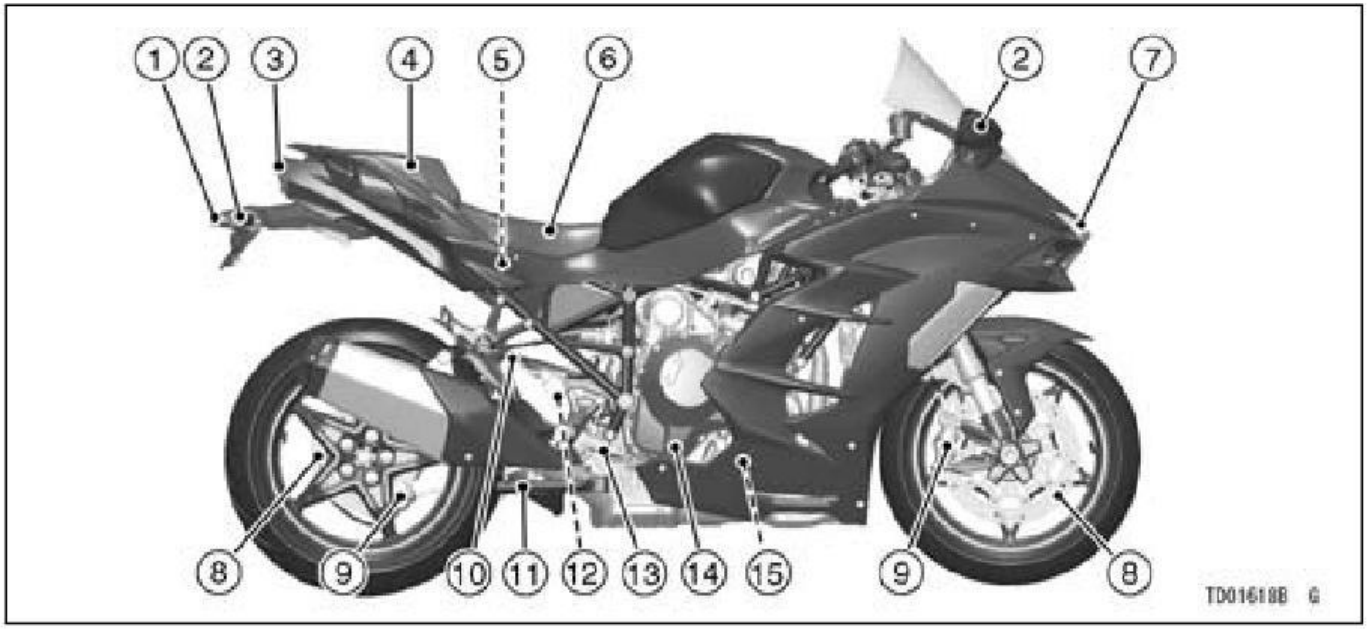
Location of Parts



1. Rear View Mirrors
2. Starter Lockout Switch
3. Accessory Socket
4. Clutch Fluid Reservoir
5. Meter Instrument
6. Brake Fluid Reservoir (Front)
7. Clutch Lever
8. Front Brake Lever
9. Grip Heater Switch
10. Left Handlebar Switches
11. Ignition Switch/Steering Lock
12. Right Handlebar Switches
13. Throttle Grip



1. Air Cleaner Intake
2. Fuse Boxes
3. Fuel Tank Cap
4. Fuel Tank
5. Air Cleaner
6. Seat Lock
7. Tool Kit
8. Grab Rail
9. Front Fork
10. Cornering Light
11. Rear Shock Absorber
12. Side Stand Switch
13. Shift Pedal
14. Side Stand
15. Drive Chain
16. Chain Adjuster

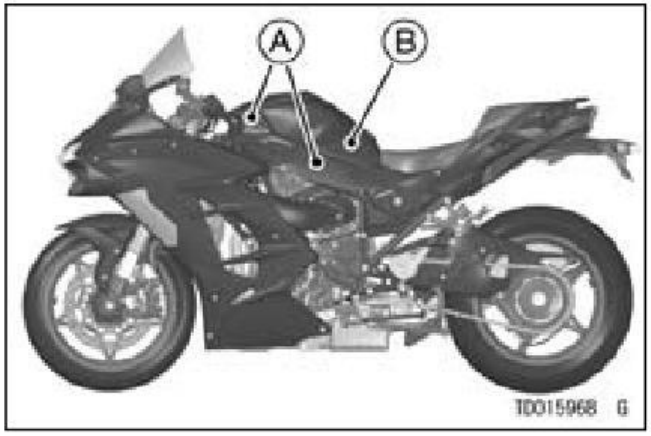


1. Licence Plate Light
2. Turn Signal Lights
3. Brake/Tail Light
4. Passenger's Seat
5. Battery
6. Rider's Seat
7. Headlight
8. Brake Discs
9. Brake Calipers
10. Brake Fluid Reservoir (Rear)
11. Center Stand
12. Rear Brake Light Switch
13. Rear Brake Pedal
14. Oil Level Inspection Window
15. Coolant Reserve Tank

Highly Durable Paint (For applicable color only)

Highly durable paint, a special coat which consist of soft and hard segments, can prevent daily use scratches.

Applied Parts



A. Fuel Tank Cover
B. Fuel Tank

NOTE

- *In some cases, it takes about one week for recovery.*
- *The paint will not recover in case of scratches caused by sharp objects such as coin, key, or zip fasteners.*

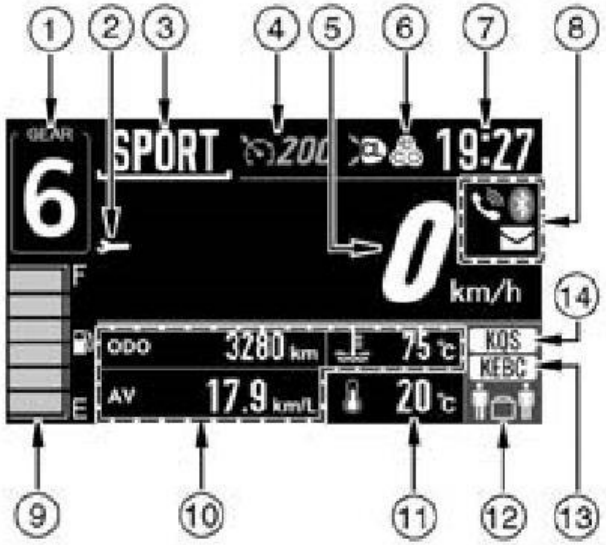
Meter Instruments

1. **Tachometer**
2. **Display Screen**
3. **Ambient Brightness Sensor**

The display layout can be switched from four different types. Refer to the Menu Mode section.

Display Layout (Type 1)

1. Gear Position Indicator
2. Service Indicator
3. Integrated Riding Mode Indicator
4. Cruise Control System Indicator
5. Speedometer
6. Economical Riding Indicator
7. Clock
8. Bluetooth® Connection Indicator
9. Fuel Gauge
10. Multifunction Display
    - Odometer
    - Trip Meter A/B
    - Lean Angle
    - Maximum Lean Angles
    - Current Mileage
    - Average Mileage
    - Cruising Range
    - Average Speed
    - Total Time
    - Battery Voltage
    - Coolant Temperature
    - Boost Temperature
    - Boost Pressure (%)
11. Outside Temperature Meter
12. KECS Preload Mode Indicator
13. KEBC Mode Indicator
14. KQS Mode Indicator

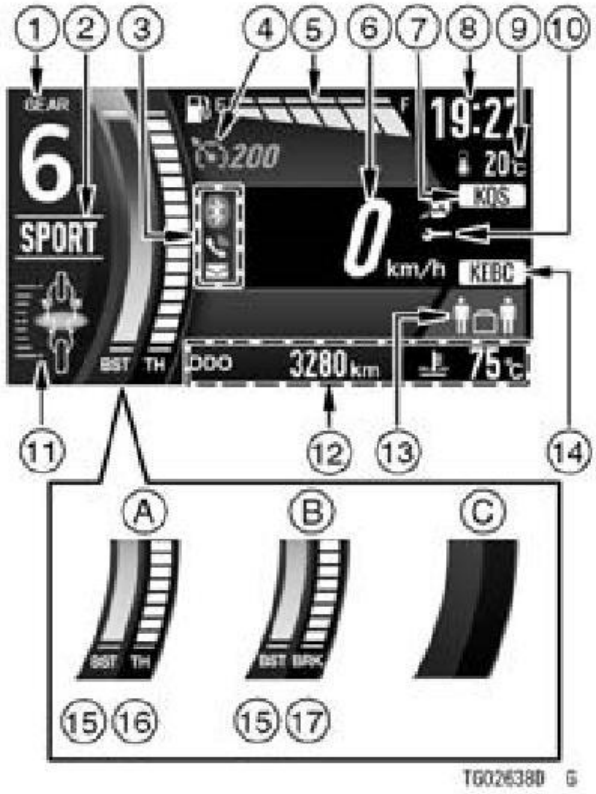


TG026370 G

Display Layout (Type 2/3/4)

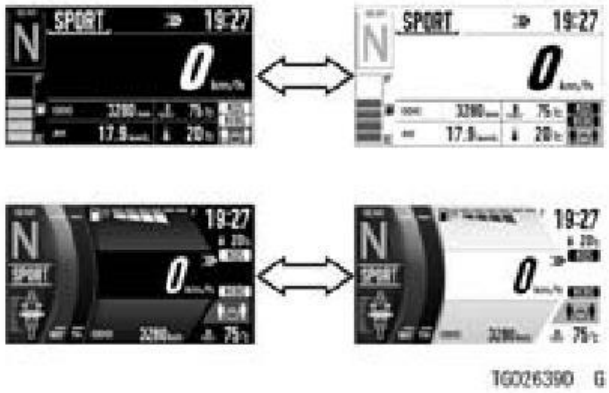
1. Gear Position Indicator
2. Integrated Riding Mode Indicator
3. Bluetooth® Connection Indicator
4. Cruise Control System Indicator
5. Fuel Gauge
6. Speedometer
7. KQS Mode Indicator
8. Clock
9. Outside Temperature Meter
10. Service Indicator
11. Acceleration/Deceleration Indicator
12. Multifunction Display
    - Odometer
    - Trip Meter A/B
    - Lean Angle
    - Maximum Lean Angles
    - Coolant Temperature
    - Boost Temperature
    - Boost Pressure (%)
13. KECS Preload Mode Indicator
14. KEBC Mode Indicator
15. Boost Pressure Gauge
16. Throttle Gauge
17. Front Brake Pressure Gauge

A. Type 2
B. Type 3
C. Type 4



Background Color Change

- Push the RESET button to invert the background color of the display screen.



⇨ : **Flow when pushing RESET button**

Ambient Brightness Sensor

The brightness of the meter instrument is controlled automatically depending on the ambient brightness.

NOTE

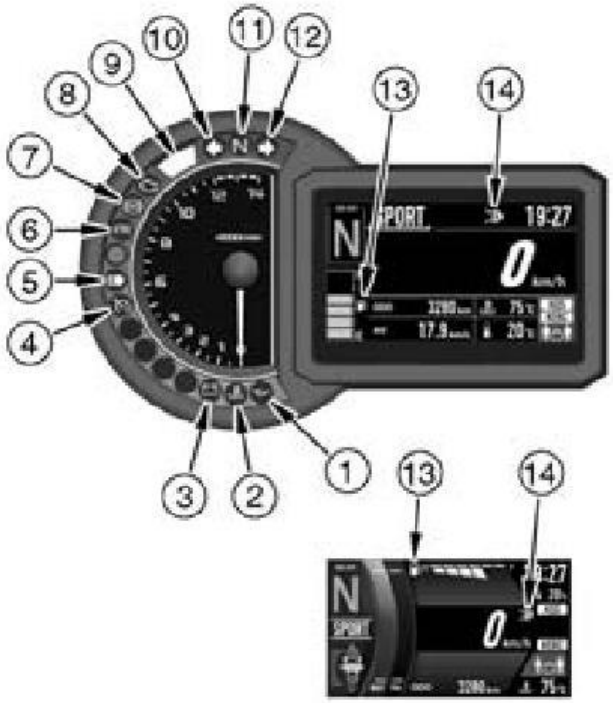
○ *Be careful not to cover the ambient brightness sensor on the meter instrument while riding the motorcycle.*

Meter Instrument Brightness Setting

- The brightness of the meter instrument can be adjusted manually in three levels. Refer to Brightness in the Menu Mode section.

Indicators

1. Oil Pressure Warning Indicator (Red)
2. Coolant Temperature Warning Indicator (Red)
3. Battery Warning Indicator (Red)
4. Cruise Control Indicator (White)
5. High Beam Indicator (Blue)
6. KTRC Indicator (Yellow)
7. ABS Indicator (Yellow)
8. Engine Warning Indicator (Yellow)
9. Shift-up Indicator (Yellow)
10. Left Turn Signal Indicator (Green)
11. Neutral Indicator (Green)
12. Right Turn Signal Indicator (Green)
13. Fuel Level Warning Indicator
14. Cornering Light Indicator



TG026410 G

Indicator Initial Operation

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

ON	⌛	🔑	Indicators
□	□	□	ABS N
□	□	■	
□	■	■	KTRC

ON: When ignition switch is turned on.
⌛: After a few seconds
🔑: When engine starts.
□: Goes on.
■: Goes off.
*: ABS goes off shorty after the motorcycle starts moving.

When Warning Indicators Go On or Blink

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

*: The numbers in this column corresponds to reference numbers on page 48.

*No.	Indi-cators	Status	Actions
1		ON	This indicator goes on whenever the oil pressure is dangerously low or the ignition switch is turned on with the engine not running. If this indicator goes on when the engine speed is above idle, stop the engine immediately and check the engine oil level. If the amount of engine oil is insufficient, add engine oil. If the oil level is good, have the engine checked by an authorized Kawasaki dealer.
2		ON	This indicator goes on whenever the coolant temperature rises to above 115°C (239°F). Refer to Coolant Temperature in the Multifunction Display section for more information and follow the instructions.

*No.	Indi-cators	Status	Actions
3		ON	This indicator goes on if the battery voltage is less than 11.0 V or more than 16.0 V. If the voltage is less than 11.0 V, charge the battery. If the voltage is more than 16.0 V, or if the indicator still goes on after charging the battery, have the battery and/or charging system checked by an authorized Kawasaki dealer.
13		Blink (including lowest segment)	Approximately 3.4 L (0.9 US gal) of usable fuel remains. Refuel at the earliest opportunity. If the vehicle is on the side stand, the warning indicator cannot estimate the amount of fuel in the tank. Stand the vehicle upright to check the fuel level.
		Blink (including all segments)	The fuel level warning system has malfunctioned. Have the fuel level warning system checked by an authorized Kawasaki dealer.

*No.	Indi-cators	Status	Actions
8		ON	The DFI system has malfunctioned. Have it checked by an authorized Kawasaki dealer.
7		ON*1	The ABS has malfunctioned. ABS will not work but conventional brakes function. Have the ABS checked by an authorized Kawasaki dealer.

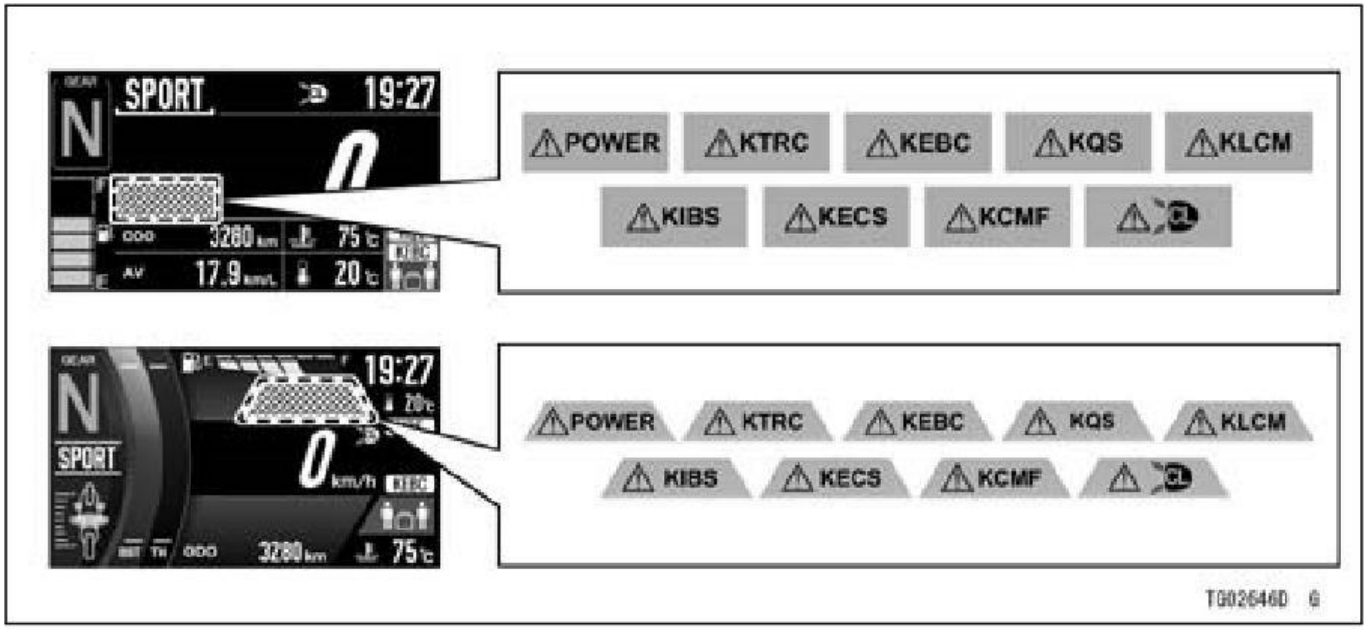
*1: ABS indicator may go on:

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

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

When Warning Messages Display

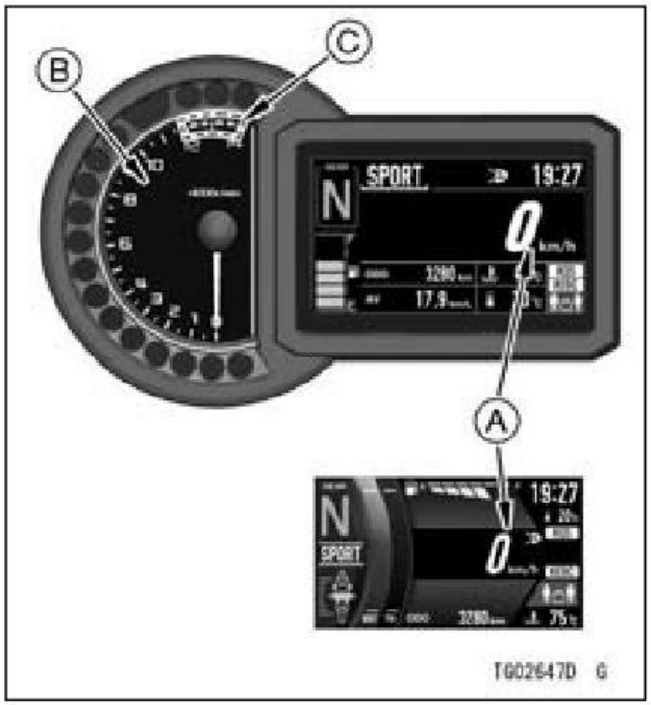
When warning messages appear, there could be a problem with vehicle function. Have them checked by an authorized Kawasaki dealer.



Other Indicators

*No.	Indicators	Status
4		When the cruise control system is on, this indicator goes on. For more detailed information of this system, refer to the Electronic Cruise Control System section in the HOW TO RIDE THE MOTORCYCLE chapter.
5		When the headlight is on high beam, this indicator goes on.
6	KTRC	When KTRC functions, this indicator blinks.
9		The shift-up indicator can be used to indicate the timing for the next up shift by blinking the shift-up indicator when a set engine speed is reached. Refer to the Menu Mode section for the setting of the shift-up indicator.
10		When the turn signal switch is pushed to the left, this indicator blinks.
11	N	When the transmission is in neutral, this indicator goes on.
12		When the turn signal switch is pushed to the right, this indicator blinks.
14		When the cornering light functions, this indicator goes on.

Speedometer/Tachometer



A. Speedometer
B. Tachometer
C. Red Zone

Speedometer

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

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

Tachometer

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

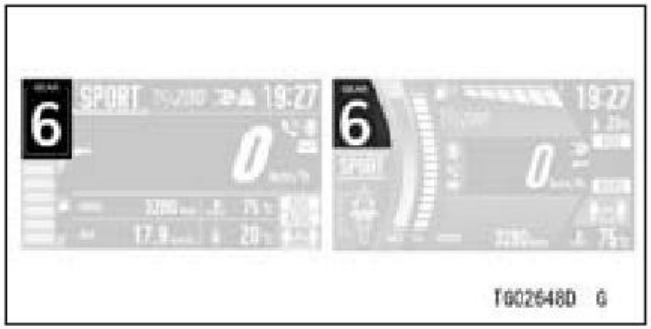
NOTICE

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

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

Features

Gear Position Indicator



The current gear position is shown. When the transmission is in neutral, "N" appears.

NOTE

○ *If the transmission gears are not engaged properly, the gear position indicator disappears.*

The gear position indicator also serves as the shift-up indicator.

Shift-up Indicator

The shift-up indicator indicates the timing for the next up shift. Before reaching the set engine speed, the gear position indicator starts blinking slowly. When the engine speed reaches the pre-set value, the gear position indicator changes color to amber and the shift-up indicator and the gear position indicator blink rapidly.

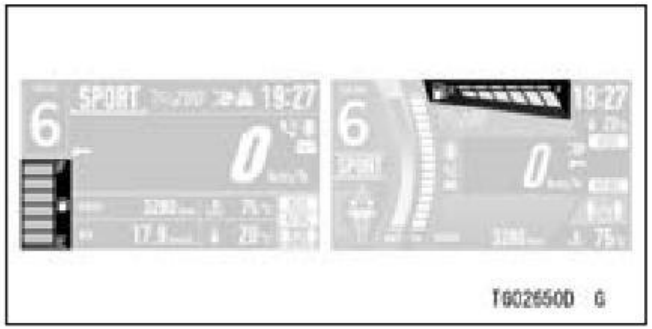
A. Shift-up Indicator
B. Gear Position Indicator

The shift-up indicator can be selected on or off, and the set value can be adjusted.

Shift-up Indicator Setting

- Refer to Vehicle Settings in the Menu Mode section.

Fuel Gauge



The fuel level in the fuel tank is shown by the number of segments displayed between E (empty) and F (full).

NOTE

○ *When the fuel level warning indicator and segment(s) blink, refer to When Warning Indicators Go On or Blink in the Indicators section.*

Outside Temperature Meter

The outside temperature around the vehicle is shown.

NOTE

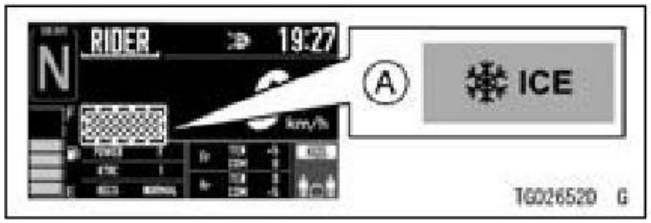
- *The outside temperature can be displayed from -20°C (-4°F) to 60°C (140°F).*
- *It may not be displayed correctly in this meter when the vehicle speed is 20 km/h (12 mph) or less, or the outside temperature sensor gets wet. The reading of the outside temperature meter does not increase when the speed is 20 km/h (12 mph) or less.*

⚠ WARNING

If the outside temperature is less than 3°C (37 °F) when the ignition key is turned on, the outside temperature meter changes to black text on an orange background or the "ICE" message appears to warn the operator that roads may be icy. Check the road surface and ride carefully.

NOTE

○ *When the outside temperature is not displayed, the "ICE" warning message appears.*



A. "ICE" Warning Message

Economical Riding Indicator
(Only on display layout Type 1)

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

⚠ 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.

Acceleration/Deceleration Indicator

(Only on display layout Type 2/3/4)

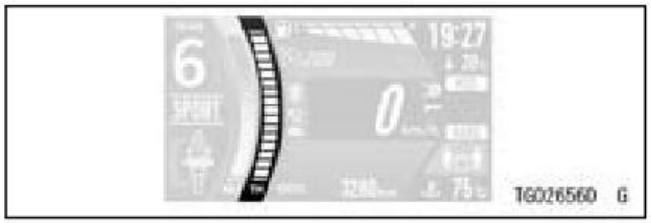
This indicator shows the acceleration/deceleration rate of the vehicle. When acceleration is greater, the indicator moves more to the back side of the vehicle illustration. When deceleration is greater, the indicator moves more to the front side of the vehicle illustration.

Boost Pressure Gauge

(Only on display layout Type 2/3)

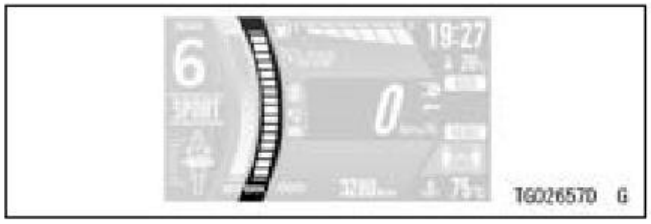
This gauge shows the instantaneous boost pressure in the intake air chamber.

Throttle Gauge
(Only on display layout Type 2)



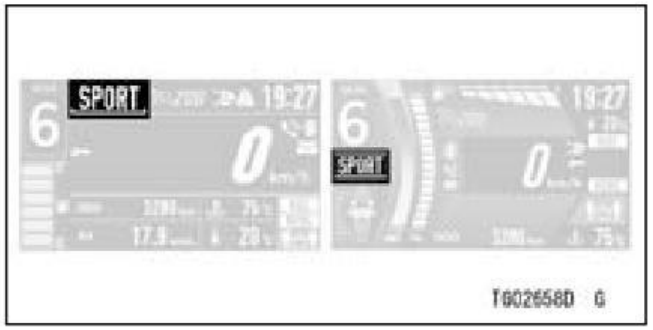
The opening angle of the throttle valve in the throttle body is shown.

Front Brake Pressure Gauge
(Only on display layout Type 3)



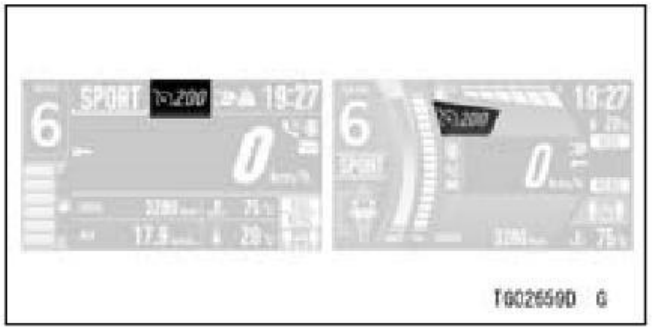
The fluid pressure of the front brake line is shown.

Integrated Riding Mode Indicator



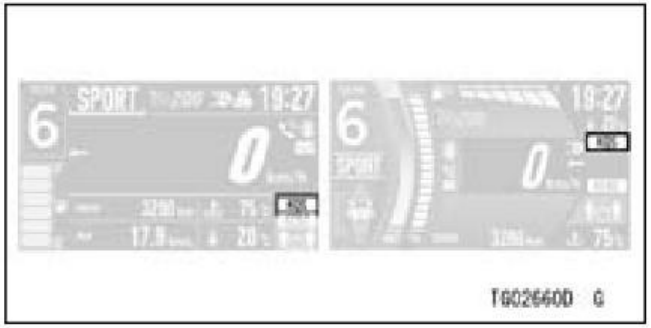
The current setting of the integrated riding mode is shown. Refer to the Integrated Riding Modes section in the HOW TO RIDE THE MOTORCYCLE chapter.

Cruise Control System Indicator



The status of the electronic cruise control system is shown. Refer to the Electronic Cruise Control System section in the HOW TO RIDE THE MOTORCYCLE chapter.

KQS Mode Indicator

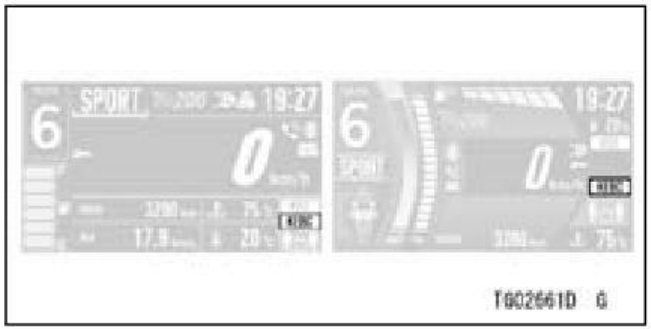


The current setting of KQS is shown. Refer to the Kawasaki Quick Shift (KQS) section in the HOW TO RIDE THE MOTORCYCLE chapter.

KQS Setting

- Refer to Vehicle Settings in the Menu Mode section.

KEBC Mode Indicator

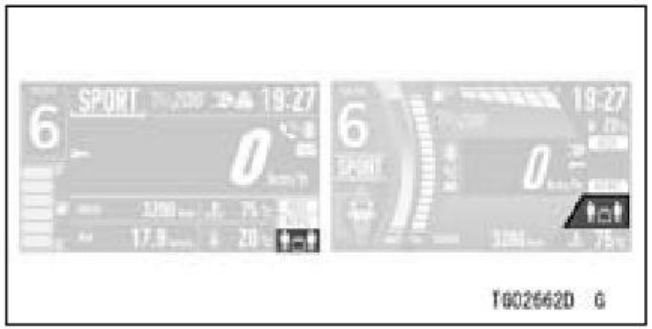


The current setting of KEBC is shown. Refer to the Kawasaki Engine Brake Control (KEBC) section in the HOW TO RIDE THE MOTORCYCLE chapter.

KEBC Setting

- Refer to Vehicle Settings in the Menu section.

KECS Preload Mode Indicator

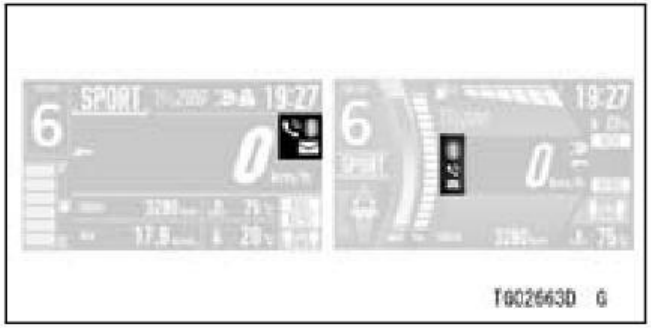


The current setting of KECS spring preload is shown. Refer to the Kawasaki Electronic Control Suspension (KECS) section in the HOW TO RIDE THE MOTORCYCLE chapter.

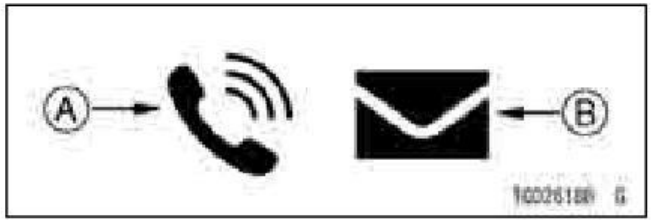
KECS Preload Adjustment

- Refer to Vehicle Settings in the Menu Mode section.

Bluetooth® Connection Indicator



The Bluetooth icon appears when your smart device is connected to the vehicle. The telephone icon appears when a phone call is received by your smart device. The mail icon appears when a email or text message is received.



A. Telephone Icon
B. Mail Icon

How to Setup Bluetooth Connection

- Refer to Bluetooth in the Menu Mode section.

Bluetooth® Connectivity

This motorcycle can connect to the smart device via built-in Bluetooth wireless technology.

Using the application “RIDEOLOGY THE APP,” several data of your vehicle can be accessed, and several setting items can be adjusted. Refer to the application for details.

⚠ WARNING

For safety, do not use a smart device while riding the motorcycle.

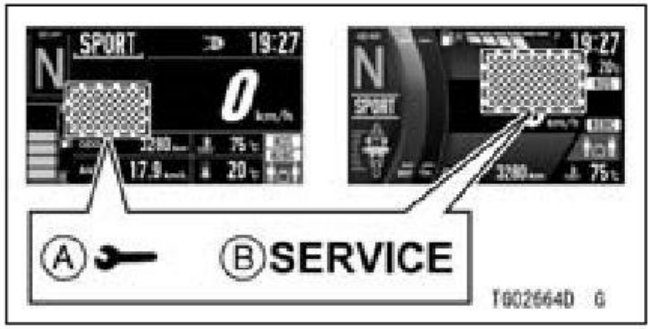
NOTE

- *Some smart devices may not be compatible even if Bluetooth technology is available.*
- *The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc., and any use of such marks by Kawasaki Heavy Industries, Ltd. is under license.*

Bluetooth®

TG02619D G

Service Indicator



A. Service Indicator
B. "SERVICE" Message

This motorcycle has three types of maintenance reminders; the standard Kawasaki maintenance schedule, user defined interval for oil, and user defined interval for regular maintenance to assist you with maintenance on your Kawasaki.

When the date or distance reaches to the set value, the service indicator and message appear on the display screen

every time the ignition switch is turned on.

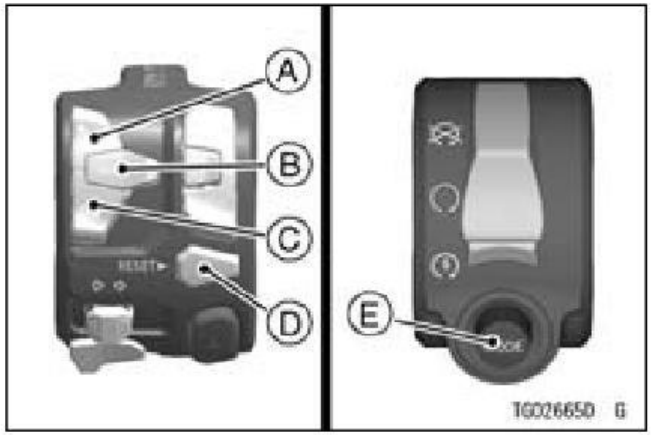
Only “SERVICE” message disappears after 30 seconds.

Maintenance Reminder Setting

- Refer to Service in the Menu Mode section.

Control Buttons

The upper MODE, lower MODE, PRELOAD and RESET buttons on the left handlebar and right MODE button on the right handlebar are used to operate the various functions of the display screen.

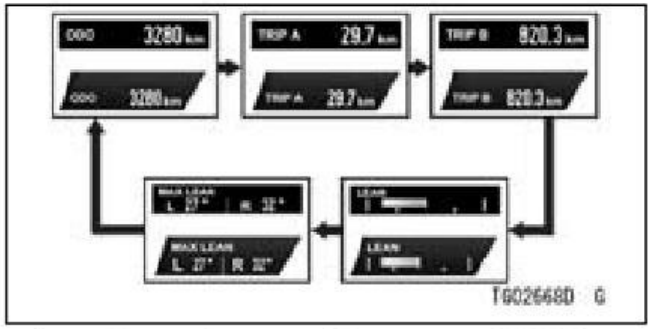


A. Upper MODE Button
B. PRELOAD Button
C. Lower MODE Button
D. RESET Button
E. Right MODE Button

Multifunction Display

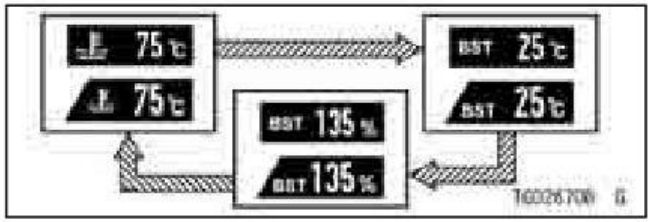
- Push the upper MODE, lower MODE or PRELOAD button to select the item. The display items are switched in the following order.

Odometer
Trip Meter A
Trip Meter B
Lean Angle
Maximum Lean Angles



➡ : **Flow when pushing upper MODE button**

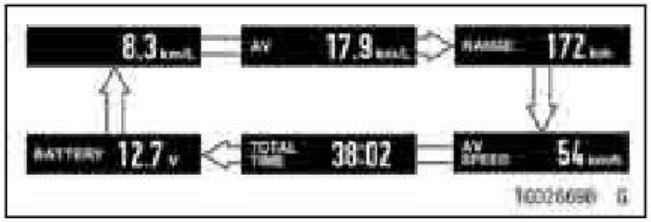
Coolant Temperature
Boost Temperature
Boost Pressure (%)



⇨ : **Flow when pushing PRELOAD button**

(Only on display layout Type 1)

Current Mileage
Average Mileage
Cruising Range
Average Speed
Total Time
Battery Voltage



⇨ : **Flow when pushing lower MODE button**

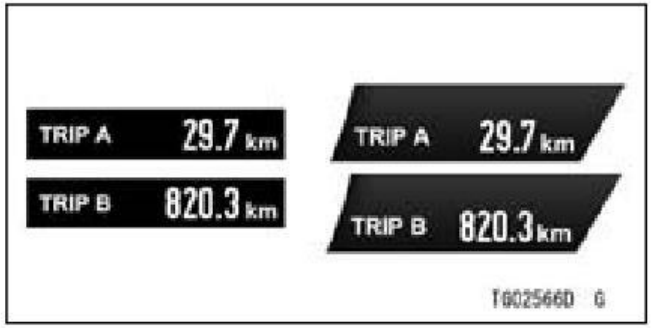
Odometer

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

NOTE

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

Trip Meter



The trip meter shows the distance traveled since it was reset.

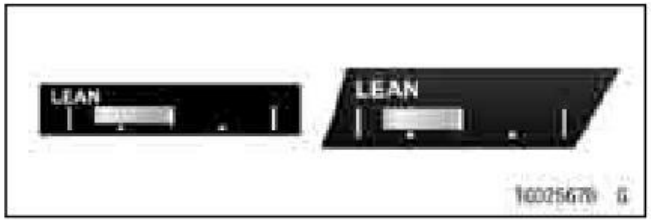
NOTE

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

How to Reset

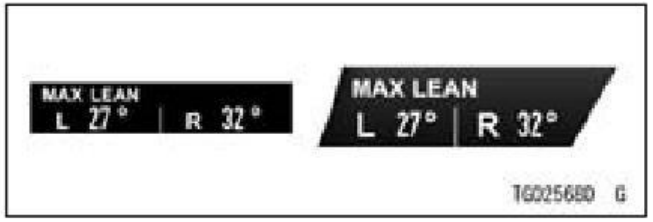
Refer to the Multifunction Display Resetting section.

Lean Angle



This shows the lean angle of the vehicle. The more it is leaned, the larger the bar on the gauge.

Maximum Lean Angles

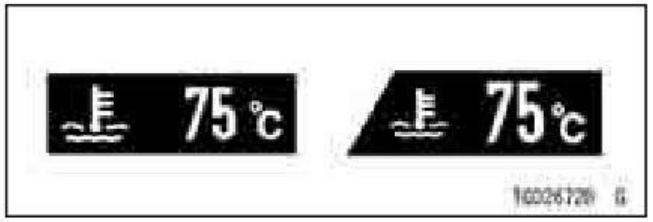


This shows the maximum lean angles of the vehicle by numerical value.

How to Reset

Refer to the Multifunction Display Resetting section.

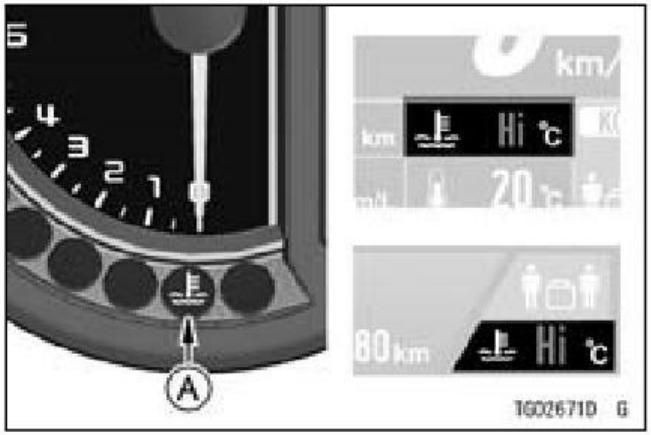
Coolant Temperature



This shows the engine coolant temperature. If the coolant temperature

is below 40°C (104°F), "– – –" is displayed.

If the coolant temperature rises to above 115°C (239°F), the meter starts blinking and the warning indicator goes on. If the coolant temperature rises to 120°C (248°F) or more, "Hi" appears and starts blinking, the coolant temperature warning indicator continues to appear. This warns the operator that the coolant temperature is high.



A. Coolant Temperature Warning Indicator

Stop the engine and check the coolant level in the reserve tank after the engine cools down. If the amount of coolant is insufficient, add coolant to the reserve tank. If the coolant level is good, have the cooling system checked by an authorized Kawasaki dealer.

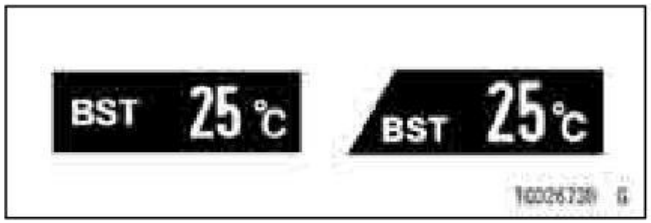
NOTICE

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

NOTE

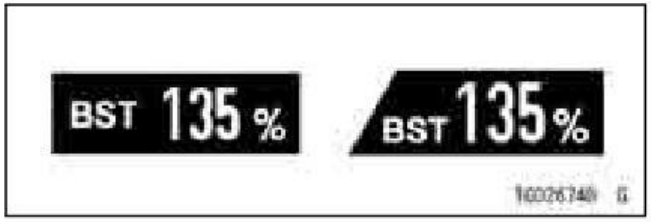
○ *Other item is switched to the coolant temperature automatically if the coolant temperature rises to above 115°C (239°F).*

Boost Temperature



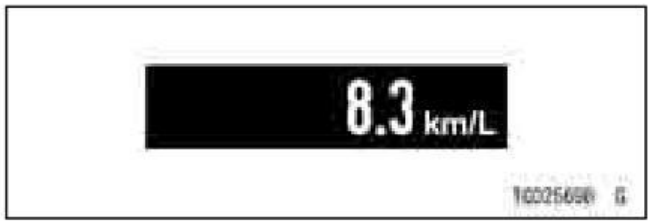
This shows the boost temperature of the intake air chamber.

Boost Pressure (%)



This shows the boost pressure of the intake air chamber by the percentage.

Current Mileage

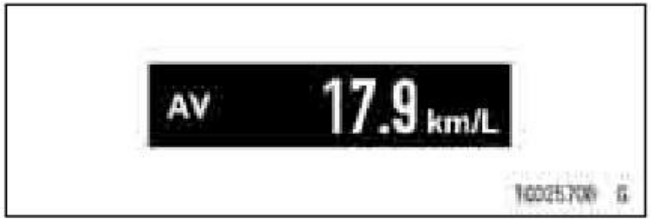


This shows the instantaneous rate of fuel consumption. It is renewed every 4 seconds.

NOTE

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

Average Mileage

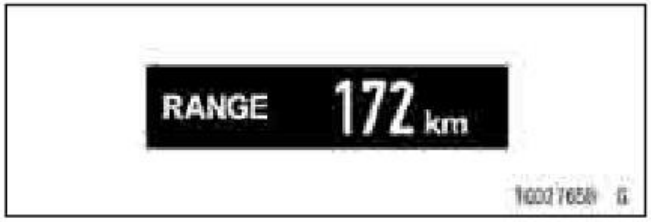


This shows the average rate of fuel consumption since it was reset. It is renewed every 5 seconds.

How to Reset

Refer to the Multifunction Display Resetting section.

Cruising Range

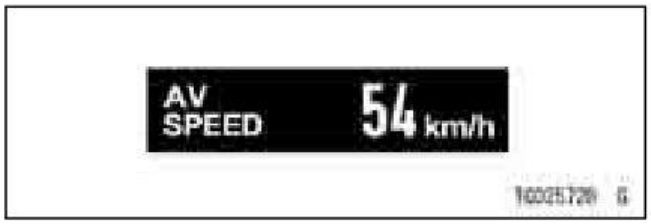


This indicates the cruising range from the remaining fuel in the fuel tank. It is renewed every 20 seconds.

NOTE

- *The cruising range value disappears if the fuel level gets too low.*
- *To recover the cruising range display, add fuel to at least the level needed for the fuel level warning indicator to stop blinking. The cruising range value may still be displayed with a low fuel level, but it will not be accurate until enough fuel is added to stop the fuel level warning indicator from blinking.*

Average Speed



This shows the average vehicle speed since it was reset.

How to Reset

Refer to the Multifunction Display Resetting section.

Total Time

This shows the amount of time that has elapsed while the ignition switch is turned on.

NOTE

○ *When the figures come to 99:59, the display is stopped and locked.*

How to Reset

Refer to the Multifunction Display Resetting section.

Battery Voltage

This shows the current battery voltage.

NOTE

○ *The battery voltage is displayed in the 9.0 ~ 16.0 V range. If the display range is exceeded, the indication is*

fixed at the maximum or minimum value.

○ *The battery voltage shown in this display may differ from the numerical value measured by a volt meter.*

Multifunction Display Resetting

The following multifunction display items can be reset.

Trip Meter A/B
Maximum Lean Angles
Average Mileage
Average Speed
Total Time

NOTE

○ *When pushing any button (upper MODE, lower MODE, PRELOAD, right MODE) while the item is blinking, the resetting is canceled.*

○ *After the item has been blinking for five seconds, the resetting is canceled.*

When only one resettable item is shown:

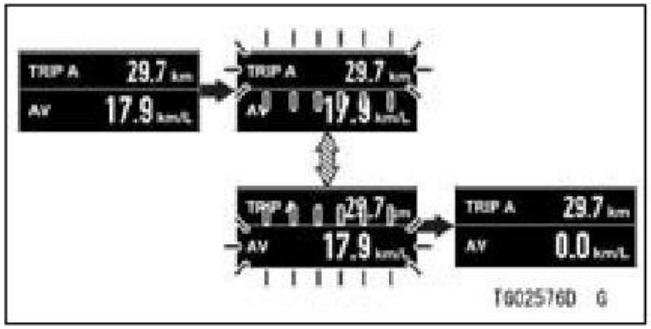
● Push the RESET button and hold it until resetting is done.

➡ : **Flow when pushing and holding RESET button**

When two resettable items are shown:

● Push the RESET button and hold it. The resettable item starts blinking.

- The blinking item indicates that it is being selected. Push the RESET button to select the item.
- Push the RESET button and hold it until resetting is done.

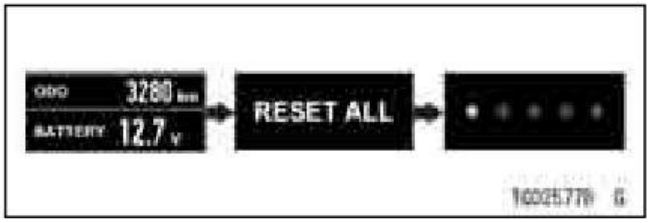


➡ : **Flow when pushing and holding RESET button**

⇨ : **Flow when pushing RESET button**

When no resettable item is shown:

- Push the RESET button and hold it. "RESET ALL" appears.
- "RESET ALL" means all resettable items will be reset. Push the RESET button and hold it until resetting is done.



➡ : **Flow when pushing and holding RESET button**

NOTE

○ *If the ignition switch is turned off during resetting, the reset is not carried out.*

Menu Mode

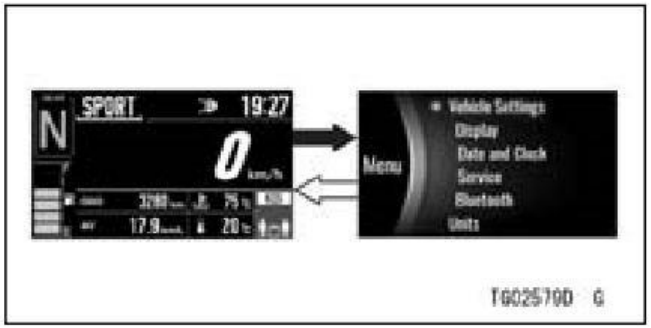
The menu mode can set various functions of the vehicle.

NOTE

○ *When the vehicle speed exceeds 5 km/h (3 mph), the menu mode cannot be displayed.*

How to Enter/Exit Menu Mode

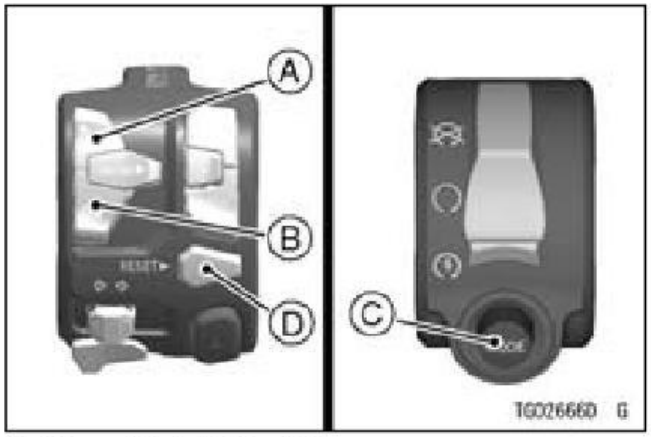
- Push and hold the right MODE button to enter.
- Push the RESET button to exit.



➡ : **Flow when pushing and holding right MODE button**

⇨ : **Flow when pushing RESET button**

Basic Operations in Menu Mode



A. Move highlighted item
B. Move highlighted item
C. Shift to next screen
D. Go back to previous screen (cancel)

Vehicle Settings

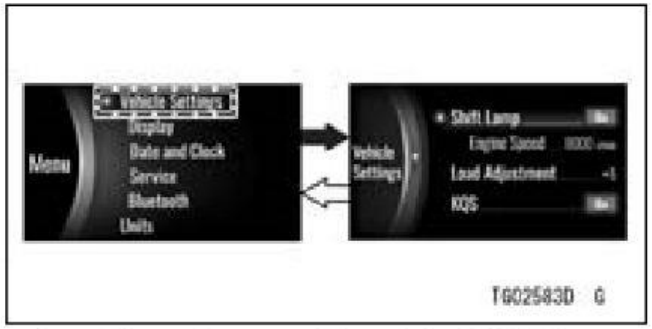
Screen 1 of 2

Shift Lamp: Turn shift-up indicator system on or off
Engine Speed: Adjust pre-set engine speed of shift-up indicator
Load Adjustment: Adjust preload setting of KECS
KQS: Turn KQS on or off

Screen 2 of 2

KEBC: Turn KEBC off or light
Cornering Lights: Turn cornering light system on or off
RIDER Mode: Turn RIDER mode on or off

- Enter the menu mode.
- Highlight “Vehicle Settings” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.

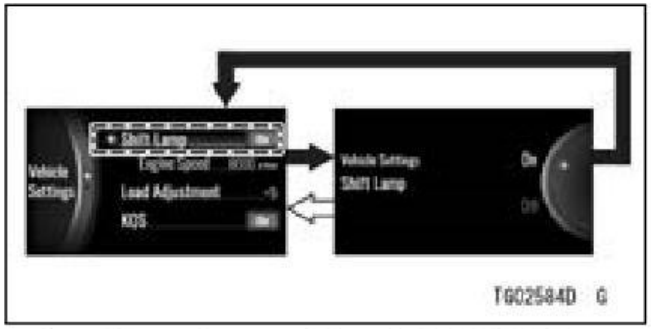


➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

Shift Lamp

This switches the shift-up indicator system on or off.

- Highlight “Shift Lamp” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Choose on or off using the upper or lower MODE button.
- Push the right MODE or RESET button.



➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

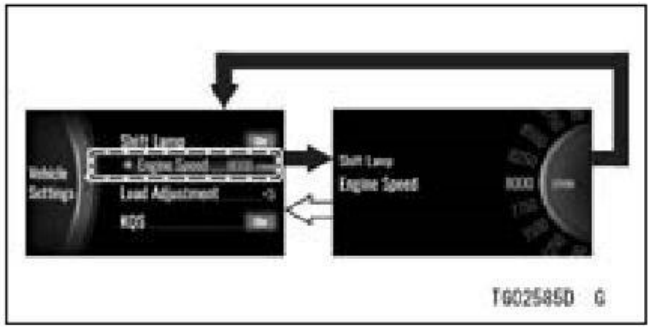
Engine Speed

This adjusts the timing at which the shift-up indicator works.

NOTE

○ *When "Shift Lamp" setting is off, this item is grayed out.*

- Highlight "Engine Speed" using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Set the desired engine speed using the upper or lower MODE button.
- Push the right MODE or RESET button.



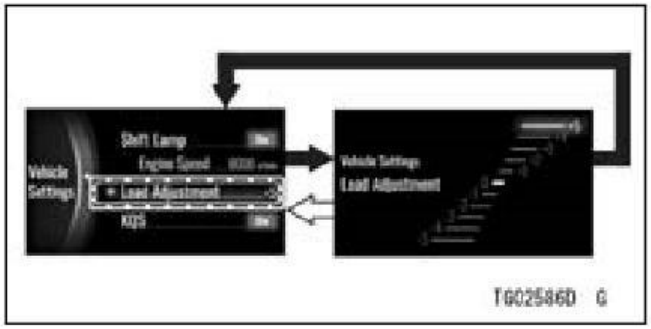
➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

Load Adjustment

This adjusts the preload setting of KECS in 11 levels.

- Highlight "Load Adjustment" using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.

- Adjust the setting using the upper or lower MODE button.
- Push the right MODE or RESET button.



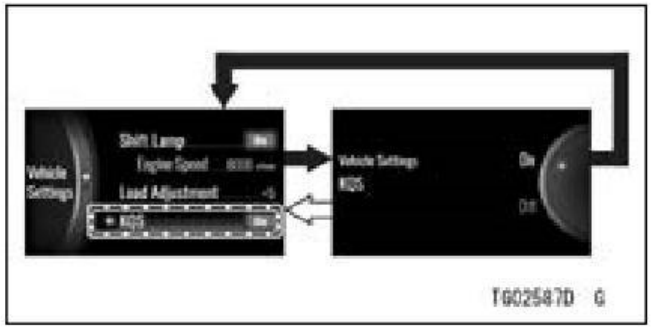
➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

KQS

This switches KQS (Kawasaki Quick Shift) on or off.

- Highlight “KQS” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.

- Choose on or off using the upper or lower MODE button.
- Push the right MODE or RESET button.



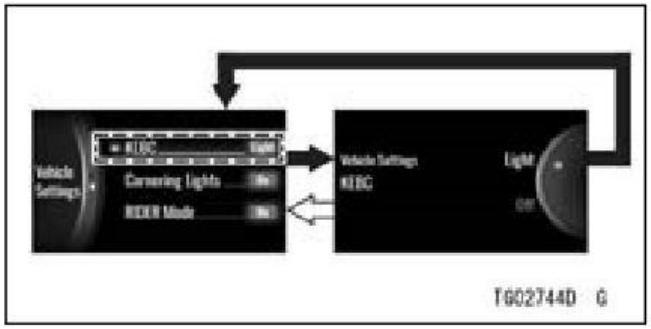
➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

KEBC

This switches KEBC (Kawasaki Engine Brake Control) off or light.

- Highlight “KEBC” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.

- Choose “Light” or “Off” using the upper or lower MODE button.
- Push the right MODE or RESET button.



➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

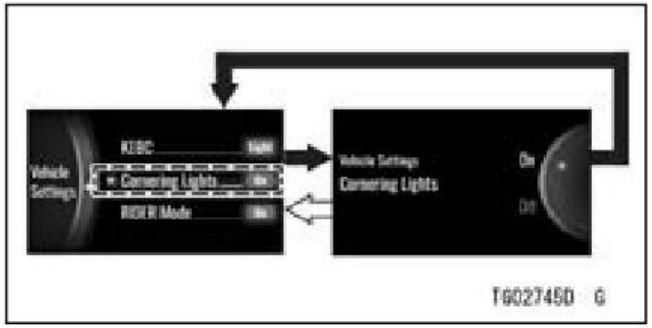
Cornering Lights

This switches the cornering light system on or off.

NOTE

○ *This item is grayed out when the engine is stopped.*

- Highlight “Cornering Lights” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Choose on or off using the upper or lower MODE button.
- Push the right MODE or RESET button.

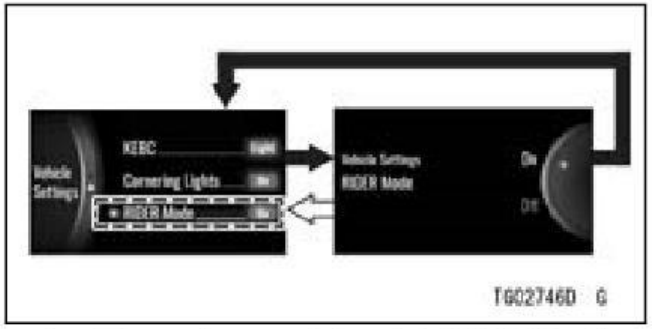


➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

RIDER Mode

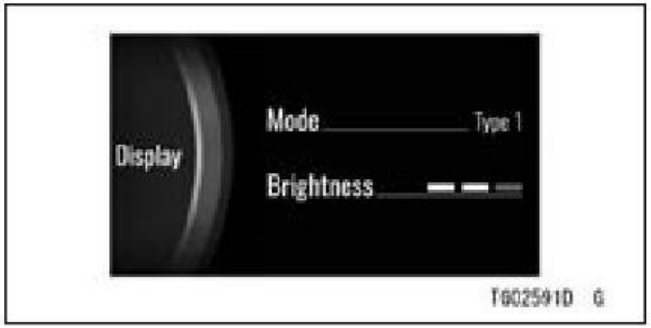
This switches the RIDER mode on or off.

- Highlight “RIDER Mode” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Choose on or off using the upper or lower MODE button.
- Push the right MODE or RESET button.



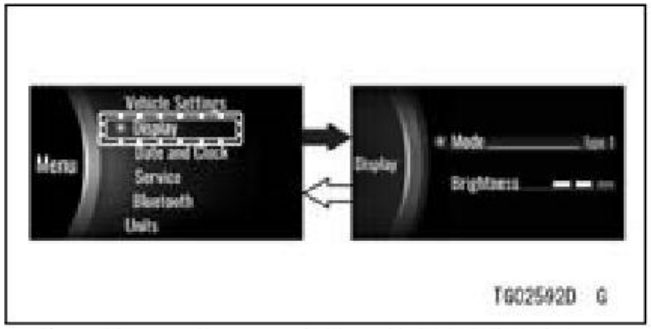
➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

Display



Mode: Switch layout of LCD
Brightness: Adjust backlight of LCD

- Enter the menu mode.
- Highlight “Display” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.

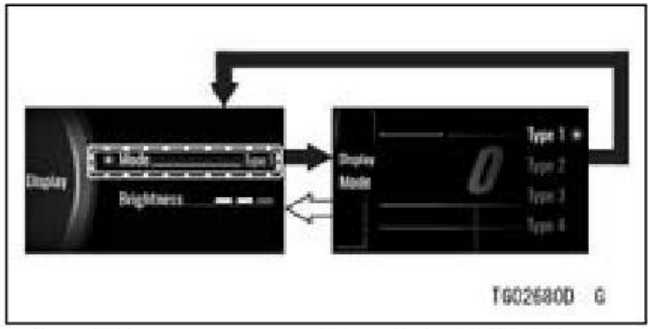


➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

Mode

This switches the display layout.

- Highlight “Mode” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Choose the layout type using the upper or lower MODE button.
- Push the right MODE or RESET button.

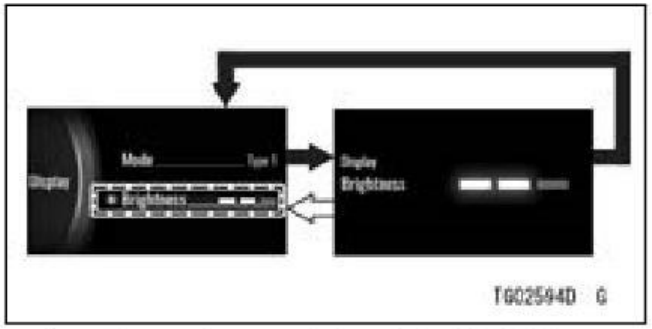


➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

Brightness

This adjusts the backlight brightness of the screen in three levels.

- Highlight “Brightness” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Adjust the setting using the upper or lower MODE button.
- Push the right MODE or RESET button.



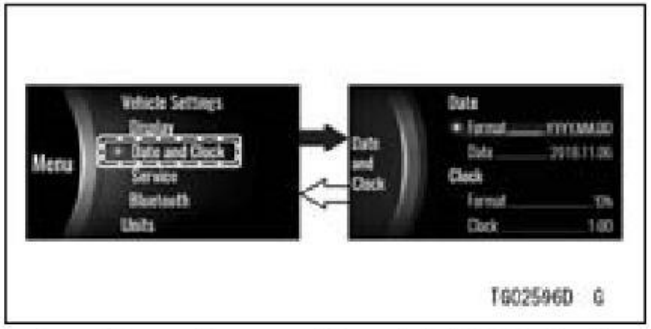
➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

Date and Clock

Date: Adjust date
Clock: Adjust clock

Format: Choose date and time notation

- Enter the menu mode.
- Highlight “Date and Clock” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.



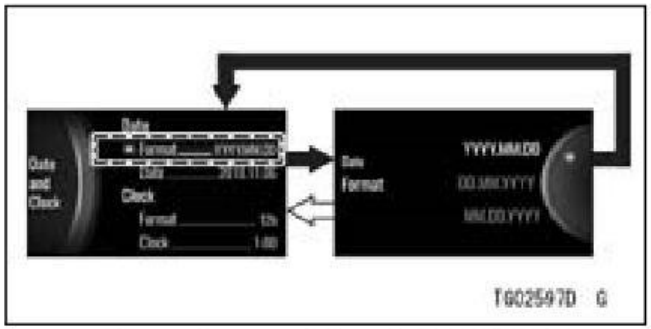
➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

Format (Date)

This switches the date format.

- Highlight “Format” under “Date” using the upper or lower MODE button.

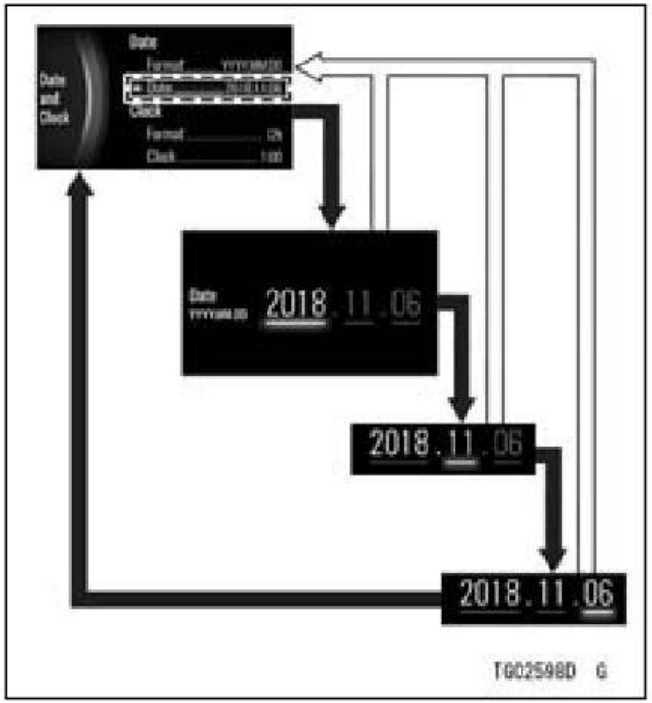
- Push the right MODE button to shift to the next screen.
- Choose the date format using the upper or lower MODE button.
- Push the right MODE or RESET button.



➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

Date

- Highlight “Date” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Adjust the date using the upper or lower MODE button and the right MODE button.
- Push the right MODE or RESET button.

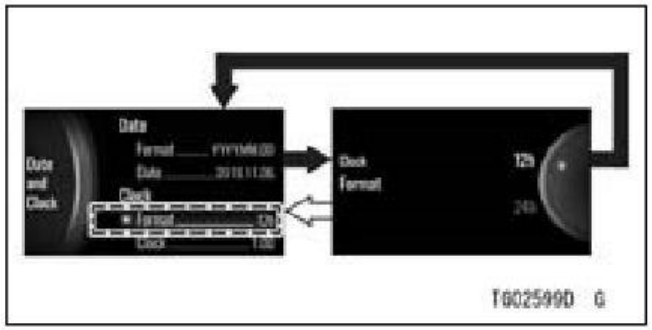


➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

Format (Clock)

This switches the time display.

- Highlight “Format” under “Clock” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Choose the 12-hour clock or 24-hour clock using the upper or lower MODE button.
- Push the right MODE or RESET button.

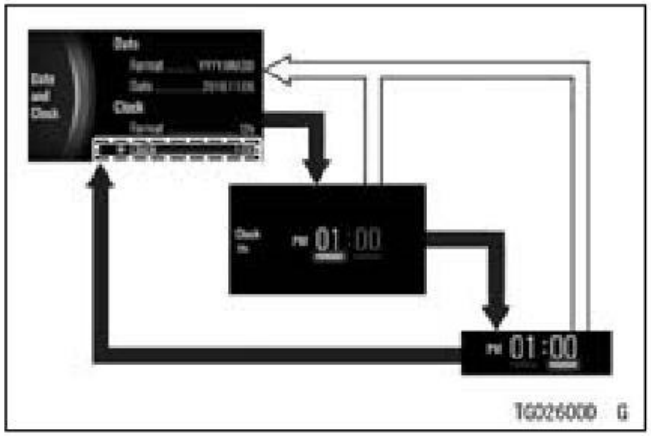


➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

Clock

- Highlight “Clock” using the upper or lower MODE button.

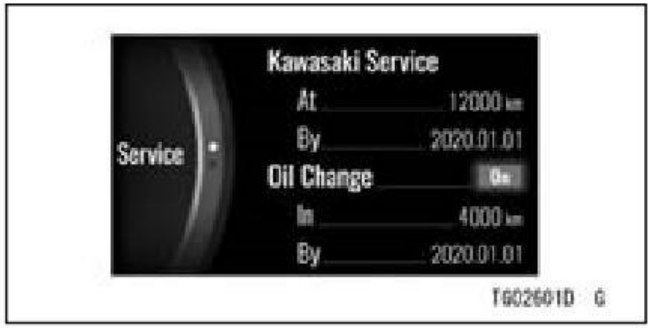
- Push the right MODE button to shift to the next screen.
- Adjust the clock using the upper or lower MODE button and the right MODE button.
- Push the right MODE or RESET button.



➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

Service

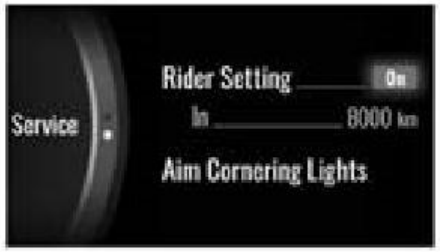
Screen 1 of 2



Kawasaki Service: Dealer defined interval for periodic maintenance (can be activated or deactivated by authorized Kawasaki dealer)

Oil Change: User defined interval for engine oil change (user can set distance and end date maintenance reminder)

Screen 2 of 2



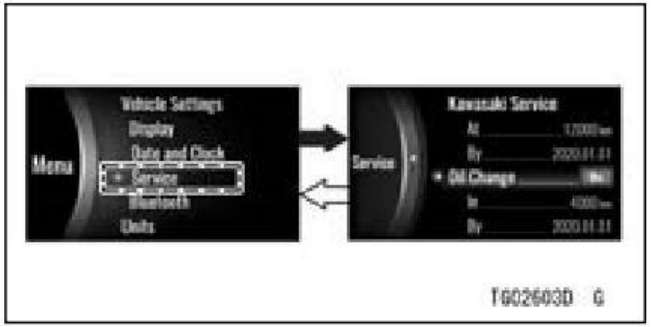
Rider Setting: User defined interval for maintenance (user can set distance maintenance reminder)

Aim Cornering Lights: A mode turn on cornering light for aiming (adjustable only by dealers)

NOTE

- *The disabled item is grayed out.*
- *The distance shown on the meter indicates the remaining distance to the maintenance reminder and will decrease as the vehicle is operated.*
- *The service item changes to orange when the scheduled date or distance is reached.*

- Enter the menu mode.
- Highlight "Service" using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.



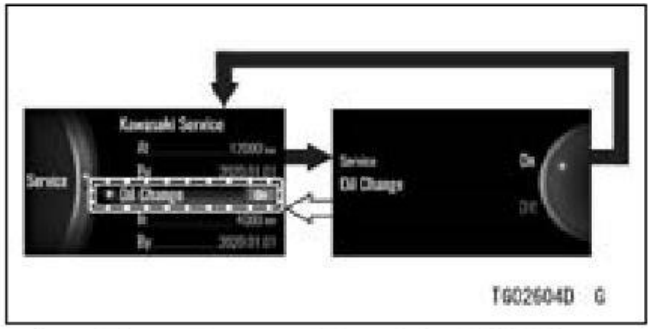
➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

Oil Change

This switches the engine oil maintenance schedule notification on or off.

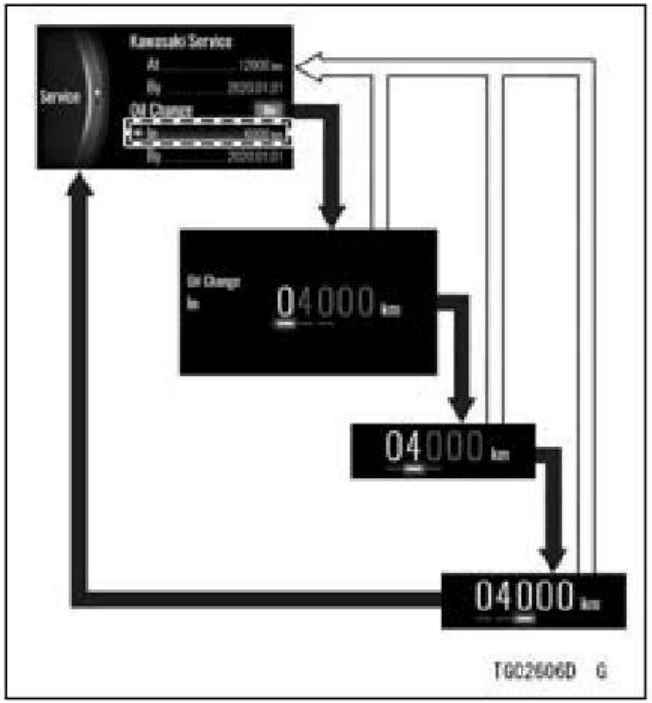
The setting distance also can be adjusted.

- Highlight “Oil Change” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Choose on or off using the upper or lower MODE button.
- Push the right MODE or RESET button.



➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

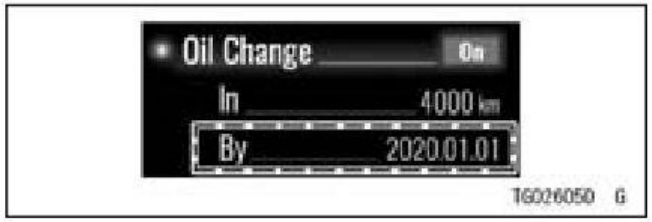
- Highlight “In” under “Oil Change” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Set the desired distance using the upper or lower MODE button and the right MODE button.



➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

NOTE

○ *The setting date cannot be changed manually. It sets to one year later automatically when turning on this function or changing the distance. When the current date is "2019.01.01," it sets to "2020.01.01."*

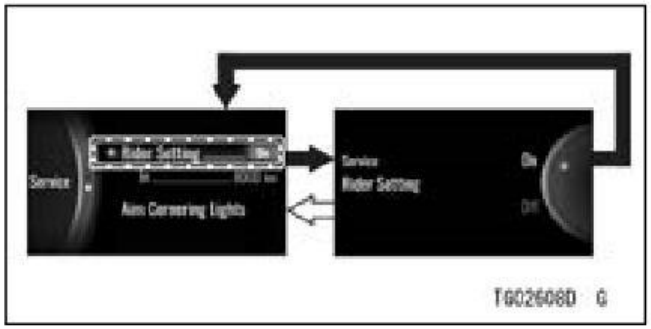


Rider Setting

This allows the rider to set the distance for certain maintenance item.

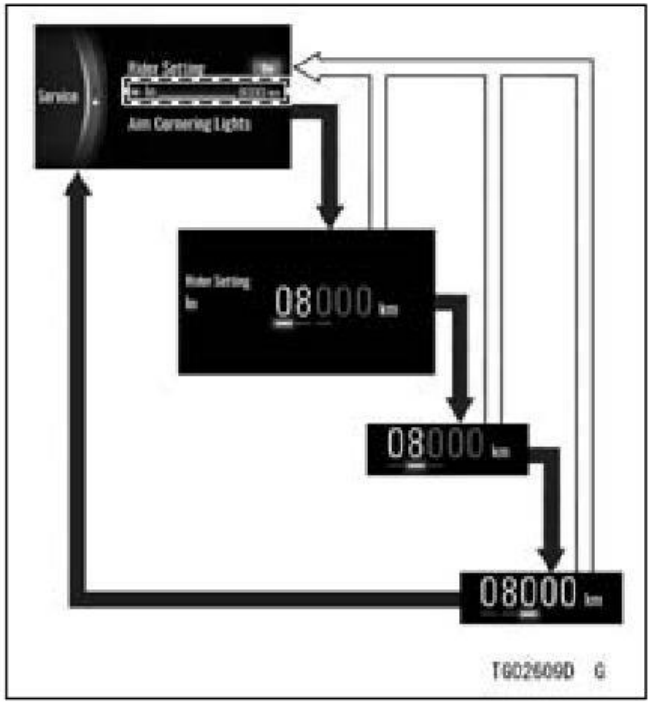
- Highlight "Rider Setting" using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Choose on or off using the upper or lower MODE button.

- Push the right MODE or RESET button.



➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

- Highlight “In” under “Rider Setting” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Set the desired distance using the upper or lower MODE button and the right MODE button.



➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

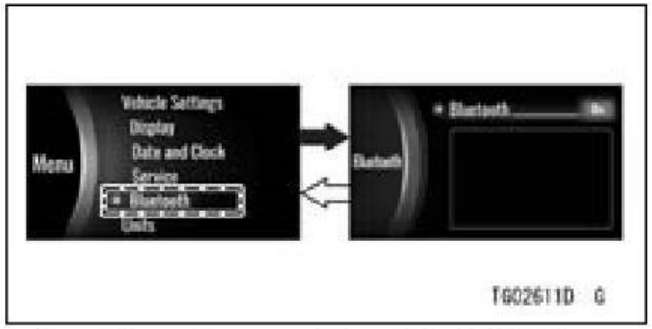
Bluetooth®

Bluetooth: Turn Bluetooth wireless technology on or off

NOTE

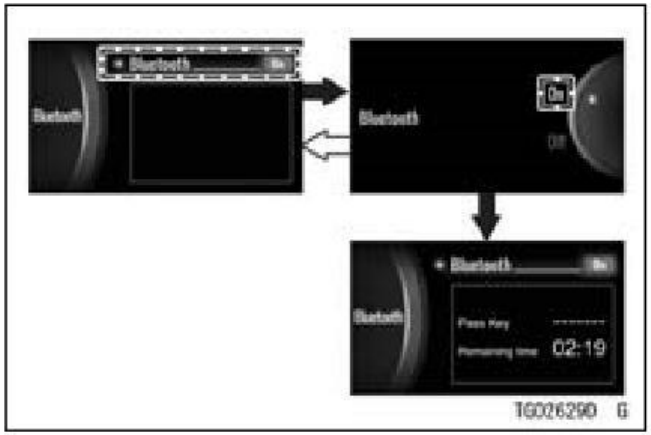
○ *To use the Bluetooth function, "RIDEOLOGY THE APP" is necessary.*

- Enter the menu mode.
- Highlight "Bluetooth" using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.



➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

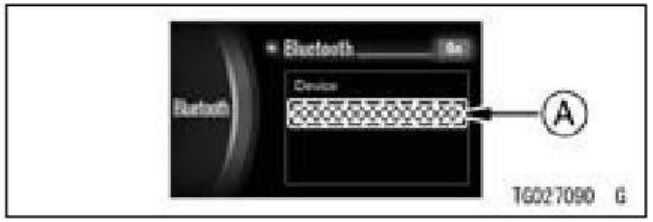
- Push the right MODE button to shift to the next screen.
- Choose on or off using the upper or lower MODE button.
- Push the right MODE or RESET button. When selecting "On," the motorcycle starts searching for the smart device.
- Turn on the Bluetooth function of the smart device and launch the app.



➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

NOTE

○ *If the motorcycle detects the paired device, they connect automatically.*



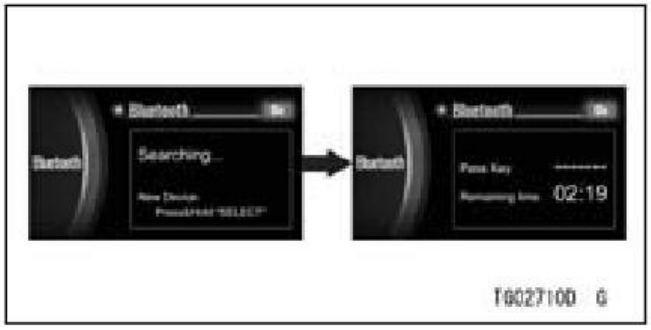
A. Connected Device Name

- In the pairing setting menu of the app, select “Ninja H2 SX” and tap the connect button. The motorcycle displays the pass key (PIN) on the display screen.
- Enter the pass key (PIN) into the unpaired device.

A. Pass Key (PIN)

NOTE

- *If the motorcycle does not detect the device, bring the device closer to the meter instruments.*
- *To pair with other smart device, push and hold the right MODE button after the Bluetooth is turned on. When the remaining time is appeared, operate the app.*

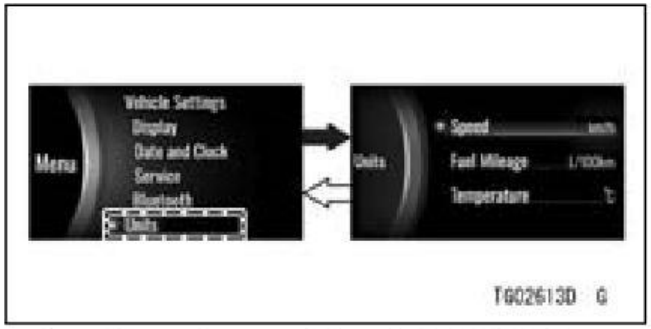


➡ : **When pushing and holding right MODE button**

Units

Speed: Switch unit of speed between kph and mph
Fuel Mileage: Switch unit of fuel consumption
Temperature: Switch unit of temperature between °C and °F

- Enter the menu mode.
- Highlight “Units” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.

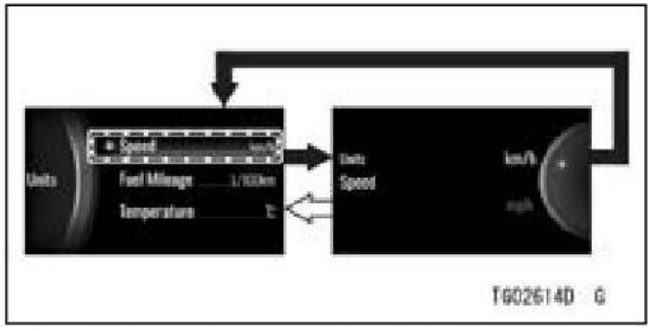


➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

Speed

This switches the unit of speed.

- Highlight “Speed” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Choose “km/h” or “mph” using the upper or lower MODE button.
- Push the right MODE or RESET button.

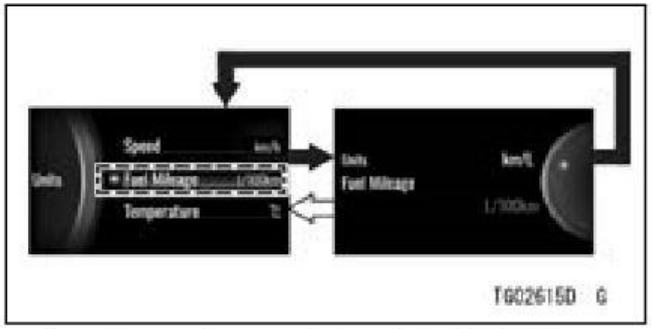


➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

Fuel Mileage

This switches the unit of fuel consumption.

- Highlight “Fuel Mileage” using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Choose the unit by the upper or lower MODE button.
- Push the right MODE or RESET button.



➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

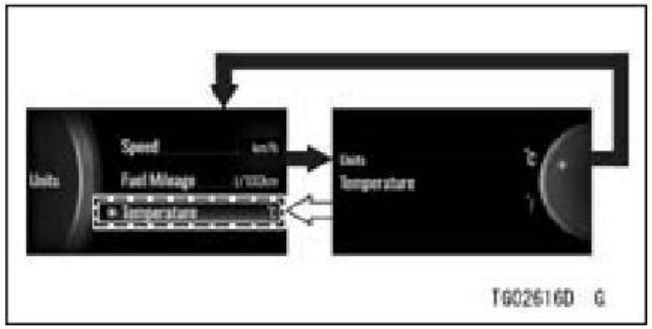
NOTE

○ *The choices will change according to the unit set by "Speed."*

Temperature

This switches the unit of temperature.

- Highlight "Temperature" using the upper or lower MODE button.
- Push the right MODE button to shift to the next screen.
- Choose "°C" or "°F" using the upper or lower MODE button.
- Push the right MODE or RESET button.

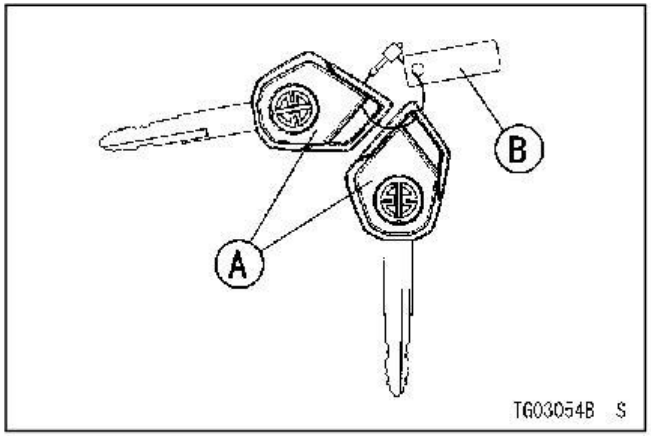


➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

Keys

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

Write your key code on the MAINTENANCE RECORD page.



A. Ignition Key
B. Key Code Tag

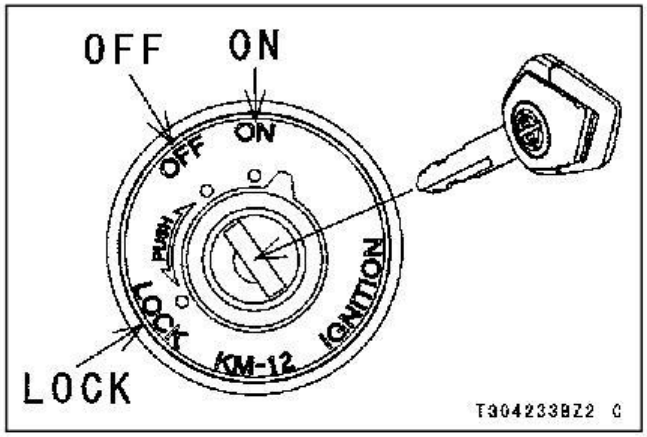
If you lose all keys and the key code, you will need to replace the ignition switch and all other locks operated by that key.

Contact your Kawasaki dealer to purchase additional spare keys.

Ignition Switch/Steering Lock

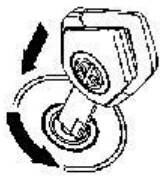
This is a three-position, key-operated switch.

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



ON	● Engine can be started. ● All electrical equipment can be used. ● Key cannot be removed.
OFF	● Engine off. ● Electrical equipment is off. ● Key can be removed.
LOCK	● Steering locked. ● Engine off. ● Electrical equipment is off. ● Key can be removed.

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



1G04231B S

⚠ WARNING

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

NOTE

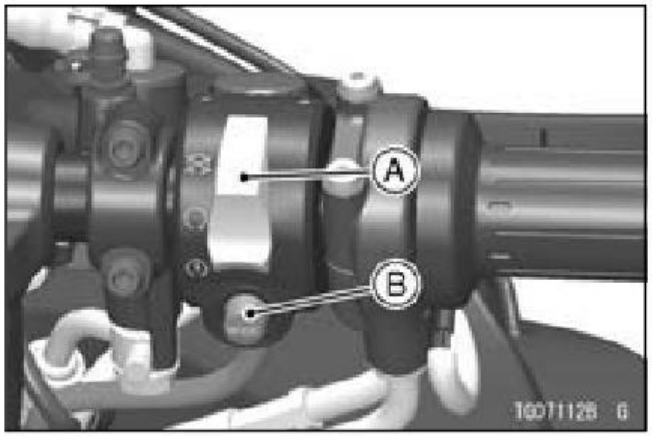
○ *The tail, city and license plate lights are on whenever the ignition key is in the "ON" position. The headlight goes on when the starter button is released after starting the engine.*

○ *Do not leave the ignition switch at the "ON" position for an extended time*

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

- *Do not leave the hazard lights switched on for a long time without the engine running or the battery will become discharged.*

Right Handlebar Switches



A. Engine Start/Stop Switch
B. Right Mode Button

Engine Start/Stop Switch

To start the engine, refer to the Starting the Engine section for starting instructions.

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

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

NOTE

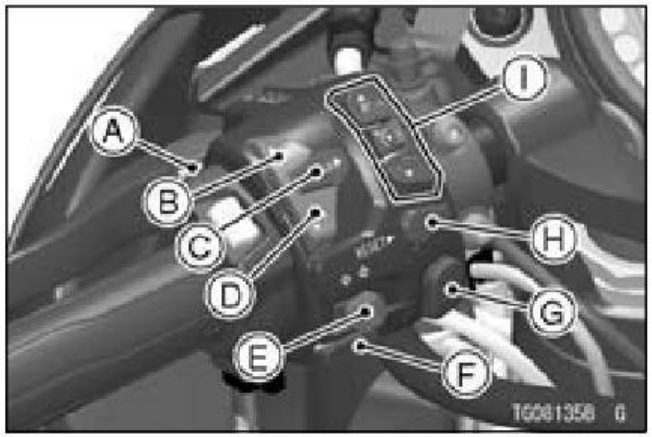
- *Ordinarily, the ignition switch should be used to stop the engine.*
- *Although the engine stop switch stops the engine, it does not turn off all the electrical circuits and eventually the battery will be discharged.*

Right Mode Button

The right mode button is used for setting the meter.

Meter setting: Refer to the Menu Mode section.

Left Handlebar Switches



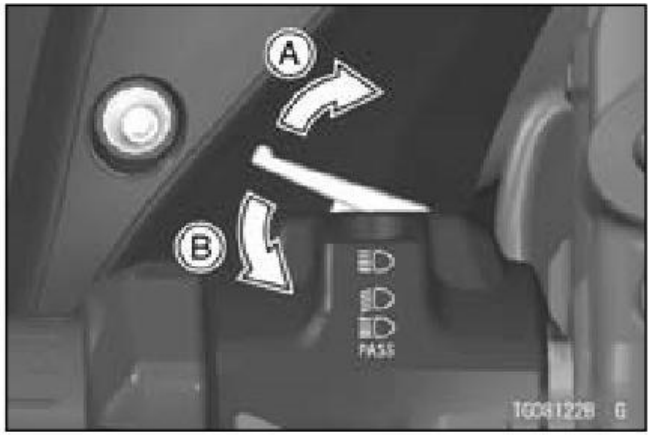
A. Dimmer/Passing Button
B. Upper Mode Button
C. Preload Button
D. Lower Mode Button
E. Turn Signal Switch
F. Horn Button
G. Hazard Button
H. Reset Button
I. Cruise Control Buttons

Dimmer/Passing Button

High or low beam can be selected with the dimmer/passing button like a trigger.

To use the high beam, push the button out. To turn off the high beam, pull the button.

To use the high beam for the passing, pull the button. The high beam turns on only while the button is pulled.



A. Push: Dimmer Function (Turning on high beam)
B. Pull: Passing Function/Dimmer Function (Turning off high beam)

High beam... (High beam indicator: see Meter Instruments section)
Low beam...
Passing ...

NOTE

○ *Do not allow anything to cover the headlight lens when the headlight is*

on. If covered, heat can build up in the headlight lens causing lens discoloration or melting, as well as damage to the item covering the lens.

Upper/Lower Mode Button

The upper and lower mode buttons are used for setting the meter and integrated riding mode.

Meter setting:	Refer to the Multifunction Display section.
Riding mode:	Refer to the Integrated Riding Modes section in the HOW TO RIDE THE MOTORCYCLE chapter.

Preload Button

The preload button is used for setting the KECS preload mode.

KECS preload mode:	Refer to the Kawasaki Electronic Control Suspension (KECS) section in the HOW TO RIDE THE MOTORCYCLE chapter.

Turn Signal Switch

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

Horn Button

When the horn button is pushed, the horn sounds.

Hazard Button ⚠

Push in the hazard button with the ignition switch in the "ON" position or the "LOCK" position. All turn signal lights and turn signal indicators will blink.

NOTE

○ *Be careful not to use the hazard lights for an extended period of time, otherwise the battery may become totally discharged.*

Reset Button

The reset button is used for setting the meter.

Meter setting: Refer to the Multifunction Display Resetting section.

Cruise Control Buttons

The cruise control buttons are used for setting the cruise control.

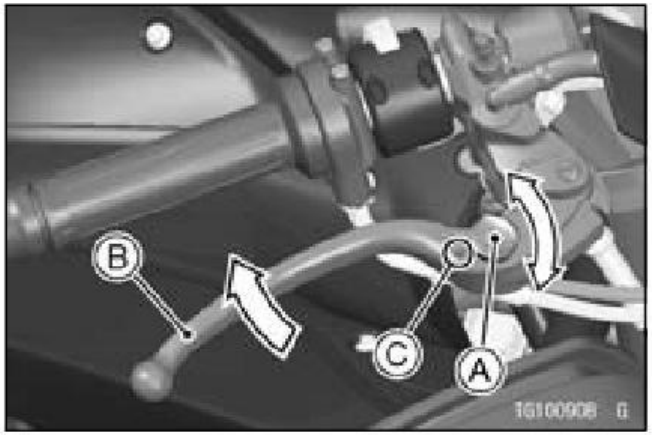
Cruise control setting: Refer to the Electronic Cruise Control System section in the HOW TO RIDE THE MOTORCYCLE chapter.

Brake Lever Adjuster

While pushing the brake lever forward, rotate the adjuster and choose a suitable lever position from the six positions.

[Brake Lever Adjustment]

Adjuster Position	1	2	3	4	5	6
Lever Position	Far ←	—	—	—	→	Near



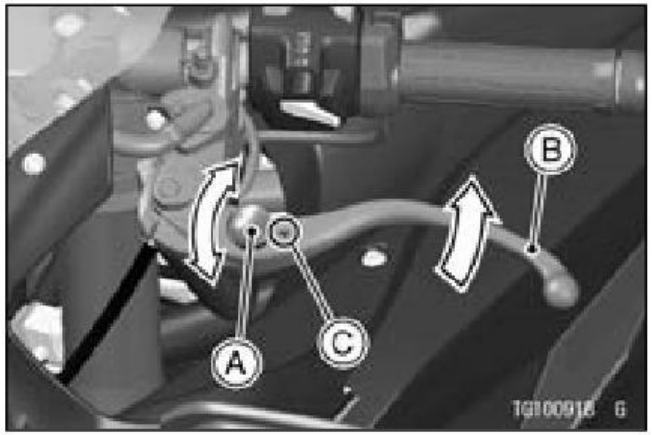
A. Adjuster
B. Brake Lever
C. Mark

Clutch Lever Adjuster

While pushing the clutch lever forward, rotate the adjuster and choose a suitable lever position from the five positions.

[Clutch Lever Adjustment]

Adjuster Position	1	2	3	4	5
Lever Position	Far	←	—	→	Near



A. Adjuster
B. Clutch Lever
C. Mark

Fuel

⚠ WARNING

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

Fuel Requirements

Use clean, fresh unleaded gasoline with the following conditions.

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

NOTICE

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

NOTICE

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

NOTICE

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

NOTICE

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

NOTE

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

NOTICE

Never use gasoline with an octane rating lower than the minimum specified by Kawasaki. Never use "gasohol" with more than 10% ethanol, or more than 5% methanol.
Gasoline containing methanol must also be blended with cosolvents and corrosion inhibitors. Certain ingredients of gasoline may cause paint fading or damage. Be extra careful not to spill gasoline or gasoline oxygenate blends during refueling.
When not operating your Kawasaki for 30 to 60 days, mix a fuel stabilizer (such as STA-BIL) with the gasoline in the fuel tank. Fuel stabilizer additives inhibit oxidation of the fuel which minimizes gummy deposits.

Fuel Type and Octane Rating

Use clean, fresh unleaded gasoline.

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

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

NOTICE

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

*E10 means fuel containing up to 10% ethanol.

Filling the Tank

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

⚠ WARNING

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

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

Never fill the tank completely to the top.

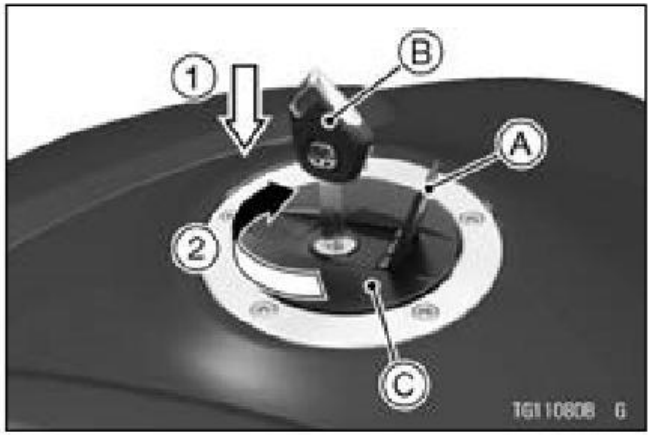
If the tank is filled completely to the top, heat may cause the fuel to expand and overflow through the vents in the tank cap.

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

NOTICE

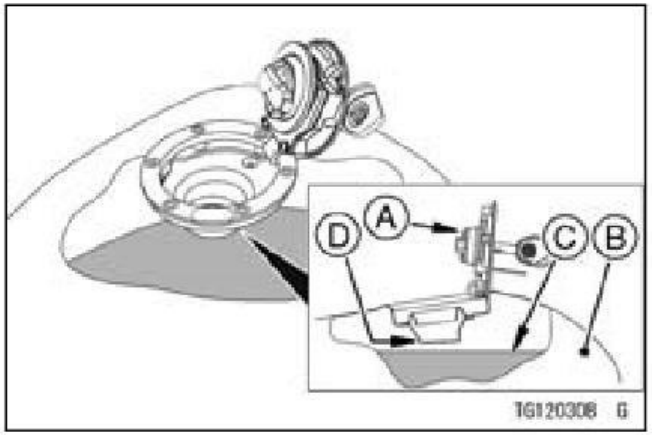
California model only: Never fill the tank so the fuel level rises into the filler neck. If the tank is overfilled, heat may cause the fuel to expand and flow into the Evaporative Emission Control System resulting in hard starting, engine hesitation and non-compliance with the emission regulation.

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



A. Key Hole Cover
B. Ignition Key
C. Fuel Tank Cap

- Open the fuel tank cap.
- Add fuel.



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

NOTE

○ *Do not exceed the maximum fuel level as shown.*

- Push the fuel tank cap down into place with the key inserted.
- The key can be removed by turning counterclockwise to the original position.
- Close the key hole cover.

NOTICE

Never fill the tank completely to the top.
If the tank is filled completely to the top, heat may cause the fuel to expand and overflow through the vents in the tank cap.
After refueling, make sure the tank cap is closed securely.
If gasoline is spilled on the fuel tank, wipe it off immediately.

NOTE

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

cannot be removed unless the cap is locked properly.

○ *Do not push on the key to close the cap, or the cap cannot be locked.*

Side Stand

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

NOTE

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

○ *Make sure the side stand is down securely before leaving the motorcycle.*

○ *Do not sit on the motorcycle while it is on its side stand.*

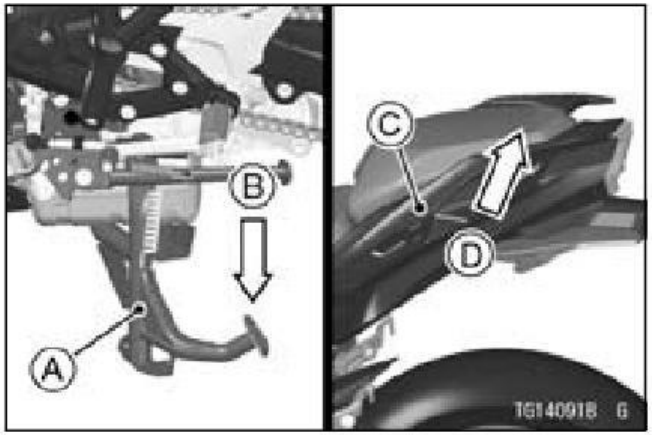
Center Stand

To set the center stand

● Step down firmly on the stand, and then lift the motorcycle up and to the rear using the grab rail as a hand-hold.

NOTE

○ *Do not pull up on the seat to lift as this will damage the seat.*



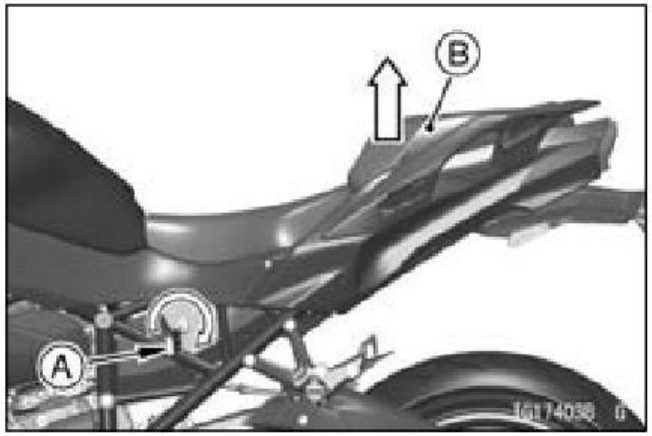
A. Center Stand
B. Step down.
C. Grab Rail
D. Lift up.

Seats

The seats can be removed in order of the passenger's seat then the rider's seat.

Passenger's Seat Removal

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

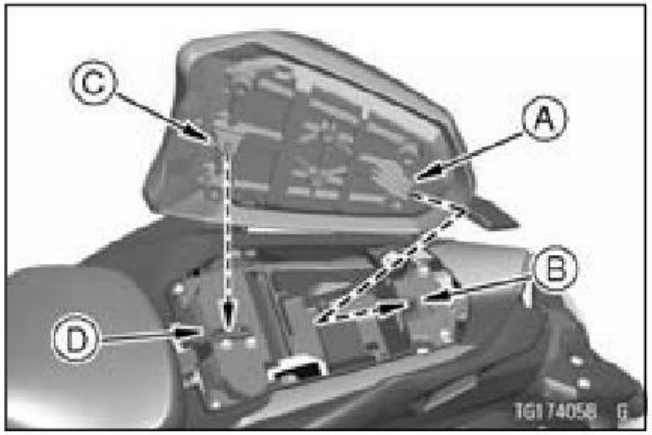


A. Ignition Key
B. Passenger's Seat

Passenger's Seat Installation

- Insert the hook at the rear of the passenger's seat into the slot.

- Insert the latch plate at the front of the passenger's seat into the latch hole.
- Push down the front part of the passenger's seat until the lock clicks.

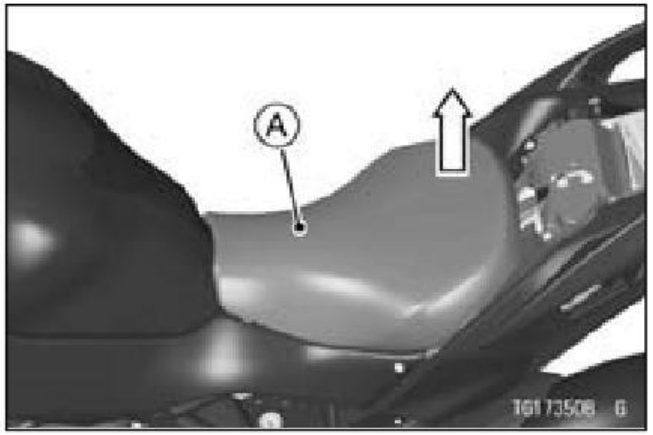


A. Hook
B. Slot
C. Latch Plate
D. Latch Hole

- 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 passenger's seat (see Passenger's Seat Removal).
- Lift the rear part of the rider's seat upward, and remove the rider's seat.

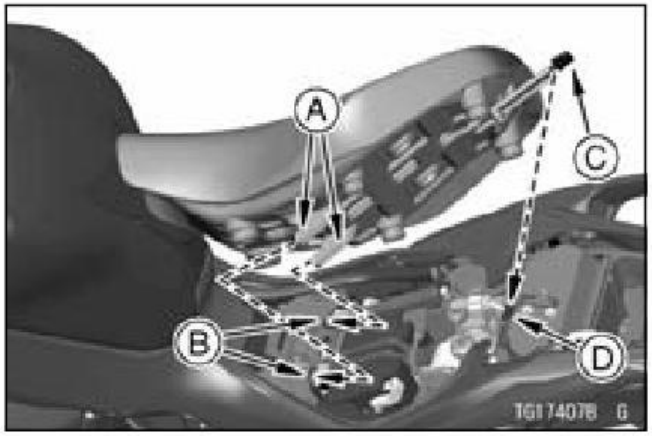


A. Rider's Seat

Rider's Seat Installation

- Insert the hooks at the front of the rider's seat into the slots of the bracket.

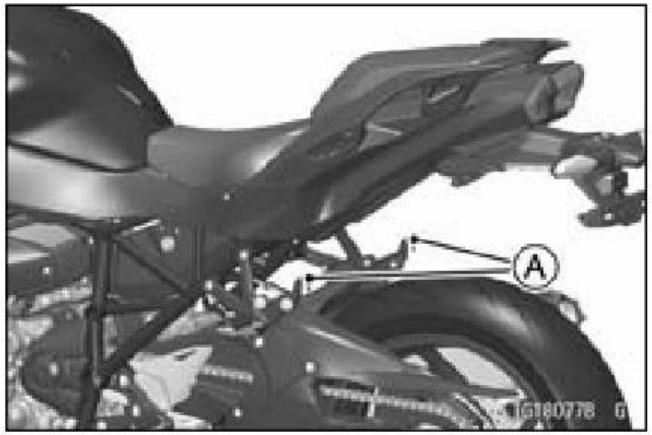
- Fit the tab at the rear of the rider's seat on the guide.



A. Hooks
B. Slots
C. Tab
D. Guide

Tie Hooks

When tying up light loads to the seat, use the tie hooks located in rear of the rear footpegs.

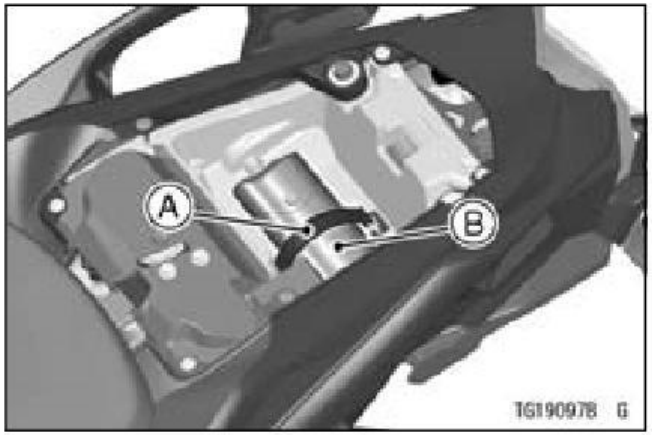


A. Tie Hooks

Tool Kit

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

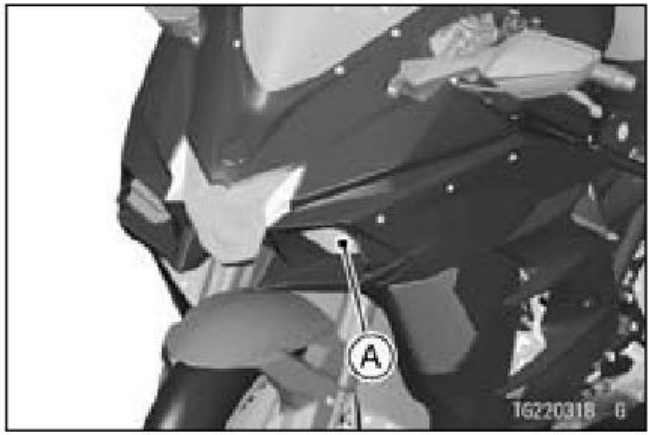
Keep the tool kit in the original place. Secure the tool kit with the band.



A. Band
B. Tool Kit

Air Cleaner Intake

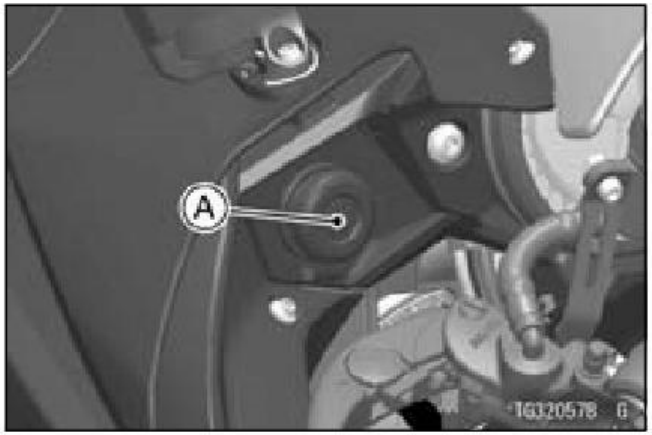
The air cleaner intake allows air to enter the fuel system. Never allow anything to restrict the flow of air into the air cleaner. A restricted air cleaner will reduce performance and increase exhaust emissions.



A. Air Cleaner Intake

Accessory Socket

The electric power of the battery can be used through the accessory socket. Observe and follow the notes listed below.



A. Accessory Socket

NOTICE

If using an accessory in the socket, unless it has a waterproof connection, do not operate this motorcycle in the rain or wash it. Always put the cap on the socket when the accessory is not used.

NOTICE

This accessory circuit has 7.5 A fuse for the accessory socket. Always install a fuse 7.5 A or less for the circuit. Do not connect more than 25 W of load to this accessory circuit or the battery may become discharged, even with the engine running.

Grip Heater

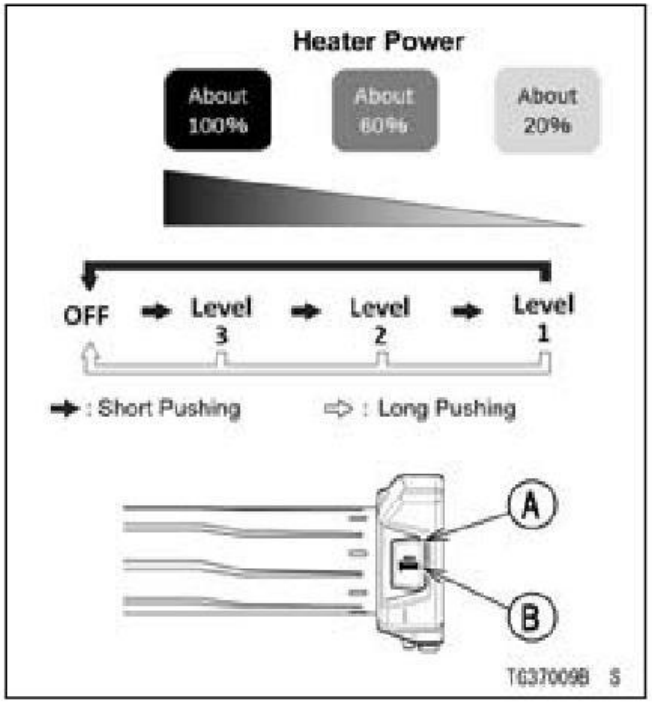
⚠ WARNING

- **Operating the grip heater switch while riding may cause a distraction that can lead to a crash resulting in serious injury or death. Do not operate the grip heater switch while riding.**
- **Always wear gloves when using the grip heater to avoid burning hands.**
- **Using the grip heater with worn or damaged grips may cause burns. If the handlebar grip becomes worn or damaged, stop using the grip heater and replace the grip with a new one.**

This motorcycle is equipped with temperature-adjustable grip heaters designed to heat the handlebar grips.

To operate the grip heater

- Push the grip heater switch as shown to switch on and off or change the temperature.



A. Grip Heater Switch
B. Indicator

- Check the grip heater operating condition and temperature setting level with the indicator.

Mode	Indicator
OFF	No lighting (blinking when the voltage is low)
Level 3	Lighting (It goes on after 5 cycles of 3 blinkings)
Level 2	Lighting (It goes on after 5 cycles of 2 blinkings)
Level 1	Lighting (It goes on after 5 cycles of 1 blinking)

- The grip heater switch turns off when the ignition switch is turned off.

NOTE

- *When the ignition switch is turned on, the indicator blinks when the battery voltage is low. Charge or replace the battery. Still blinking, there is a possibility that the grip heater may be broken, so replace the grip heater.*
- *If the battery voltage drops while using the grip heater, the grip heater*

turns off and the indicator blinks. The indicator will continue blinking even if the battery voltage recovers at high speed driving etc. When using the grip heater, push the switch and turn off the grip heater once before using it. If the battery voltage is recovered, the grip heater can be turned on.

○ *The grip temperature is proportional to the outside air temperature. Avoid using it at a higher temperature setting on warmer days.*

NOTICE

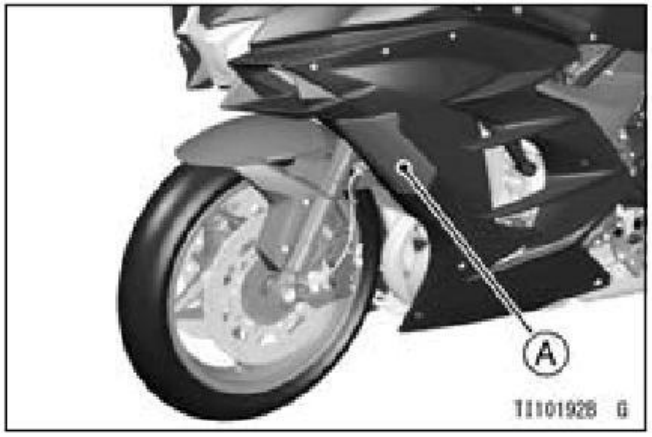
- **Do not use the grip heaters for extended periods while the engine is stopped or idling to prevent draining the battery.**
- **Do not use a high-pressure washer to clean the motorcycle and avoid spraying the grips to prevent damage to wiring and heating elements.**
- **If the grip heater does not work properly, have the grip heater checked by an authorized Kawasaki dealer.**

Cornering Light

The cornering light is the auxiliary light that illuminates the road along the curve when turning. When leaning the vehicle to the left and right, the LEDs of

the corresponding cornering light go on in three stages depending on the lean angle.

The cornering light ON/OFF can be set in the menu mode. Refer to the Menu Mode section in this chapter.



A. Cornering Light

Event Data Recorder

In common with many other vehicle manufacturers, Kawasaki has equipped this motorcycle with an event data recorder (EDR). The purpose of this device is to record data that assists with understanding of how some of the vehicle's systems were performing during a short period of time immediately before and during an accident or similar event involving minor damage. Due to accident variables, all vehicle performance data may not be stored on the EDR.

NOTE

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

not record some or all of the data, or it may not record if the EDR is damaged.

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

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

This data can help provide a better understanding for both the rider and the manufacturer of how the vehicle was performing at the time of an accident or near accident-like situation.

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

HOW TO RIDE THE MOTORCYCLE

Break-In

The first 1 000 km (600 miles) of use is the break-in period.

Follow the recommendations below to maintain the vehicle's performance and longevity.

Travelled distance	Maximum engine revolutions
0 ~ 350 km (0 ~ 250 miles)	4 000 r/min (rpm)
350 ~ 600 km (250 ~ 400 miles)	6 000 r/min (rpm)
600 ~ 1 000 km (400 ~ 600 miles)	Ride moderately

NOTE

- *You can ride above the maximum engine revolution stated in the break-in table briefly if necessary. Brief periods above the listed engine revolutions will not affect break-in results.*
- *When travelling on public roads, obey the speed limits.*
- *Do not race the engine while the transmission is in neutral.*

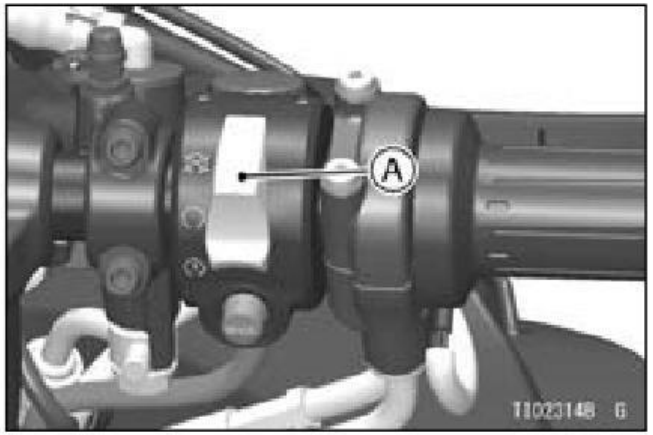
⚠ WARNING

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 miles) it is extremely important that the owner has the initial maintenance service performed by an authorized Kawasaki dealer.

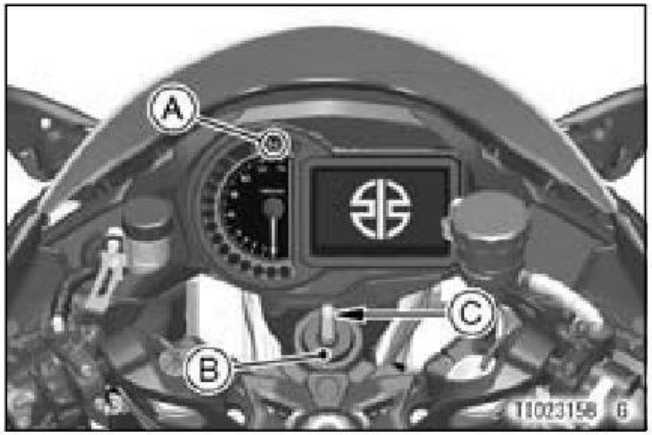
Starting the Engine

- Check that the engine start/stop switch is in the ⟳ position.



A. Engine Start/Stop Switch

- Turn the ignition key to the “ON” position.
- Make sure the transmission is in neutral.

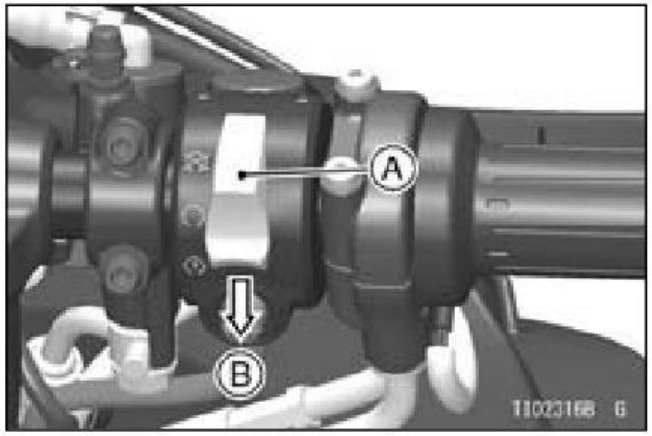


A. Neutral Indicator (Green)
B. Ignition Switch
C. "ON" Position

NOTE

- *While the engine is cold, the fast idle system automatically raises the engine idling speed. At this time, the engine warning indicator ( ) may appear if you operate the throttle grip unnecessarily.*
- *The motorcycle is equipped with a vehicle-down sensor which causes the engine to stop automatically if the motorcycle falls down. After righting the motorcycle, first turn the ignition key to the "OFF" position and then back to the "ON" position before starting the engine.*

- Without holding the throttle grip, slide the engine start/stop switch to the position to start the engine.



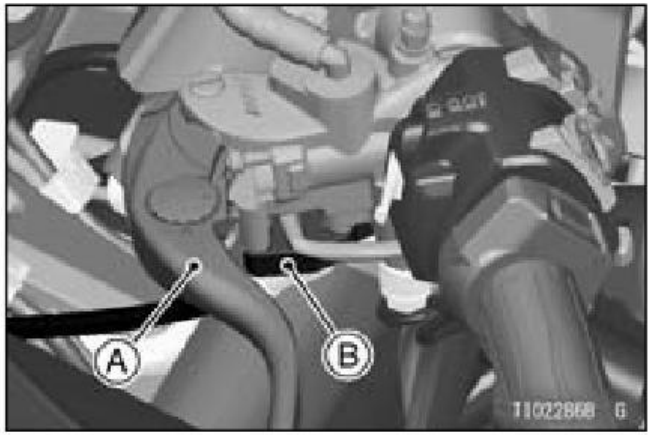
A. Engine Start/Stop Switch
B. Slide

NOTICE

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

NOTE

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



A. Clutch Lever
B. Starter Lockout Switch

NOTICE

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

Moving Off

● Check that the side stand is up.

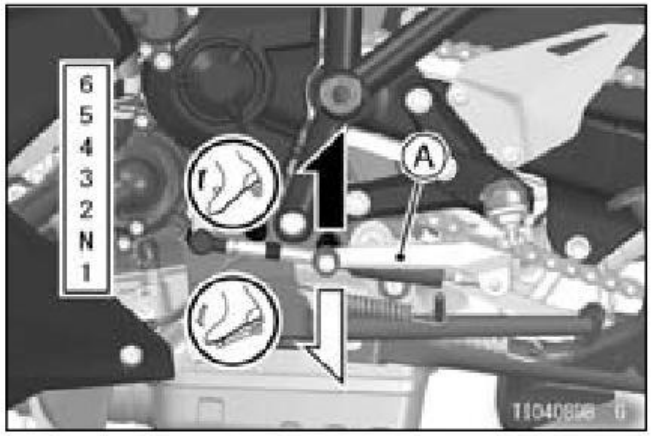
- Pull in the clutch lever.
- Shift into 1st gear.
- Open the throttle a little, and start to let out the clutch lever very slowly.
- As the clutch starts to engage, open the throttle a little more, giving the engine just enough fuel to keep it from stalling.

NOTE

- *Warm up the engine thoroughly before the riding or revving the engine.*
- *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.



A. Shift Pedal

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

⚠ WARNING

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

Vehicle speed when shifting

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

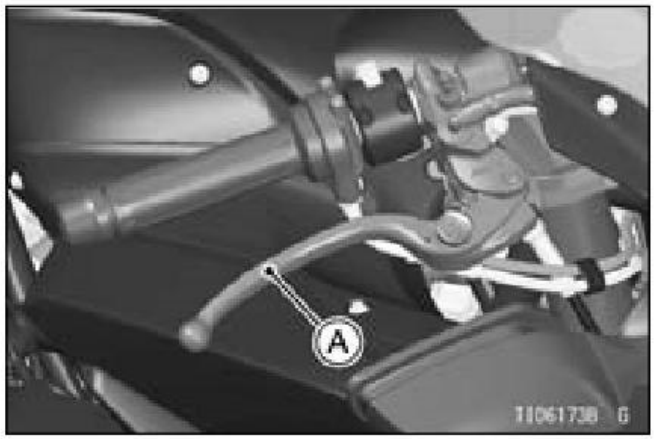
Shifting down	km/h (mph)
6th → 5th	30 (19)
5th → 4th	25 (15)
4th → 3rd	20 (12)
3rd → 2nd	15 (9)
2nd → 1st	15 (9)

Braking

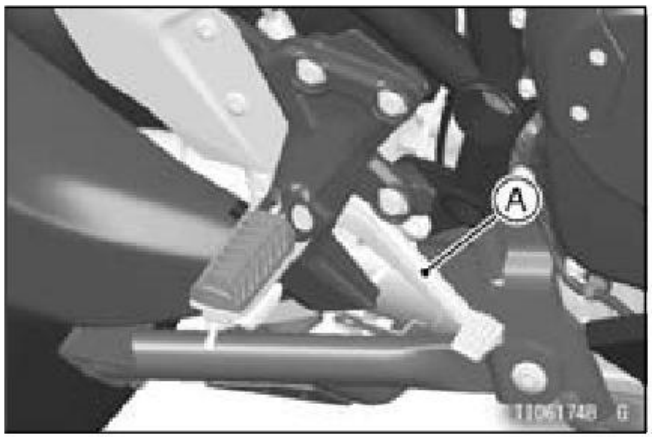
- Close the throttle completely, leaving the clutch engaged (except when shifting gears) so that the engine will help slow down the motorcycle.
- Shift down one gear at a time so that you are in 1st gear when you come to a complete stop.
- When stopping, always apply both brakes at the same time. Normally the front brake should be applied a little more than the rear. Shift down or

fully disengage the clutch as necessary to keep the engine from stalling.

- Never lock the brakes, or it will cause the tires to skid. When turning a corner, it is better not to brake at all. Reduce your speed before you get into the corner.
- For emergency braking, disregard downshifting, and concentrate on applying the brakes as hard as possible without skidding.
- Even in motorcycles equipped with ABS, braking during cornering may cause wheel slip. When turning a corner, it is better to limit braking to the light application of both brakes or not to brake at all. Reduce your speed before you get into the corner.



A. Front Brake Lever



A. Rear Brake Pedal

Anti-lock Brake System (ABS)

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

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

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

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

distance of a motorcycle with ABS may be longer than that of an equivalent motorcycle without ABS. Use special caution in such areas.

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

⚠ WARNING

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

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

⚠ WARNING

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

NOTE

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

Kawasaki Intelligent anti-lock Brake System (KIBS)

KIBS regulates smoother braking performance during sports riding.

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

⚠ WARNING

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

Stopping the Engine

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

Stopping the Motorcycle in an Emergency

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

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

⚠ 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.

⚠ WARNING

The engine and exhaust system get extremely hot during normal operation and can cause serious burns.
Never touch a hot engine, exhaust pipe, or muffler during operation or after stopping the engine.

- Shift the transmission into neutral and turn the ignition key to the "OFF" position.
- 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.

⚠ WARNING

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

- Lock the steering to help prevent theft.

Integrated Riding Modes

This motorcycle can change its performance characteristics with the press of a button only. This system has three different modes and they integrally control the engine and suspensions.

SPORT:

Power mode	F
KTRC	1
KECS	HARD

ROAD:

Power mode	F
KTRC	2
KECS	NORMAL

RAIN:

Power mode	L
KTRC	3
KECS	SOFT

How to Switch Integrated Riding Modes

- Push and hold the upper or lower MODE button to switch the mode.

➡ : **Flow when pushing and holding upper MODE button**

⇨ : **Flow when pushing and holding lower MODE button**

- The modes cannot be switched on following situations:

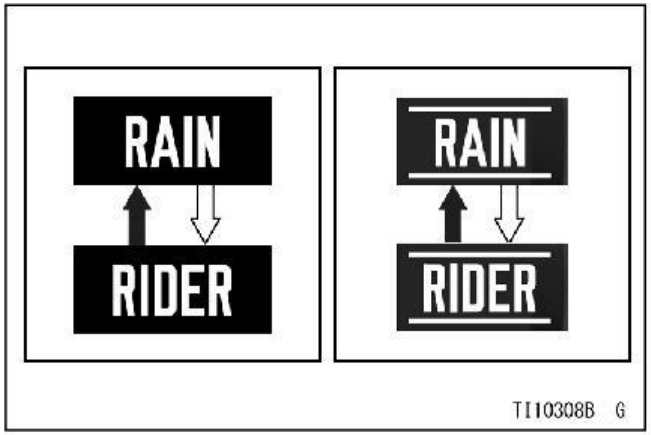
○When the throttle grip is open.
○When using the cruise control system.

RIDER Mode

In addition to three different riding modes, the RIDER mode that can be set to your preference. Three system parameters are adjustable manually: Power modes, KTRC and KECS (damping forces of the front and rear suspension).

How to Switch to RIDER Mode

- Enable the RIDER mode in the menu mode. Refer to the Menu Mode section in the GENERAL INFORMATION chapter.
- Push and hold the lower MODE button when the riding mode is RAIN.



➡ : **Flow when pushing and holding upper MODE button**

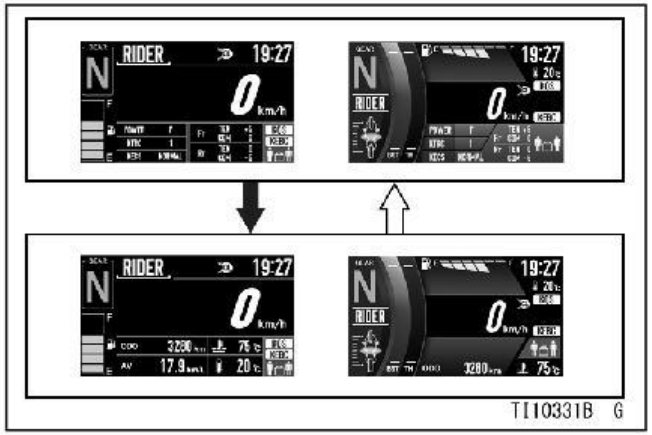
⇨ : **Flow when pushing and holding lower MODE button**

- The modes cannot be switched on following situations:

○ When the throttle grip is open.
○ When using the cruise control system.

NOTE

○ *When switching the mode to RIDER, the RIDER mode parameters appear as shown. To return the screen to the ordinary display, push the RESET button until the screen is shifted.*
○ *To display the RIDER mode parameters, push the right MODE button.*



➡ : **Flow when pushing and holding RESET button**

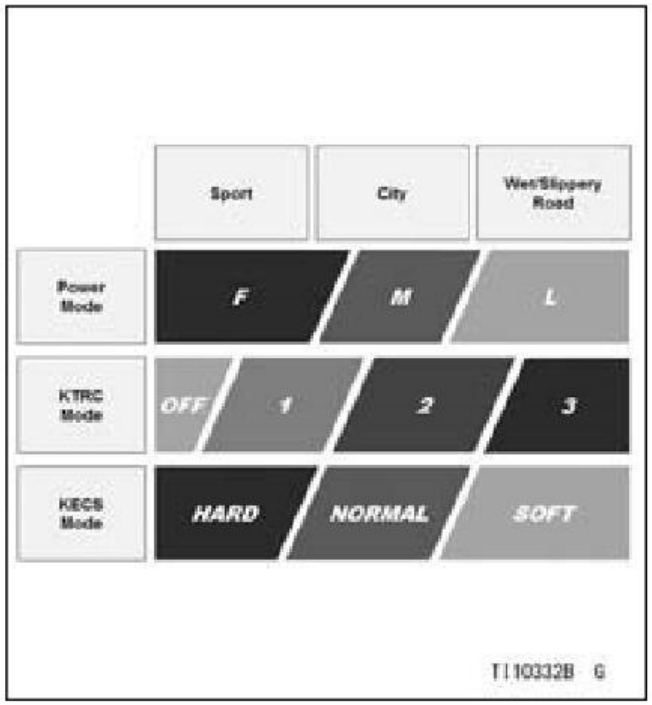
⇨ : **Flow when pushing right MODE button**

RIDER Mode Parameters

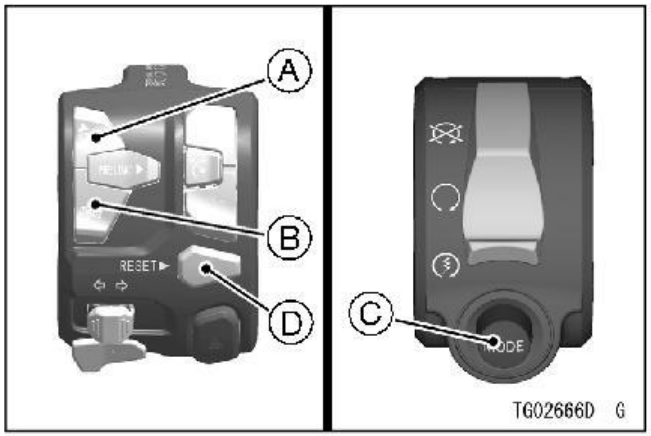
By combining the power mode, KTRC and KECS, some combination settings are available to suit your preference.

The combination of each mode should be decided according to riding skill and road conditions. Set the combination by referring to the following table.

Examples of mode combinations



How to Change Parameters



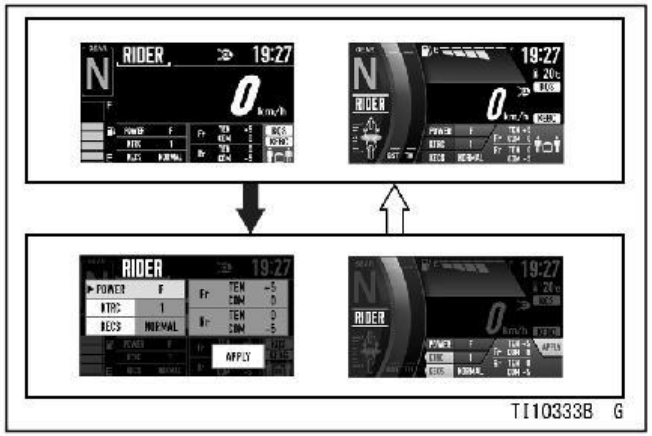
A. Move highlighted item
B. Move highlighted item
C. Shift to next screen
D. Go back to previous screen (cancel)

NOTE

○ *The throttle grip can be used to return to the previous screen instead of the RESET button.*

- Display the RIDER mode parameters.
- Push the right MODE button to shift to the detailed setting screen.
- The screen cannot be shifted on following situations:

○ When the throttle grip is open.
○ When the vehicle speed exceeds 5 km/h (3 mph).



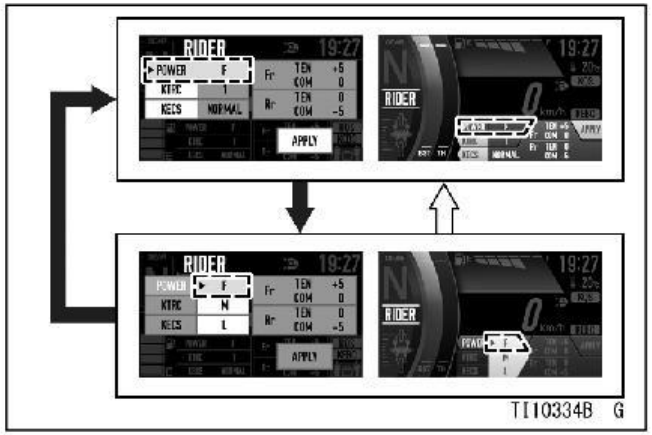
➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

- Highlight “POWER” using the upper or lower MODE button.

- Push the right MODE button and choose the mode using the upper or lower MODE button.

Mode	Characteristics
F	Full power
M	Middle power (About 75%)
L	Low power (About 50%)

- Push the right MODE or RESET button.



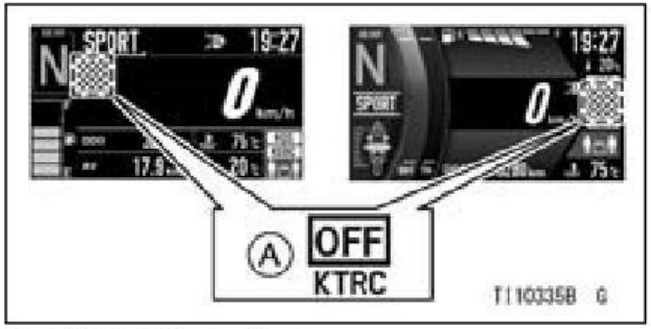
➡ : **Flow when pushing right MODE button**
⇨ : **Flow when pushing RESET button**

- Choose KTRC mode in the same way.

Mode	System intervention level
1	Low
2	Middle
3	High
OFF	No intervention

NOTE

- *Operate the throttle carefully while KTRC is off because rear wheelspin cannot be controlled.*
- *When KTRC is off, KTRC OFF indicator appears on the display screen.*



A. KTRC OFF Indicator

- Choose KECS mode in the same way.

Mode	Suspension setting
HARD	More controllable
NORMAL	Middle level
SOFT	More comfortable

NOTE

- *The rebound and compression damping force settings for the front and rear suspension can be adjusted manually and separately.*
- *KECS damping force settings can be stored individually in three modes of KECS.*

- Push and hold the right MODE button while selecting KECS mode, KECS damping force setting screen is highlighted.
- Highlight the desired parameter and push the right MODE button.
- Select each parameter in 11 levels.

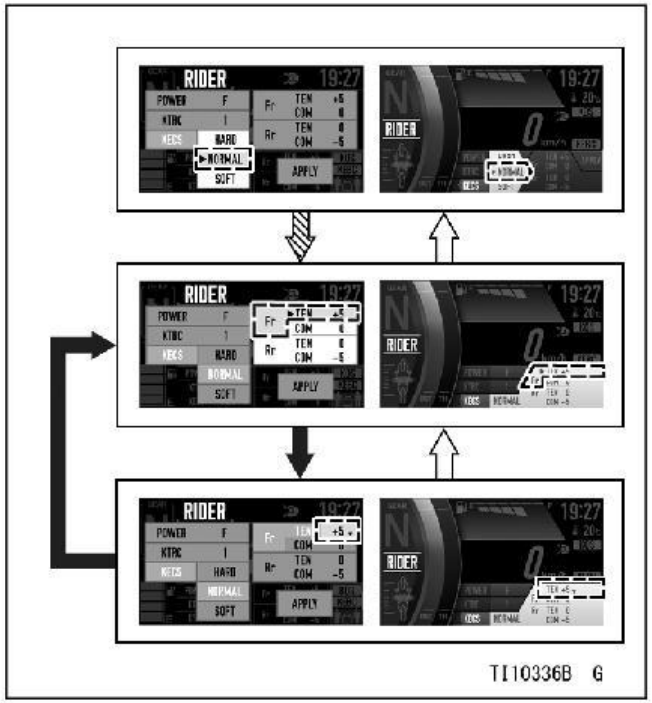
Front Fork Setting (Fr)

Rebound (TEN)		
Soft	-5 ← 0 → +5	Hard
Compression (COM)		
Soft	-5 ← 0 → +5	Hard

Rear Shock Absorber Setting (Rr)

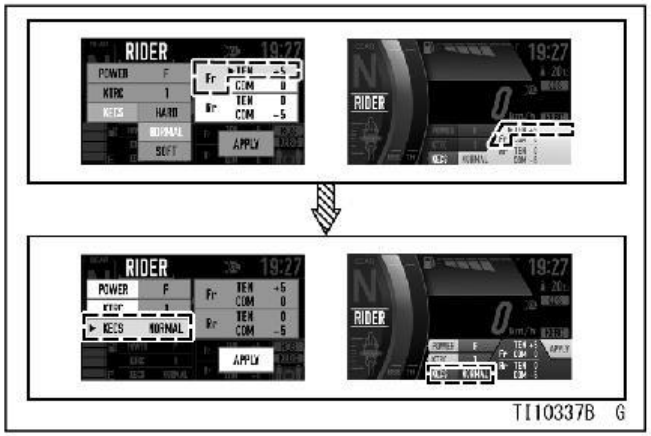
Rebound (TEN)		
Soft	-5 ← 0 → +5	Hard
Compression (COM)		
Soft	-5 ← 0 → +5	Hard

- Push the right MODE or RESET button.



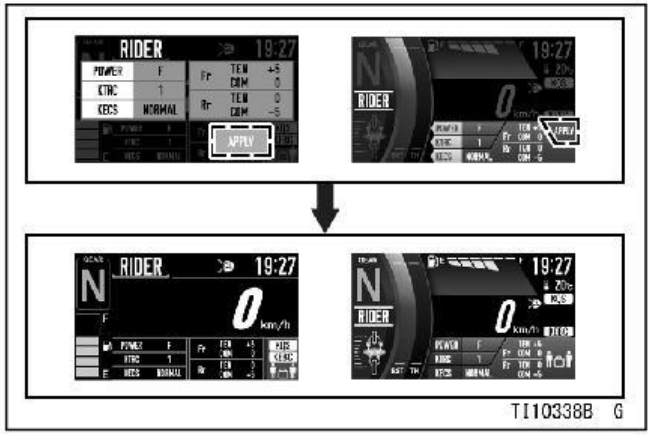
⇨ : Flow when pushing and holding right MODE button
➡ : Flow when pushing right MODE button
⇨ : Flow when pushing RESET button

- Push and hold the right MODE button to apply the parameters.



⇛ : Flow when pushing and holding right MODE button

- Highlight “APPLY” and push the right MODE button to apply all parameters.



→ : Flow when pushing right MODE button

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.

⚠ WARNING

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

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.

⚠ WARNING

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

KTRC Indicator

A. KTRC Indicator (Yellow)

KTRC indicator blinks while the system intervenes.

KTRC Modes

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

Mode 1:

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

Mode 2:

KTRC intervention is moderate about half way between the mode 1 and mode 3.

Mode 3:

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

Power Mode

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

Mode F (Full Power):

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

Mode M (Middle Power):

About 75% of the highest engine power output is achieved. The throttle response is milder than mode F.

Mode L (Low Power):

About 50% of the highest engine power output is achieved. The throttle response is milder than mode M.

Kawasaki Electronic Control Suspension (KECS)

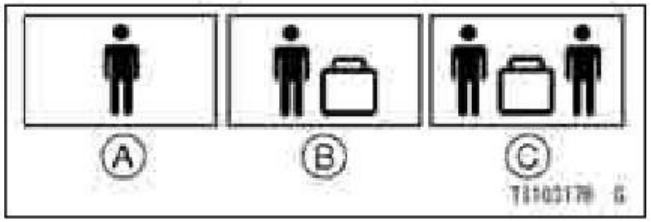
KECS adjusts the damping force settings of the front and rear suspension individually. Additionally, this system can adjust the spring preload of the rear shock absorber.

NOTE

○ *The spring preload of the front fork can be adjusted by the adjuster on the right fork leg (see Suspension System section in the MAINTENANCE AND ADJUSTMENT chapter).*

Preload Modes

The adjustable range of the rear shock absorber spring preload is from 0 to 35. This KECS preload mode has the following three preset settings, and each setting value is as shown below.

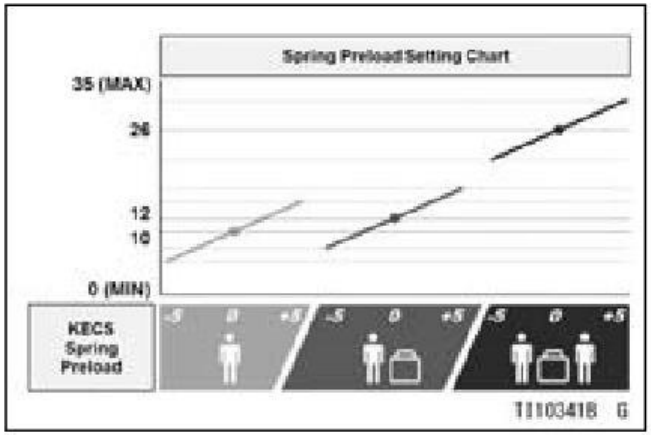


A. Rider only: 10
B. Rider and Baggage: 12
C. Rider, Baggage and Passenger: 26

NOTE

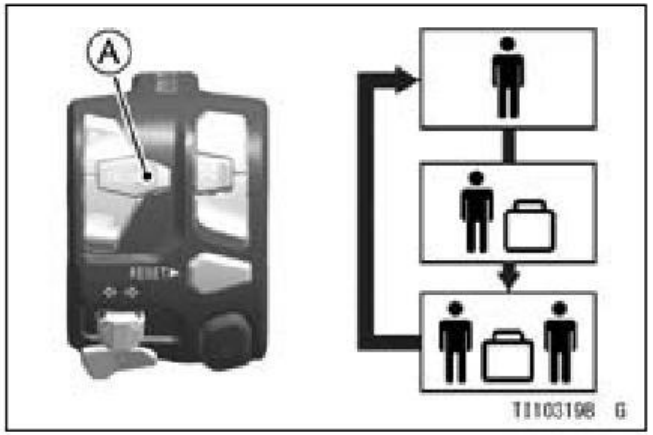
○ *Use "Rider and baggage" when there is a passenger without baggage.*

Each setting value can be adjusted finely as shown (±5).



How to Switch Preload Mode

- Push and hold the PRELOAD button on the left handlebar. The preload modes are switched in the following order.



A. PRELOAD Button
➡ : Flow when pushing and holding PRELOAD button

- The modes cannot be switched on following situations:

○ When the throttle grip is open.
○ When using the cruise control system.

NOTE

- *To prevent the heat generated in the actuator and the battery discharging, avoid repeatedly changing the preload mode.*
- *"KECS WAITING" message blinks on the screen while the spring preload adjustment function is in the standby. If this message does not disappear, have it checked by an authorized Kawasaki dealer.*

A. "KECS WAITING" Message

How to Adjust Setting

- Refer to the Menu Mode section in the GENERAL INFORMATION chapter.

Damping Forces

This system has the following three settings. The system determines the rebound and compression damping forces automatically based on the vehicle speed, acceleration and suspension stroke.

HARD:

This setting is suitable for sport riding or heavy loading.

NORMAL:

This setting is the standard setting that is enhanced for irregularities of a road.

SOFT:
This is softest setting suitable for wet or slippery road conditions.

Electronic Cruise Control System

Cruise control lets the motorcycle maintain a speed of about 35 km/h (22 mph) or more without operating the throttle.

NOTE

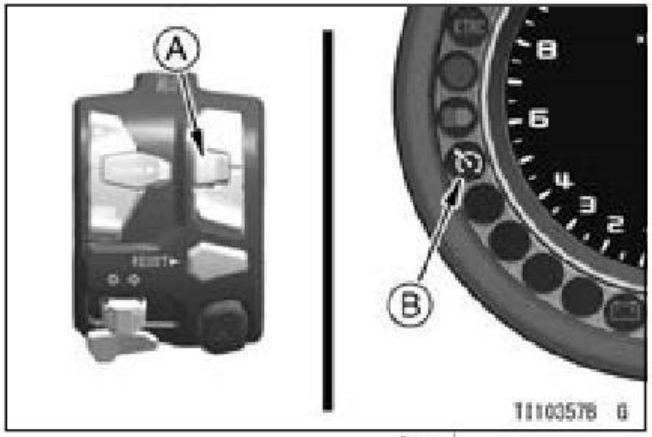
- *The system does not open at excessively low rpm or when in neutral, 1st or 2nd gear.*
- *At 3rd gear, the cruise control can be used when the vehicle speed exceeds about 35 km/h (22 mph).*
- *At 6th gear, the maximum settable speed is 137 km/h (85 mph). However, on public roads, keep maximum speed under the posted speed limits.*
- *For engine protection, the settable speed varies depending on the gear position.*

⚠ WARNING

Cruise control can be dangerous where you cannot drive safely as a steady speed. Do not use cruise control when riding in heavy or varying traffic, on hills or when negotiating winding roads as this will cause an accident resulting in serious injury or death.

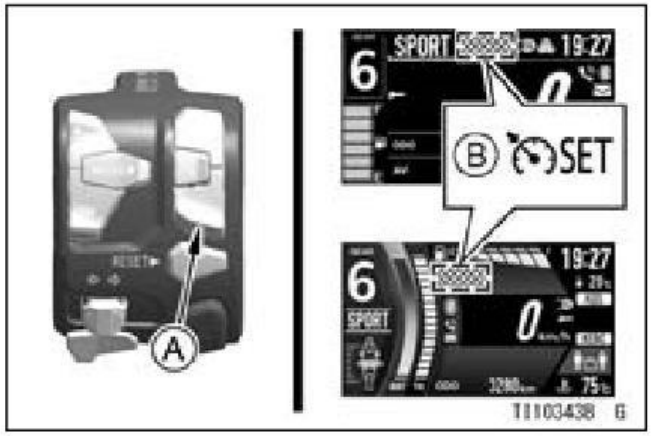
To set the cruise control

- Push the cruise control button ( ) on the left handlebar. The system activates and the cruise control indicator goes on.



A. Cruise Control Button ( )
B. Cruise Control Indicator

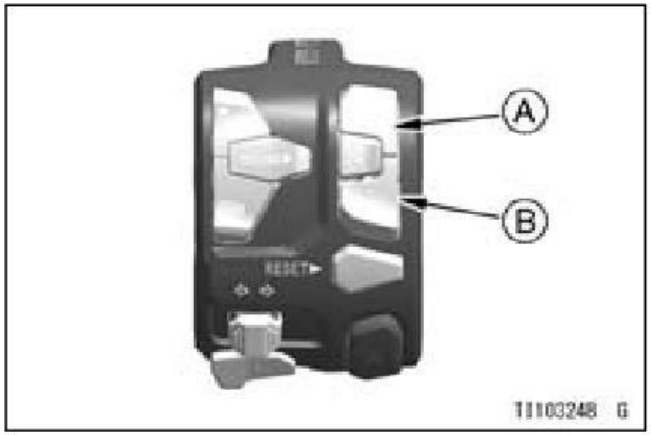
- Push the SET/- button at the desired speed. The system starts the cruise control at the current vehicle speed and the "SET" mark appears on the display screen.



A. SET/- Button
B. "SET" Mark

To adjust the set speed

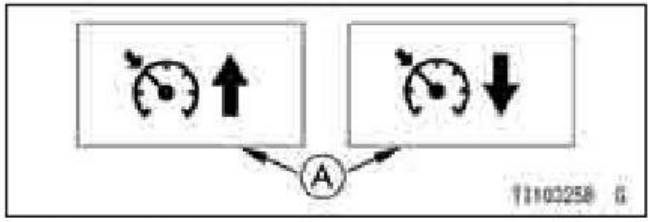
- To increase the set speed, push the RES/+ button and hold it until the vehicle reaches the desired speed.
- To decrease the set speed, push the SET/- button and hold it until the vehicle reaches the desired speed.



A. RES/+ Button
B. SET/- Button

NOTE

- *When the RES/+ button is released rapidly, the set speed increases 1.5 km/h (1 mph) from the current speed.*
- *When the SET/- button is released rapidly, the set speed decreases 1.5 km/h (1 mph) from the current speed.*
- *When pushing the RES/+ or SET/- button, the arrow mark appears on the display screen.*



A. Arrow Mark

NOTE

- *If you want to accelerate temporarily, accelerate with normal throttle application. In this case, to return to the set speed, release the throttle without using the front and rear brakes.*

To cancel the set speed

- The set speed is disengaged temporarily under the following conditions:

○ When pulling the brake lever.
○ When stepping on the brake pedal.
○ When pulling the clutch lever.
○ When shifting gears.
○ When closing the throttle grip beyond the closed position.

● The cruise control is stopped under the following conditions and the set speed is erased and it cannot be resumed:

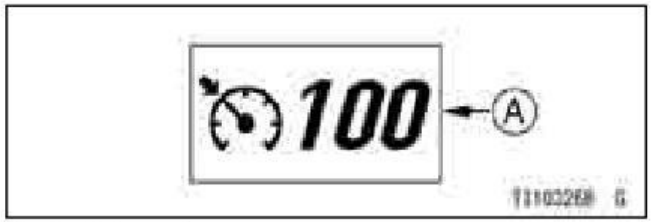
○ When the vehicle speed drops below 30 km/h (19 mph).
○ When the vehicle speed drops 15 km / h (9 mph) from the set speed.
○ When pushing the cruise control button ( ).

● The cruise control set indicator disappears.

To resume the set speed

● Push the RES/+ button.

● The set speed appears on the display screen until the set speed is reached.



A. Set Speed

NOTE

○ *When the RES/+ or SET/- button is pushed during resume set speed, the set speed is renewed to the current vehicle speed.*

● When the vehicle speed reaches to the set speed, the cruise control set indicator appears again.

To deactivate the cruise control

● Push the cruise control button ( ).

- The system deactivates and the cruise control indicator goes off. The set speed also erases.

Kawasaki Quick Shift (KQS)

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

NOTE

- *KQS system does not work while the clutch lever is being pulled.*
- *KQS system does not work properly below approximately 2 500 r/min (rpm).*
- *Following any up or down shift, the shift pedal must be fully released before another shift with KQS can be made.*

Upshifting

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

NOTE

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

Downshifting

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

NOTE

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

KQS Setting

- KQS mode can be selected from on or off in the menu mode. Refer to the Menu Mode section in the GENERAL INFORMATION chapter.

Kawasaki Engine Brake Control (KEBC)

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

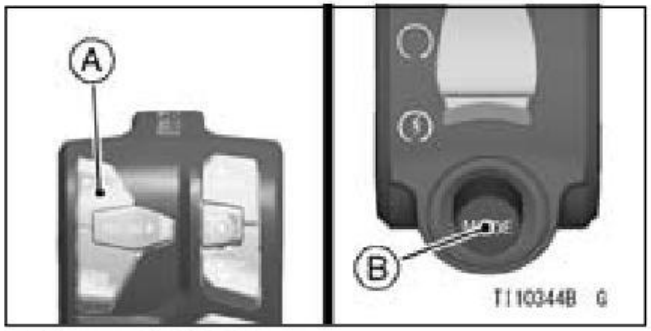
Kawasaki Launch Control Mode (KLCM)

KLCM is a rider assist system which optimizes the starting acceleration by electronically controlling the engine output.

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

KLCM Setting

- Change the riding mode to SPORT, ROAD or RIDER. In RIDER mode, set the power mode to F. Refer to the Integrated Riding Modes section.
- Push the upper MODE button and the right MODE button simultaneously and hold them in until KLCM ON message blinks three times.



A. Upper MODE Button
B. Right MODE Button

A. KLCM ON Message

After setting KLCM, shifting into first gear with the motorcycle stopped will activate KLCM. Even if you turn the throttle grip fully, the engine speed limiter keeps the engine speed at 6 250 r/min (rpm).

When starting, keep the throttle grip turned fully and engage the clutch gradually. After the clutch is engaged, the system will control the engine torque to obtain maximum acceleration. KLCM is released when shifted into second gear.

Successive use of KLCM is restricted to protect the engine.

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

When KLCM is unable to use, the following warning message is displayed.

A. KLCM OFF Warning Message

⚠ WARNING

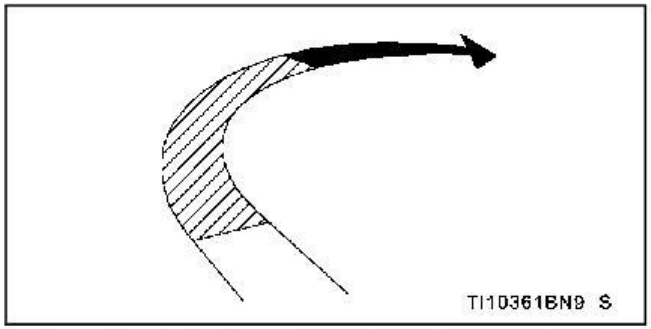
KLCM is for experienced riders. Be sure to understand its characteristics completely before use. Never engage the clutch abruptly or you may lose control and crash, plus sudden high power transmission may damage the engine.

Kawasaki Cornering Management Function (KCMF)

Using feedback from IMU (Inertial Measurement Unit) that gives an even clearer realtime picture of chassis orientation, KCMF monitors engine and chassis parameters throughout the corner - from entry, through the apex, to corner exit - modulating brake force

and engine power to facilitate smooth transition from acceleration to braking and back again, and to assist riders in tracing their intended line through the corner.

This function oversees following control systems: KTRC, KLCM, KECS, KIBS, KEBC.



⇨ : Straight Road (KTRC/KLCM/KECS)
⇨ : from Corner Entry to Apex (KIBS/KEBC/KECS)
➡ : Exit of Corner (KTRC/KECS)

Inertial Measurement Unit (IMU)

The IMU measures the acceleration along longitudinal, transverse and vertical axes, plus roll rate and pitch rate. In addition, the yaw rate is calculated using above data by ECU.

These six axes data are used for analysis of the chassis attitude. By using the chassis attitude information, the electronic management technologies equipped on the vehicle can be controlled more smoothly.

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.**

⚠ 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.

⚠ 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.

⚠ 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

○ *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	169
Tires	
Air pressure (when cold), install the air valve cap	191
Tire wear	192
Drive chain	
Slack	181
Lubricate if dry	180

Operation	See Page
Bolts, 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	183
Brake fluid level	182
No brake fluid leakage	–
Throttle	
Throttle grip free play	176
Clutch	
Clutch fluid level	179
No clutch fluid leakage	–
Coolant	
No coolant leakage	–

Operation	See Page
Coolant level between level lines (when engine is cold)	172
Electrical equipment	
All lights (head, city, brake/tail, turn signal, license plate, warning/indicator) and horn work	–
Engine stop switch	
Stops engine	–
Side stand and center 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
○: Emission Related Item

 : Inspection

 : Dealer Inspection

 : Change or Replace

 : Dealer Change or Replace

 : Lubrication

 : Dealer Lubrication

	Items	year (*A)	Odometer Reading (*B) × 1 000 km (× 1 000 mile)					See Page
			1 (0.6)	12 (7.6)	24 (15.2)	36 (22.8)	48 (30.4)	
○	Air cleaner element (*C)			R	R	R	R	175
○	Idle speed		Q	Q	Q	Q	Q	178
○	Throttle control system (play, smooth return, no drag)	Q:1	Q	Q	Q	Q	Q	176
○	Engine vacuum synchronization			Q	Q	Q	Q	–
	Fuel system	Q:1	Q	Q	Q	Q	Q	–
	Fuel filter				R		R	–
	Fuel pump						R	–
	Fuel hose	R:5						–
○	Evaporative emission control system (*D)				Q		Q	–
	Coolant level	Q:1	Q	Q	Q	Q	Q	172

	Items	year (*A)	Odometer Reading (*B) × 1 000 km (× 1 000 mile)					See Page
			1 (0.6)	12 (7.6)	24 (15.2)	36 (22.8)	48 (30.4)	
	Cooling system	Q:1	Q	Q	Q	Q	Q	–
	Coolant, water hose and O-ring	⟳:3				⟳		–
○	Valve clearance				Q		Q	–
○	Air suction system			Q	Q	Q	Q	–
	Clutch operation (play, engagement, disengagement)	Q:1	Q	Q	Q	Q	Q	179
	Clutch fluid level	Q:1	Q	Q	Q	Q	Q	179
	Clutch fluid, hose and pipe	Q:1	Q	Q	Q	Q	Q	–
	Clutch fluid	⟳:2			⟳		⟳	–
	Clutch hose/rubber parts of clutch master cylinder and slave cylinder	⟳:4					⟳	–

Items	year (*A)	Odometer Reading (*B) × 1 000 km (× 1 000 mile)					See Page
		1 (0.6)	12 (7.6)	24 (15.2)	36 (22.8)	48 (30.4)	
Engine oil (*C) and oil filter	:1						170
Tire air pressure	:1						191
Wheel and tire	:1						191
Wheel bearing damage	:1						–
Drive chain lubrication condition (*C)		: every 600 km (400 mile)					180
Drive chain slack (*C)		: every 1 000 km (600 mile)					181
Drive chain wear (*C)							–
Drive chain guide wear							–
Brake system	:1						–
Brake operation (effectiveness, play, no drag)	:1						–

	Items	year (*A)	Odometer Reading (*B) × 1 000 km (× 1 000 mile)					See Page
			1 (0.6)	12 (7.6)	24 (15.2)	36 (22.8)	48 (30.4)	
	Brake fluid level	Q:1	Q	Q	Q	Q	Q	182
	Brake fluid (front and rear)	R:2			R		R	–
	Brake hose	R:4						–
	Rubber parts of brake master cylinder and caliper	R:4					R	–
	Brake pad wear (*C)	Q:1		Q	Q	Q	Q	183
	Brake light switch operation	Q:1	Q	Q	Q	Q	Q	184
	Suspension system	Q:1		Q	Q	Q	Q	–
	Lubrication of rear suspension				L		L	–
	Steering play	Q:1	Q	Q	Q	Q	Q	–
	Steering stem bearing	L:2			L		L	–

	Items	year (*A)	Odometer Reading (*B) × 1 000 km (× 1 000 mile) 1 (0.6)	12 (7.6)	24 (15.2)	36 (22.8)	48 (30.4)	See Page
	Electrical system	:1		Q	Q	Q	Q	–
○	Spark plug				Q		R	–
	Chassis parts	:1		I	I	I	I	–
	Condition of bolts, nuts and fasteners		Q	Q	Q	Q	Q	–
	Supercharger oil screen				R		R	–
	Supercharger impeller axial play		Q	Q	Q	Q	Q	–

Engine Oil

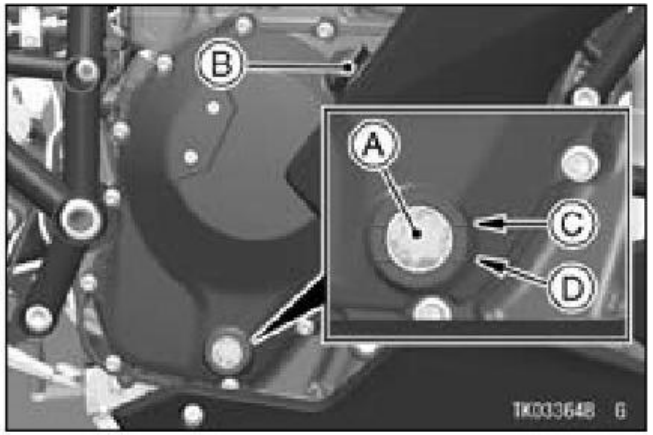
Oil Level Inspection

- 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.

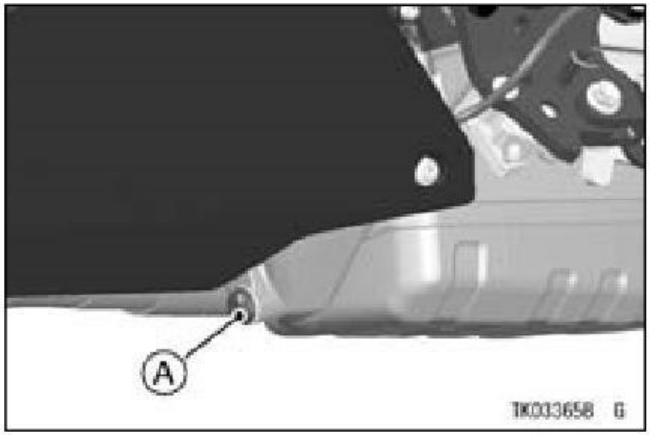
- When installing the oil filler cap, replace its O-ring with a new one.

Oil and/or Oil Filter Change

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

⚠ 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:
25 N·m (2.5 kgf·m, 18 ft·lb)
Oil Filter:
17 N·m (1.7 kgf·m, 13 ft·lb)

Recommended Engine Oil

Type: Kawasaki Performance 4-Stroke Motorcycle Oil* Kawasaki Performance 4-Stroke Semi-Synthetic Oil* Kawasaki Performance 4-Stroke Full Synthetic Oil* or other 4-stroke oils with API SG, SH, SJ, SL or SM with JASO MA, MA1 or MA2 rating Viscosity: SAE 10W-40

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

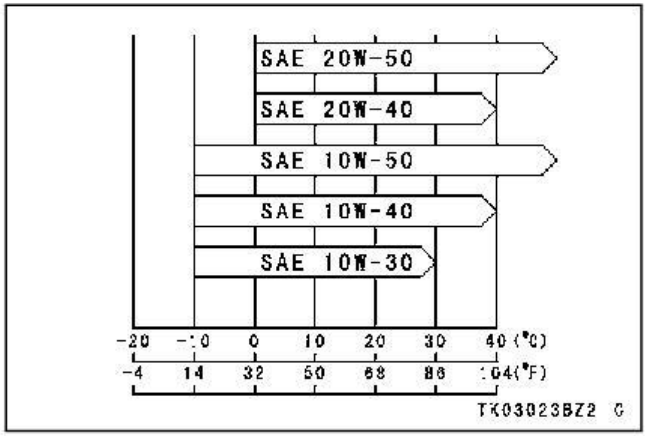
NOTE

○ *Do not add any chemical additives 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

3.5 L (3.7 US qt)
[when filter is not removed]
4.3 L (4.5 US qt)
[when filter is removed]

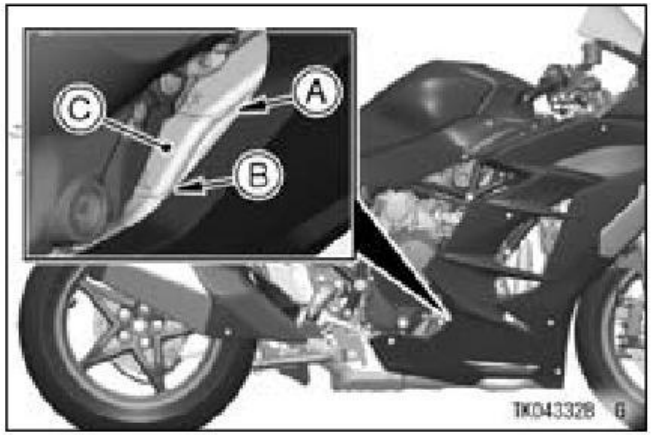
Although 10W-40 engine oil is the recommended oil for most conditions, the oil viscosity may need to be changed to accommodate atmospheric conditions in your riding area.



Coolant

Coolant Level Inspection

- Position the motorcycle so that it is perpendicular to the ground.
- Check the coolant level through the coolant level gauge on the reserve tank located to the behind of the right middle fairing. 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

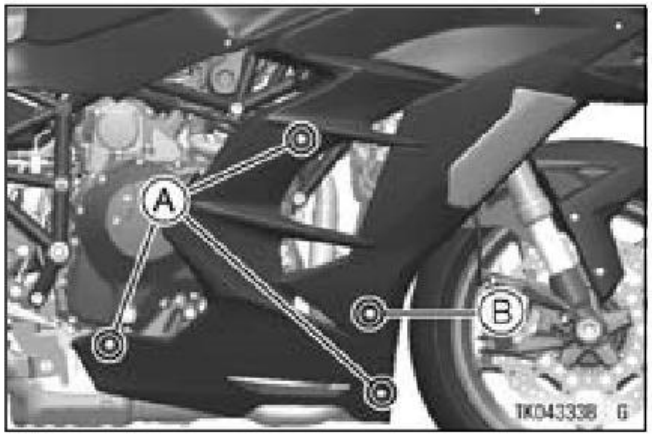
NOTE

- *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.

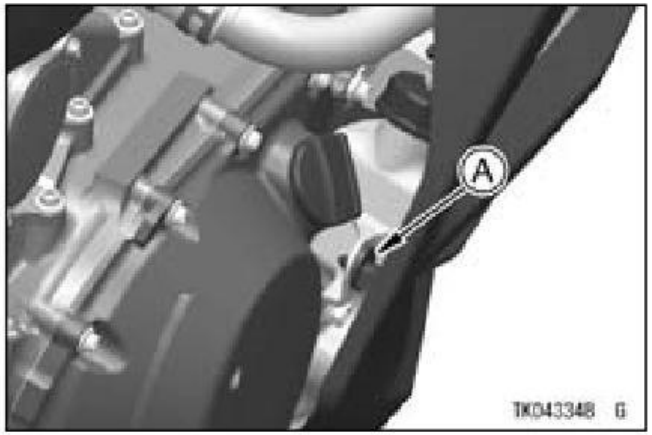
Coolant Filling

● Remove the bolts and washer.



A. Bolts and Washers
B. Bolt

● Detach the projection from the grommet.



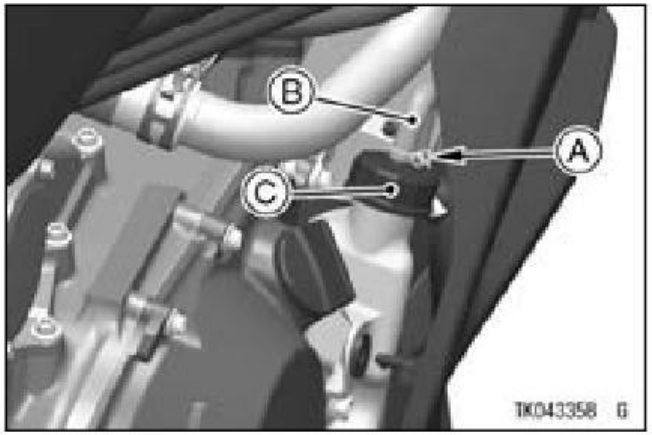
A. Projection

● Slide the clamp and disconnect the hose.

NOTE

○ *The cap will not turn unless the hose is disconnected.*

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



A. Clamp
B. Hose
C. Reserve Tank Cap

NOTE

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

NOTICE

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

- Install the reserve tank cap.
- Install the removed parts.

Coolant Requirement

⚠ WARNING

Coolant containing corrosion inhibitors for aluminum engines and radiators include harmful chemicals for human body. Drinking coolant can result in serious injury or death. Use 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

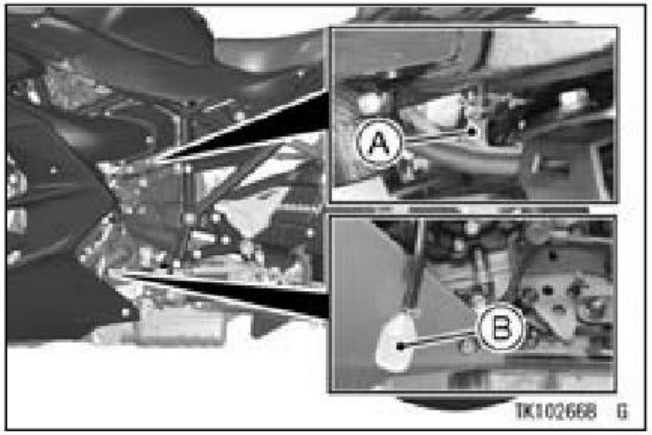
○ *A permanent type of antifreeze is installed in the cooling system when shipped. It is mixed at 50% and has the freezing point of –35°C (–31°F).*

Air Cleaner

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

Oil Draining

- Inspect the drain plug and reservoir located to the left of the engine to see if any oil has run down.



A. Drain Plug
B. Reservoir

- If there is any oil, remove the plug and reservoir and drain the oil.

⚠ WARNING

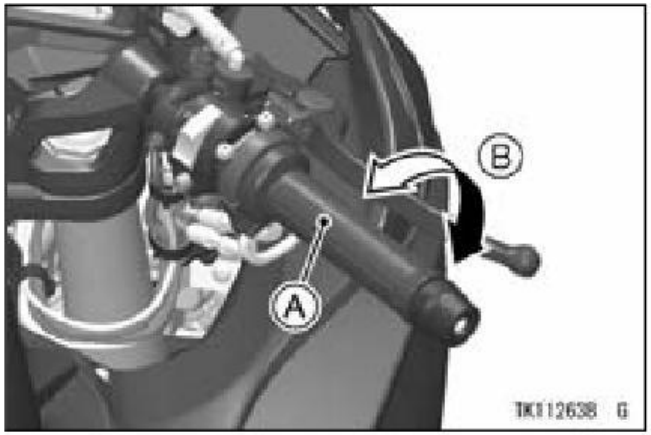
Oil on tires will make them slippery and can cause an accident and injury. Be sure to install the plug and reservoir after draining.

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

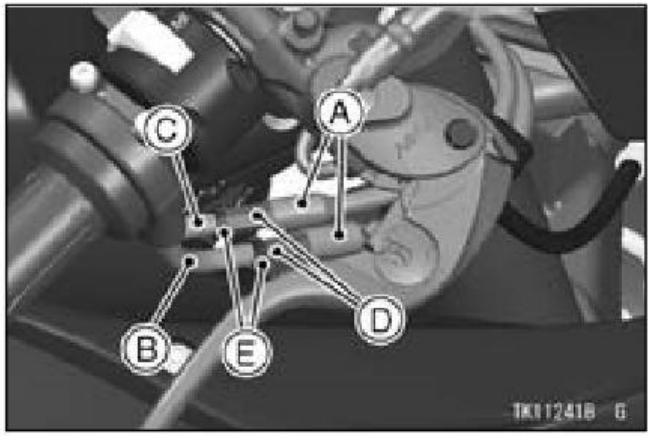
Throttle Grip Play

2 ~ 3 mm (0.08 ~ 0.12 in.)

- If there is improper play, adjust it.

Throttle Grip Free Play Adjustment

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



A. Rubber Covers
B. Accelerator Cable
C. Decelerator Cable
D. Adjusters
E. Locknuts

- Turn the accelerator cable adjuster until 2 ~ 3 mm (0.08 ~ 0.12 in.) of throttle grip free play is obtained. Tighten the locknut.
- If the throttle cables cannot be adjusted with the 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 handlebars to each side. If handlebar movement changes the idle speed, the throttle cables may be improperly adjusted or incorrectly routed, or they may be damaged. Be sure to correct any of these conditions before riding.

⚠ WARNING

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

Idle Speed

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

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

NOTE

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

Idle Speed

1 100 ±100 r/min (rpm)

Clutch

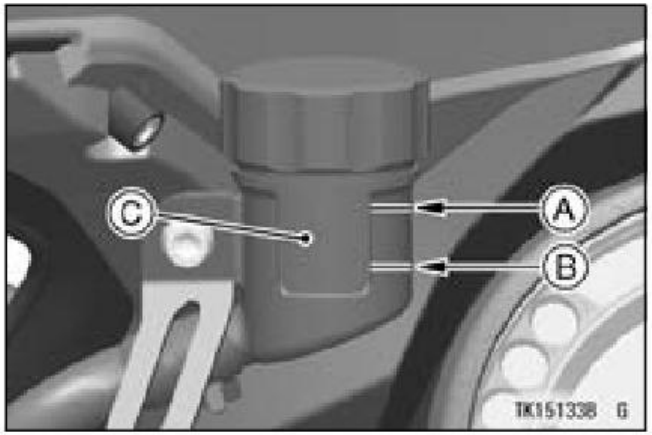
The motorcycle is equipped with a hydraulically operated clutch that requires no adjustment except fluid level and clutch operation inspection each day before riding the motorcycle in accordance with the Periodic Maintenance Chart.

Clutch Operation Inspection

- If the clutch lever play becomes excessive and the motorcycle creeps or stalls when shifted into gear, there is probably air in the clutch system and it must be bled out by an authorized Kawasaki dealer.

Clutch Fluid Level Inspection

- With the clutch fluid reservoir held horizontal, the clutch fluid level must be kept between the upper and lower level lines.
- If the fluid level is lower than the lower level line it may indicate that the fluid is leaking. In this case, have the clutch system inspected by an authorized Kawasaki dealer.



A. Upper Level Line
B. Lower Level Line
C. Clutch Fluid Reservoir

NOTE

○ *Use the same fluid as is used in the brakes and keep the same requirements mentioned in the Brakes section.*

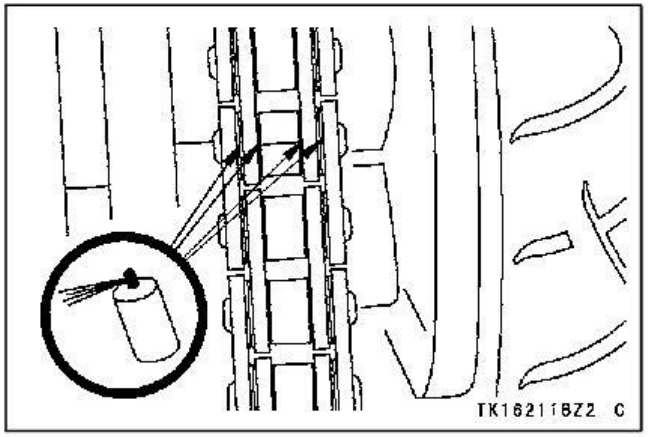
Drive Chain

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.

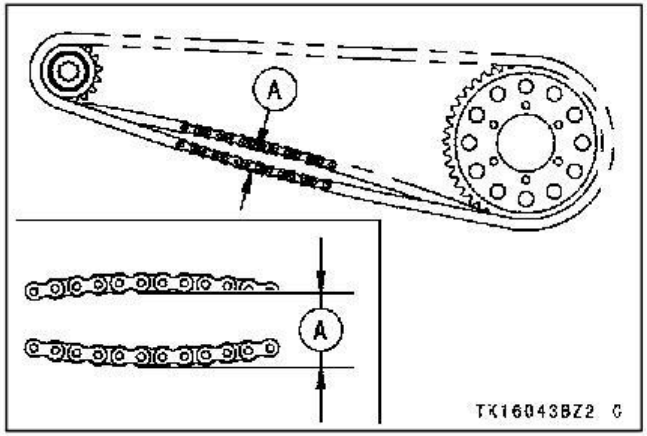
- Apply lubricant to the sides of the rollers so that it will penetrate to the rollers and bushings. Apply lubricant to the seals so that the seals will be coated with lubricant. Wipe off any excess lubricant.



- 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

25 ~ 35 mm (1.0 ~ 1.4 in.)

Drive Chain Slack Adjustment

- The drive chain slack adjustment should be done by an authorized Kawasaki dealer.

Brakes

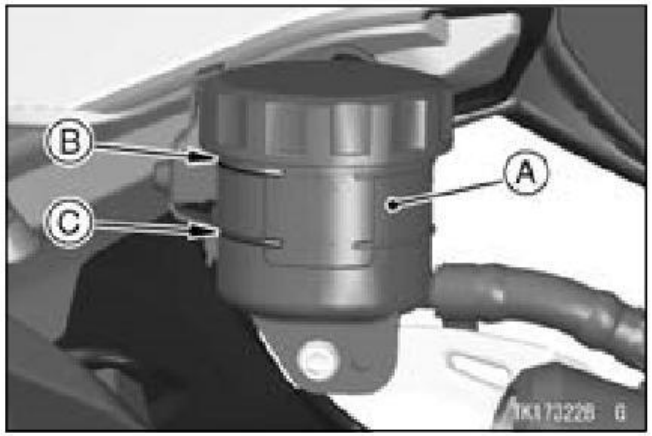
If you feel there is something wrong when applying the brakes, have the brake system checked by an authorized Kawasaki dealer immediately.

⚠ WARNING

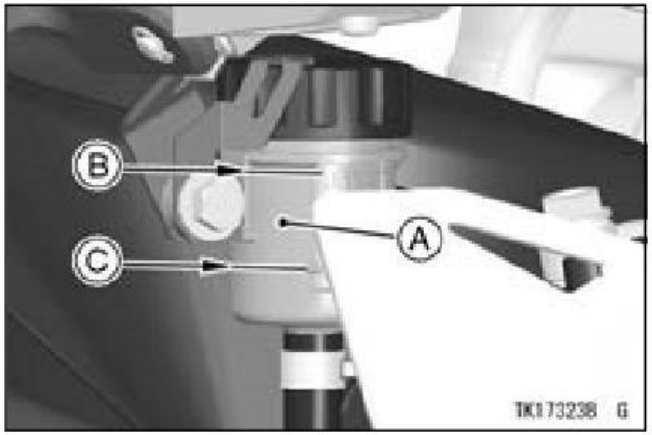
Air in the brake lines diminish braking performance and can cause an accident resulting in injury or death. If the brake lever or pedal feels mushy when it is applied, there might be air in the brake lines or the brake may be defective. Have the brake checked immediately by an authorized Kawasaki dealer.

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

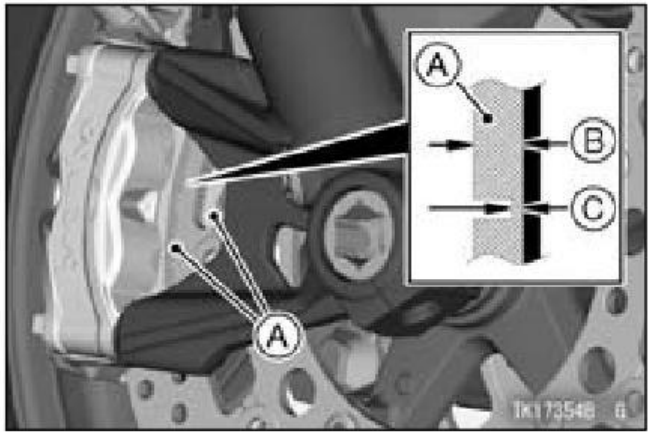
- If the fluid level is lower than the lower level line it may indicate that the fluid is leaking. In this case, have the brake system inspected by an authorized Kawasaki dealer.

Brake Pad Wear Inspection

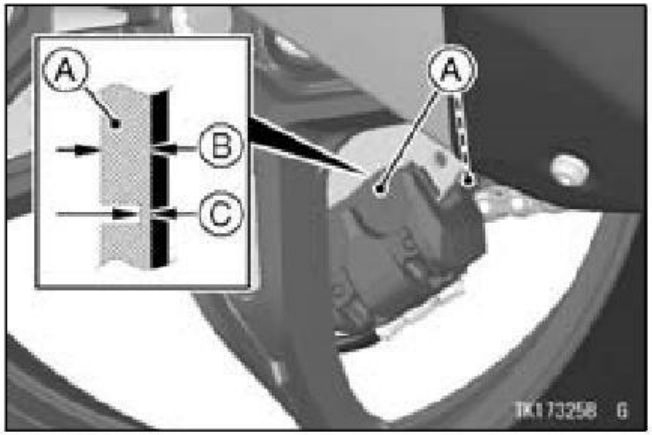
Inspect the brakes for wear. For each front and rear disc brake caliper, if the thickness of either pad lining is less than below table, replace both pads in the caliper as a set. Pad replacement should be done by an authorized Kawasaki dealer.

Lining Thickness Service Limit

Front	1 mm (0.04 in.)
Rear	1.5 mm (0.06 in.)



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

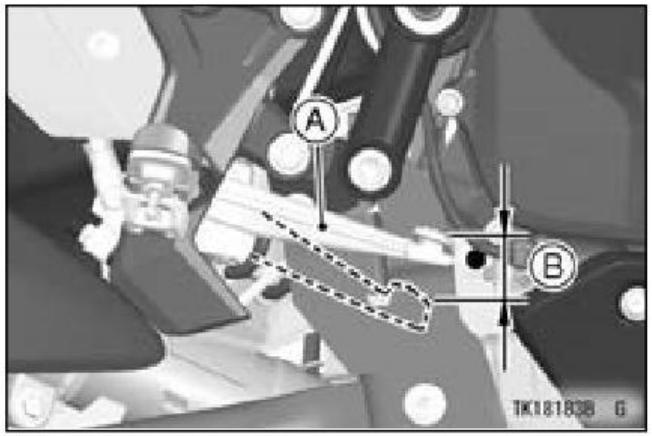


A. Rear Brake Pads
B. Lining Thickness
C. 1.5 mm (0.06 in.)

Brake Light Switches

Brake Light Switch Inspection

- Turn the ignition switch on.
- The brake light should appear 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 appear after the proper pedal travel.



A. Brake Pedal
B. 7 mm (0.28 in.)

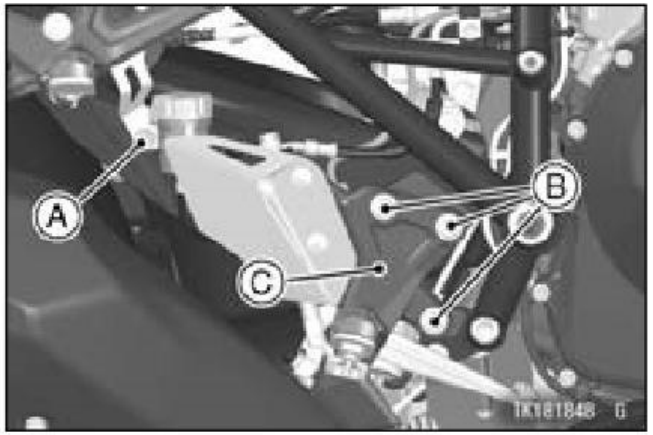
- If the light does not come on, adjust the rear brake light switch.

Brake Pedal Travel

7 mm (0.28 in.)

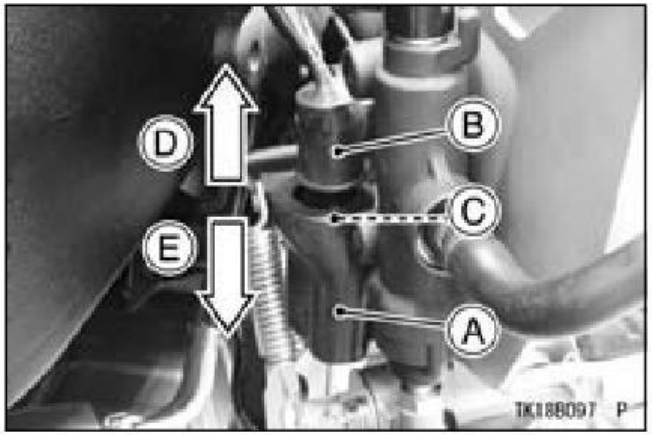
Brake Light Switch Adjustment

- Remove the rear brake fluid reservoir bolt and stopper.
- Remove the right front footpeg bracket bolts.
- Pull the footpeg bracket a little bit outward.



A. Rear Brake Fluid Reservoir Bolt and Stopper
B. Right Front Footpeg Bracket Bolts
C. Right Front Footpeg Bracket

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



A. Cover
B. Rear Brake Light Switch
C. Adjusting Nut
D. Lights sooner
E. Lights later

NOTICE

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

- Slide back the cover to the original position.
- Install the right front footpeg bracket.
- Tighten the right front footpeg bracket bolts to the specified torque.

Tightening Torque

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

NOTE

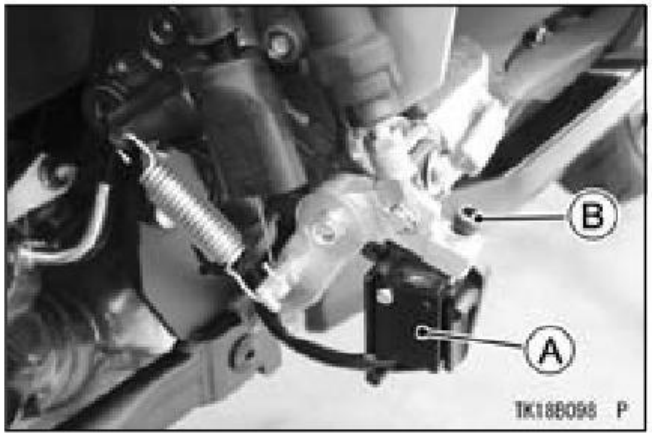
○ *If a torque wrench is not available, this item should be serviced by an authorized Kawasaki dealer.*

- Install the stopper and tighten the rear brake fluid reservoir bolt.

NOTE

○ *Be careful not to adjust the cruise control cancel switch adjuster instead of brake light switch. The cruise control cancel switch is used*

to control the timing to cancel the cruise control system.



A. Cruise Control Cancel Switch
B. Cruise Control Cancel Switch Adjuster

⚠ WARNING

Do not turn the cruise control cancel switch adjuster. Turning this adjuster causes the cruise control cancel timing to change, it may also cause an accident. If the cruise control does not work properly, have the system checked by an authorized Kawasaki dealer.

Suspension System

NOTE

○ *The suspension systems are controlled by KECS except for the spring preload of the front fork (see Kawasaki Electronic Control Suspension (KECS) section in the HOW TO RIDE THE MOTORCYCLE chapter).*

Front Fork

NOTICE

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

Spring Preload Adjustment

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

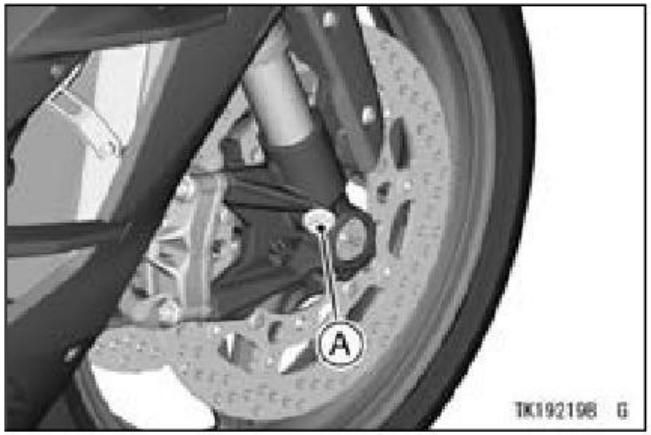
Standard

6 turns in
In from the fully seated position (turned fully counterclockwise).

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

NOTICE

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



A. Spring Preload Adjuster

Setting Table

Front Fork Spring Preload Setting

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

Wheels

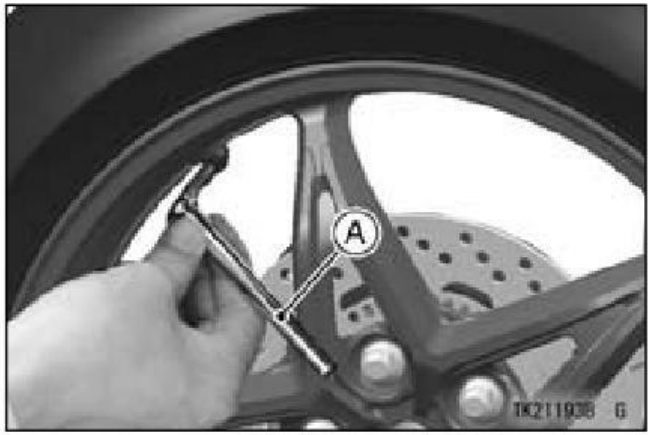
Tire Pressure Inspection

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

NOTE

○ *Measure 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).*

○ *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	290 kPa (2.90 kgf/cm², 42 psi)
Rear	290 kPa (2.90 kgf/cm², 42 psi)

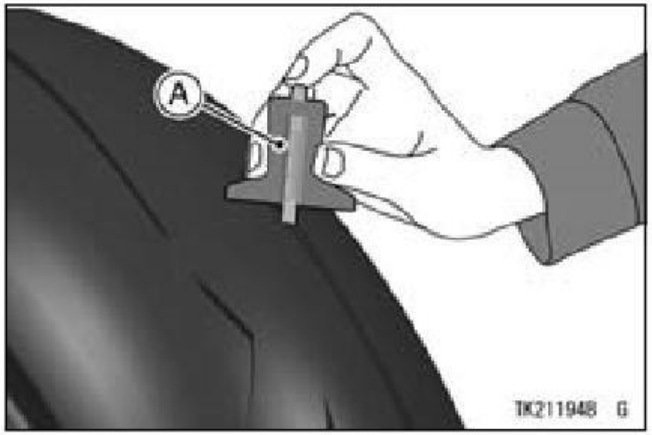
Tire Wear, Damage

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.

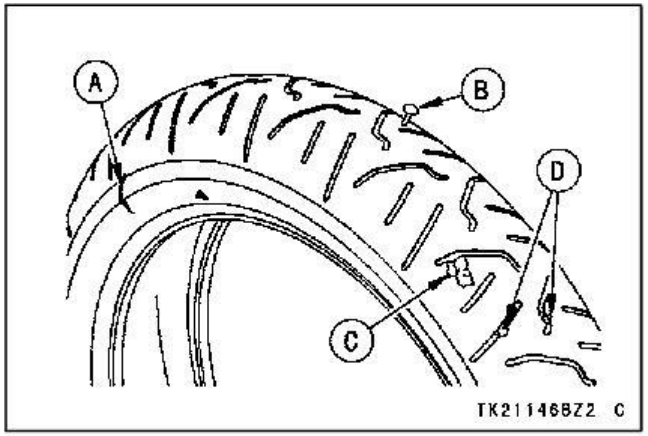


A. Tire Depth Gauge

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

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

⚠ 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, Kawasaki recommends use of 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

Front	Make, Type: BRIDGESTONE, BATTLAX HYPER SPORT S21F F Size: 120/70ZR17 M/C (58W)
Rear	Make, Type: BRIDGESTONE, BATTLAX HYPER SPORT S21R F Size: 190/55ZR17 M/C (75W)

⚠ 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.

⚠ WARNING

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

Battery

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

NOTICE

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

Make	GS Yuasa Power Supply, Ltd.
Type	YTZ10S

Battery Maintenance

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

If you are riding your vehicle infrequently, inspect the battery voltage weekly using a voltmeter. If it drops below 12.8 volts, the battery should be charged using an appropriate charger (check with your Kawasaki dealer). If you will not be using the motorcycle for longer than two weeks, the battery should be charged using an appropriate charger. Do not use an automotive-type quick charger that may overcharge the battery and damage it.

NOTE

○ *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).

⚠ DANGER

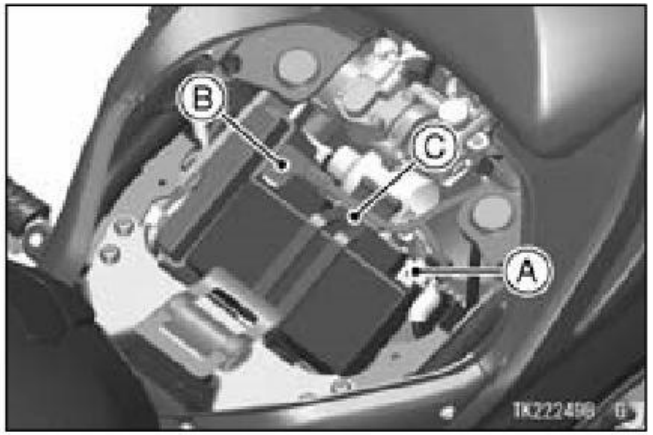
Battery acid generates hydrogen gas which is flammable and explosive under certain conditions. It is present within a battery at all times, even in a discharged condition. Keep all flames and sparks (cigarettes) away from the battery. Wear eye protection when working with a battery. In the event of battery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

⚠ 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 rider's seat (see Seats section in the GENERAL INFORMATION chapter).
- Disconnect the negative (–) cable from the (–) terminal.
- Slide the red cap from the positive (+) terminal.
- Disconnect the positive (+) cable from the (+) terminal.
- Remove the band.



A. (–) Terminal
B. (+) Terminal with Red Cap
C. Band

- Take the battery out of the battery case.
- Clean the battery using a solution of baking soda and water. Be sure that the cable connections are clean.

Battery Installation

- Place the battery on the battery case.

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

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

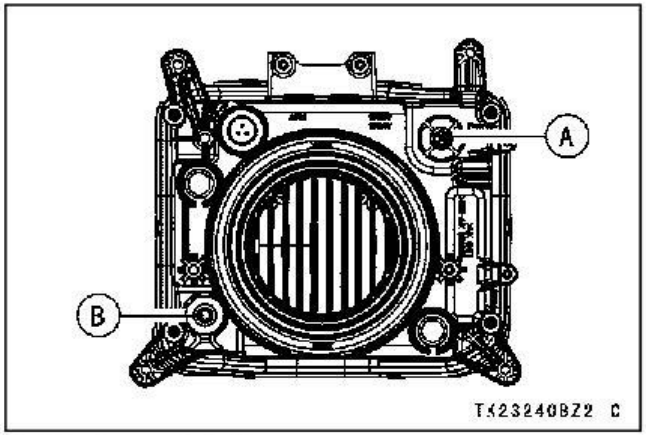
Headlight

Headlight aiming should be done by an authorized Kawasaki dealer.

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.



A. Horizontal Adjuster
B. Vertical Adjuster

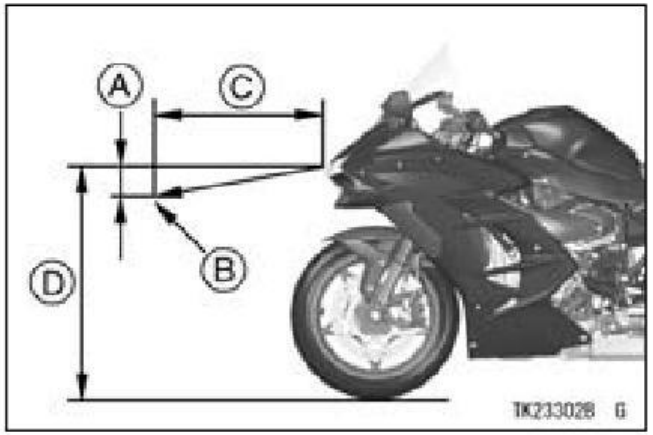
Vertical Adjustment

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

Cornering Light Vertical Adjustment

Cornering light aiming should be done by an authorized Kawasaki dealer.

NOTE

○ *The cornering light beam should be aimed to the specified position with*

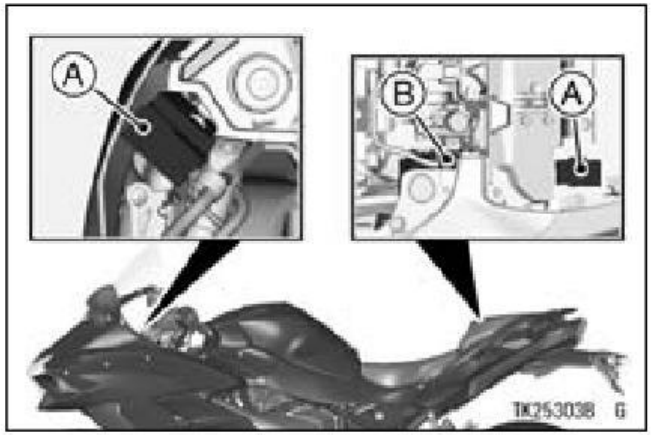
the motorcycle on its wheels and the rider seated. Adjust the cornering light to the proper angle according to local regulations.

Fuses

Fuses are arranged in the fuse boxes located under the passenger's seat and left inner cover. The main fuse is located under the rider's seat. 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.

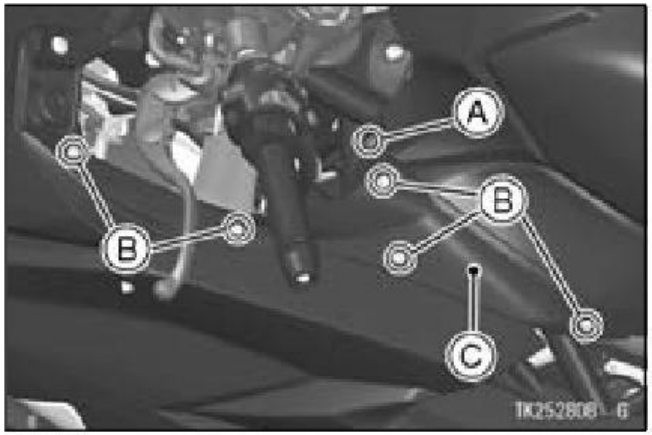
If the fuse fails repeatedly, there is something wrong with the electrical system. Have the motorcycle checked by an authorized Kawasaki dealer.

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



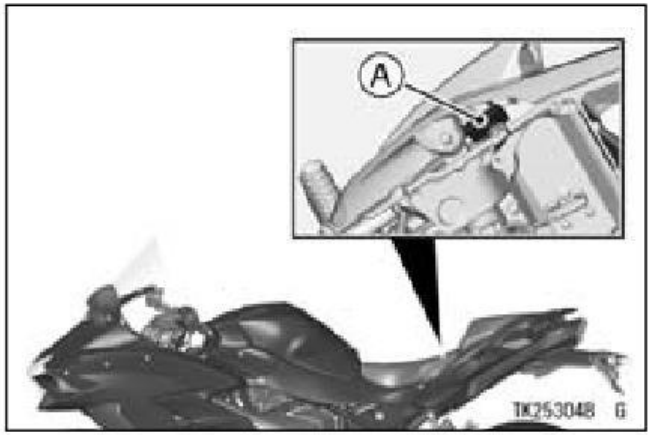
A. Fuse Boxes
B. Main Fuse

To access the front fuse box:
- Remove the quick rivet.
- Remove the bolts and washers.
- Remove the left inner cover.



A. Quick Rivet
B. Bolts and Washers
C. Left Inner Cover

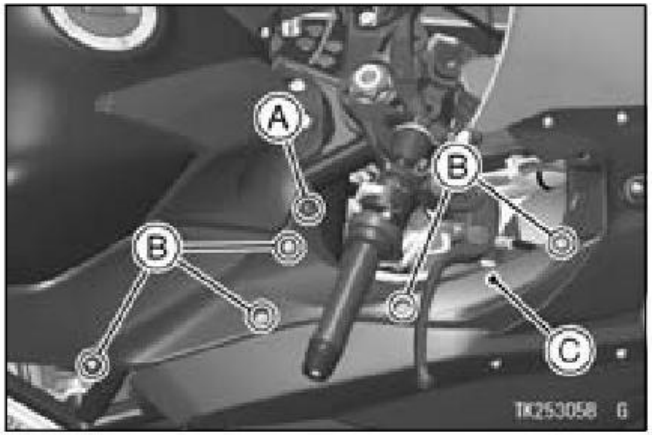
The cornering light fuse and KECS fuse are arranged in the fuse box located under the right seat sub cover.



A. Fuse Box (Cornering Light and KECS)

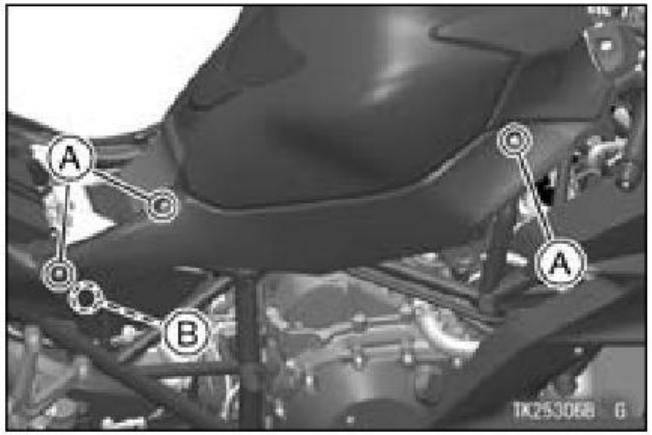
To access the fuse box (cornering light and KECS):

- Remove the rider's seat (see Seats section in the GENERAL INFORMATION chapter).
- Remove the quick rivet.
- Remove the bolts and washers.
- Remove the right inner cover.



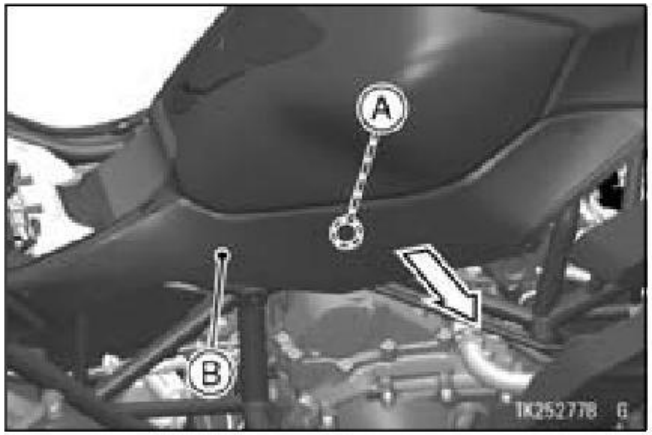
A. Quick Rivet
B. Bolts and Washers
C. Right Inner Cover

- Remove the bolts and washers.
- Remove the quick rivet.



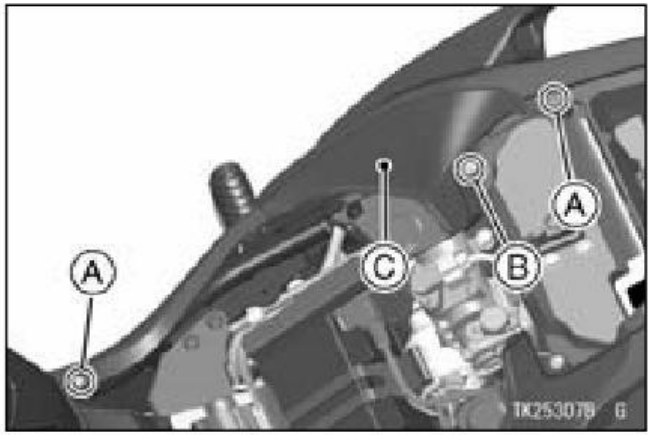
A. Bolts and Washers
B. Quick Rivet

- Pull the right side cover outward to clear the projection.
- Remove the right side cover.



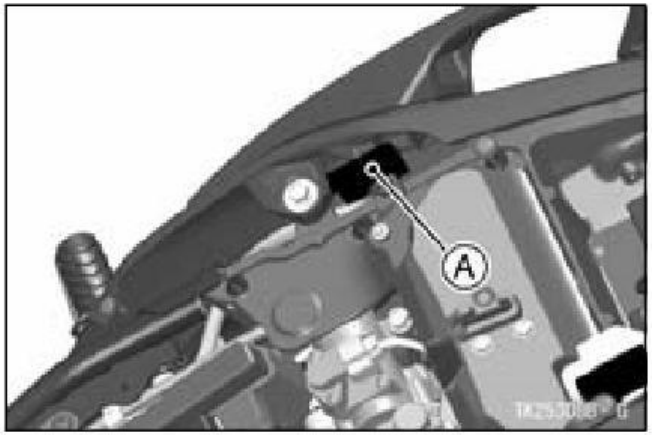
A. Projection
B. Right Side Cover

- Remove the quick rivets.
- Remove the bolt and washer.
- Remove the right seat sub cover.



A. Quick Rivets
B. Bolt and Washer
C. Seat Sub Cover

- Check the fuse.

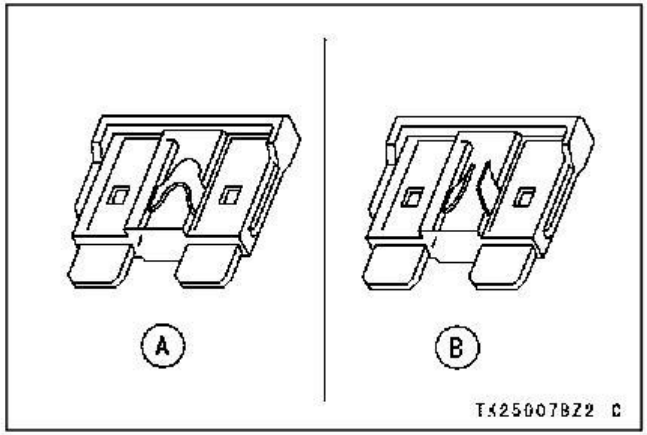


A. Fuse Box (Cornering Light and KECS)

- Install the removed parts.

⚠ WARNING

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



A. Normal
B. Failed

General Lubrication

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

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

Apply motor oil to the following pivots

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

Lubricate the following cables with a pressure cable luber

- **(K)** Throttle Inner Cables

Apply grease to the following points

- **(K)** Throttle Inner Cable Upper Ends

(K): Should be serviced by an authorized Kawasaki dealer.

NOTE

○ *After connecting the cables, adjust them.*

Cleaning

General Precautions

Frequent and proper care of your vehicle will enhance its appearance, optimize overall performance, and extend its useful life. Covering your vehicle with a high quality, breathable vehicle cover will help protect its finish from

harmful UV rays, pollutants, and reduce the amount of dust reaching its surfaces.

⚠ WARNING

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

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

NOTE

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

Radiator

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

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

Matte Paint Parts

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

Plastic Parts

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

NOTICE

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

Chrome and Aluminum

Chrome and uncoated aluminum parts can be treated with a chrome/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 vehicle has leather accessories, special care must be taken. Use a leather cleaner/treatment to clean and care for leather accessories. Washing leather parts with detergent and water will damage them, shortening their life.

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

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

Where to be Careful

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

- Disc brake master cylinder and caliper.
- Under the seat and left inner cover - if water gets into the fuse box or battery, it can ground out the spark. When this happens the vehicle will not operate properly and the affected parts must be wiped dry.

NOTICE

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

NOTE

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

Washing Your Vehicle

- Before washing, precautions must be taken to keep water off the following parts.

Muffler rear opening - cover with a plastic bag.

Ignition switch - cover the keyhole with tape.

- Rinse your vehicle with cold water from a garden hose to remove any loose dirt.
- Mix a mild neutral detergent (designed for motorcycles or automobiles) and water in a bucket. Use a soft cloth or sponge to wash your vehicle.
- After washing, rinse your vehicle thoroughly with clean water to remove any residue (residue from the detergent can damage parts of your vehicle).
- Remove the plastic bag and tape.
- Use a soft cloth to dry your vehicle. As you dry, inspect your vehicle for chips and scratches. Do not let the water air dry as this can damage the painted surfaces.
- Carefully ride your vehicle at a slow speed and apply the brakes several times. This helps dry the brakes and restores them to normal operating performance.

APPENDIX

Storage

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

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

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

Preparation for Storage

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

⚠ 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.

⚠ 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.

⚠ WARNING

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

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

⚠ WARNING

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

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

Preparation after Storage

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

Troubleshooting Guide

If a Problem Occurs

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

⚠ WARNING

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

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

If the Engine Does Not Start

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

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

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

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

- Make sure that the gear position is in the neutral position. If not, shift the transmission into neutral.
- Inspect the fuse condition. If any fuse has blown, replace it with a new one of the same amperage.

⚠ WARNING

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

- Check the battery cable connections etc. (see page 197). If necessary, tighten the connecting bolts to securely connect them.
- In case of slow blinking of the turn signal lights, low volume of the horn sound, or when you slide the engine start/stop switch and hear a click but the starter motor does not rotate, the battery charge is low. Refresh the battery's charge (see page 196) and check if the starter motor rotates.
- Even after a refresh charge, if the starter motor stops rotating the engine properly the battery may have deteriorated. Have the battery inspected by an authorized Kawasaki dealer.

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

If the Engine Stalls or Runs Poorly

- Check the fuel level in the fuel tank. If only a small quantity of fuel remains, replenish the fuel tank. (Fuel in the tank cannot be completely consumed.)
- Raise the side stand fully up before starting the engine. (If you try to move off with the side stand is still down, the engine will stop.)

- Make sure that correct fuel is used. If not, replace the fuel the correct type (see page 107).
- If the clutch lever feels spongy, there may be something wrong with the hydraulic circuit. Ask an authorized Kawasaki dealer for maintenance.
- In case of slow blinking of the turn signal lights, low volume of the horn sound, or when you slide the engine start/stop switch and hear a click but the starter motor does not rotate, the battery is discharged. Check the battery terminals for looseness (see page 197). If necessary, tighten the bolts. If the above methods cannot solve the problems, ask an authorized Kawasaki dealer for inspection and maintenance.
- If the coolant temperature warning indicator appears, the engine may have overheated. Check the coolant level in the reserve tank after the engine cools down. If the coolant quantity is less than the lower level, replenish the coolant or soft water up to the upper level (see page 173). Ask an authorized Kawasaki dealer to identify the cause of the overheat immediately.
- When the engine warning indicator on the meter goes on and stays on, there is something wrong with the fuel injection system. Ask an authorized Kawasaki dealer for inspection and maintenance.

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

Your Warranty/Owner Satisfaction

Welcome to the Kawasaki family!

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

Frequently Asked Questions

What is a Limited Warranty?

The most important thing to know about your warranty is that it protects you from manufacturing defects in material or workmanship during the warranty period. You can find the warranty period in the Kawasaki Limited Warranty Certificate your Kawasaki dealer provided to you at the time of sale. The warranty does not cover the cost of regularly-scheduled maintenance. The warranty also does not apply to the normal wear of items such as tires, brake pads, transmission drive belts, chains, sprockets, etc.

What is the Kawasaki Protection Plus?

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

What Am I Responsible For?

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

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

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

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.

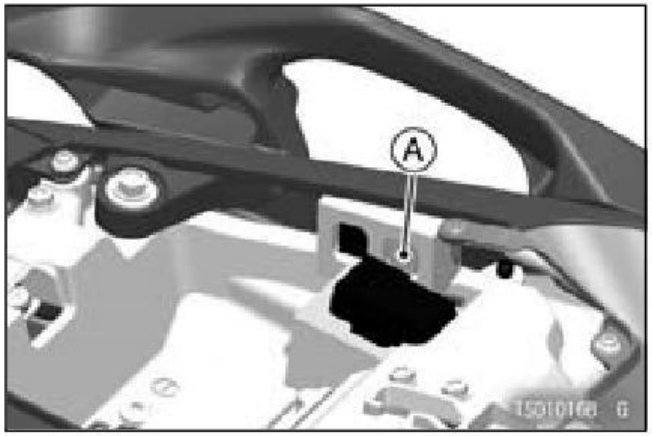
To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800 -424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

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.

Location of DFI System Diagnostic Connector

The DFI system diagnostic connector is located under the seat pad.



A. DFI System Diagnostic Connector

MAINTENANCE RECORD

Owner Name.....

Address.....

Phone Number.....

Engine Number.....

Vehicle Number.....

Key Code.....

Selling Dealer Name.....

Phone Number.....

Warranty Start Date.....

Note: Keep this information and a spare key in a secure location.

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

ZX1002DL *99803-0068*

Kawasaki Heavy Industries, Ltd. Motorcycle & Engine Company

Printed in Japan

GB