Kawasaki

保存版

Voyager XII

Motorcycle Owner's Manual

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

WARNING

○**This warning symbol identifies special instructions or procedures which, if not correctly followed, could result in personal injury, or loss of life.**

CAUTION

○**This caution symbol identifies special instructions or procedures which, if not strictly observed, could result in damage to or destruction of equipment.**

NOTE

○*This note symbol indicates points of particular interest for more efficient and convenient operation.*

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

WARNING

○Do not operate the audio systems (AM radio, FM stereo radio, Cassette player or optional sound devices) at volumes so loud that they interfere with your ability to hear sirens, horns, or other warning signals.

IMPORTANT NOTICE

Some states under various statutes prohibit the wearing of "headphones" or "headsets" while operating a motor vehicle. While the mounting of audio speakers in motorcycle helmets does not convert them to "headphones" or "headsets," some states may prohibit use of the Voyager "Ground Control" helmet sound system under such statutes. Kawasaki advises you to determine the legality of the "Ground Control" helmet sound system prior to using it in any state.

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 California Air Resources Board on vehicle sold in California only.

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 carburetors.

2. Exhaust Emission Control System

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

3. Evaporative Emission Control System

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. Liquid fuel is caught by a vapor separator and returned to the fuel tank.

High Altitude Performance Adjustment Information

To improve the EMISSION CONTROL PERFORMANCE of vehicles operated above 4,000 feet, Kawasaki recommends the following Environmental Protection Agency (EPA) approved modification.

NOTE

○*When properly performed, these specified modifications only are not considered to be emissions system "tampering" and vehicle performance is generally unchanged as a result.*

Installation Instructions:

High altitude adjustment requires replacement of certain carburetor components. Installation of these optional parts may be performed by an authorized Kawasaki Dealer, or the consumer, following repair recommendations specified in the appropriate Kawasaki Service Manual.

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 138 through 140 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.

FOREWORD

We wish to thank you for choosing this fine Kawasaki Motorcycle. Your new motorcycle is the product of Kawasaki's advanced engineering, exhaustive testing, and continuous striving for superior reliability, safety, and performance.

Read this Owner's Manual before riding so 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 Kawasaki Dealer. The Service Manual contains detailed disassembly and maintenance information.

Due to improvements in design and performance during production, in some cases there may be minor discrepancies between the actual vehicle and the illustrations and text in this manual.

KAWASAKI HEAVY INDUSTRIES, LTD.
CONSUMER PRODUCTS & COMPONENTS GROUP

Aug. 1988. (1). (S)

RIDING A LUXURY-EQUIPPED MOTORCYCLE

Driving this luxury-equipped motorcycle may be a relatively new experience, even for veteran riders. The numerous items of luxury equipment offer benefits of planned and integrated storage, entertainment, information, communication, comfort, quiet, and convenient adjustment for your personal tastes and various riding conditions. For most riders, operating this luxury-equipped motorcycle will require some adjustment in riding patterns and concentration on certain aspects of its characteristics and limitations. The following information is offered to make riders conscious of the necessary adjustments and to help prepare them for safe, enjoyable long-distance motorcycling.

CONTROLS AND DISPLAY OF A LUXURY-EQUIPPED MOTORCYCLE

The instrument panel and audio system are installed to help you accomplish your trip with confidence and enjoyment. The array of controls and adjustments offers a wide range of adaptability to help you harmonize the motorcycle with your riding needs. A "cockpit" so rich in displays and controls could be distracting to some riders. That possibility argues for special precaution and heightened awareness while riding this motorcycle. The following recommendations are based on common sense. It is hoped that you will bear with our concern for the rider's and passenger's safety when these warnings are advised:

WARNING

- **Ride Aware — Keep your eyes on the road and other vehicles. Refer to the audio system display only when traffic, speed, and road conditions permit momentary diversion of your attention without any risk of collision or loss of control.**
- **Keep both hands on the handlebar grips, ready to operate the front brake and the throttle in response to emergency situations. The control module next to the left handgrip permits operation of most of the audio equipment with your hand on or near the handgrip.**
- **Keep both feet on the footboards, ready to operate the rear brake and shift pedal in response to emergency situations.**
- **Wait until the motorcycle is stopped to remove or insert clothing or other objects from or to the saddlebags, travel trunk, or fairing pockets. Also, stop the motorcycle before making any adjustments that require you to remove your hands from the handlebar grips.**

PHYSICAL CHARACTERISTICS OF A LUXURY-EQUIPPED MOTORCYCLE

A luxury-equipped motorcycle, with its complement of storage, convenience, entertainment, and comfort appointments properly installed, is designed to optimize the rider's capabilities for long-distance travel. Compared to an equivalent, basic motorcycle without such a rich complement of luxury equipment, the luxury-equipped motorcycle appears large and imposing. In the same manner, the luxury-euiqpped motorcycle has some physical characteristics that differ from those of the basic motorcycle without so many features and appointments. Some of those different characteristics are noted here for the rider's information:

- The physical weight of the luxury-equipped motorcycle is greater.
- The center of gravity is located higher and more toward the rear of the luxury-equipped motorcycle.
- The weight distribution of the luxury-equipped motorcycle places a larger proportion of weight on the rear wheel and tire, with correspondingly less weight on the front wheel and tire.
- Bank angles (or "lean" angles) are reduced with the luxury-equipped motorcycle.
- The large surface areas of the windshield, fairing, saddlebags, and travel trunk increase the luxury-equipped motorcycle's susceptibility to aerodynamic effects when the motorcycle is in motion. While the motorcycle's greater weight tends to offset the effects of crosswinds and wind gusts, prudence dictates special caution when passing large vehicles or encountering winds across the direction of travel.

In view of these different characteristics and their consequent limitations on motorcycle operation, the following recommendations are offered with concern for the rider's and passenger's safety:

WARNING

- **Restrict handling maneuvers and vehicle speed to extra-prudent levels until you have gained familiarity with and confidence in this luxury-equipped motorcycle's capabilities and learned respect for its limitations. Remember its greater weight and different weight distribution and center of gravity, as well as its reduced bank angles, when planning and executing vehicle maneuvers. Failure to adapt your riding patterns to the characteristics of this luxury-equipped motorcycle may result in your expectations exceeding its physical limitations with a consequent loss of control and subsequent accident.**
- **Do not exceed the vehicle speed of 130 km/h (80 mph) when carrying a passenger and/or cargo. Also adjust speed according to road and weather conditions, etc. The additional weight accentuates the luxury-equipped motorcycle's performance, handling characteristics and limitations. Failure to adjust the speed to compensate for added weight and other conditions may result in a loss of control and subsequent accident.**
- **Reduce speed and increase concentration on steering control when encountering windy conditions or when following or passing large vehicles, which can generate turbulent airflow in their paths. If wind conditions become too severe for safe travel, then stop**

until the condition subsides and safe travel can be resumed. Ignoring or failing to anticipate the adverse effects of wind and/or turbulent airflow may cause the motorcycle to become unstable or to veer from the intended path, with a consequent loss of control and subsequent accident.

NOTE

○*When operating on public roadways, keep max. speed under traffic law limits.*

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PERFORMANCE	
Minimum Turning Radius	2.9 m (114.2 in)
Braking Distance	12.5 m from 50 km/h (41 ft from 31 mph)
DIMENSIONS	
Overall Length	2 520 mm (99.4 in)
Overall Width	965 mm (38.0 in)
Overall Height	1 505 mm (59.3 in)
Wheelbase	1 620 mm (63.8 in)
Road Clearance	140 mm (5.5 in)
Dry Weight	330 kg (728 lb) (Cal) 330.5 kg (729 lb)
ENGINE	
Type	DOHC, 16-valve, 4-cylinder, 4-stroke, liquid-cooled
Displacement	1196 mL (73.0 cu in)
Bore x Stroke	78.0 x 62.6 mm (3.07 x 2.46 in)
Compression Ratio	10.0 : 1
Starting System	Electric Starter
Cylinder Numbering Method	Left to right, 1-2-3-4
Firing Order	1-2-4-3
Carburetors	Keihin CVK30 x4
Ignition System	Battery and coil (transistorized ignition)
Ignition Timing (Electronically advanced)	10° BTDC @800 r/min (rpm)
Spark Plugs	NGK DPR8EA-9 or ND X24EPR-U9
Lubrication System	Forced lubrication (wet sump)
Engine Oil	SE or SF class SAE 10W40, 10W50, 20W40, or 20W50

Engine Oil Capacity		4.0 L (4.2 US qt)
Coolant Capacity		3.8 L (4.0 US qt)
TRANSMISSION		
Transmission Type		5-speed, constant mesh, return shift
Clutch Type		Wet, multi disc
Driving System		Shaft drive
Primary Reduction Ratio		1.706 (99/58)
Final Reduction Ratio		2.424 (15/22 x 32/9)
Overall Drive Ratio		3.470 (Top gear)
Gear Ratio:	1st	2.733 (41/15)
	2nd	1.800 (36/20)
	3rd	1.333 (32/24)
	4th	1.035 (29/28)
	5th	0.838 (26/31)
Final Gear Case Oil		API GL-5 SAE 80
Final Gear Case Oil Capacity		210 mL (0.22 US qt)
FRAME		
Castor		30°
Trail		121 mm (4.8 in)
Tier Size:	Front	M130/90-16 Tubeless
	Rear	M150/90-15 MC Tubeless
Fuel Tank Capacity		23.2 L (6.1 US qt)
ELECTRICAL EQUIPMENT		
Battery		12 V 20 Ah
Headlight		12 V 60/55 W
Tail/Brake Lights		12 V 8/27 W

(Cal): California model

Specifications subject to change without notice.

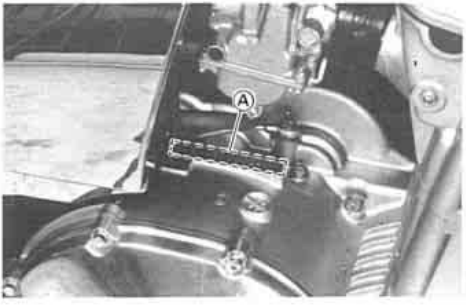
SERIAL NUMBER LOCATIONS

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.

Frame No.

A. Frame Number

Engine No.



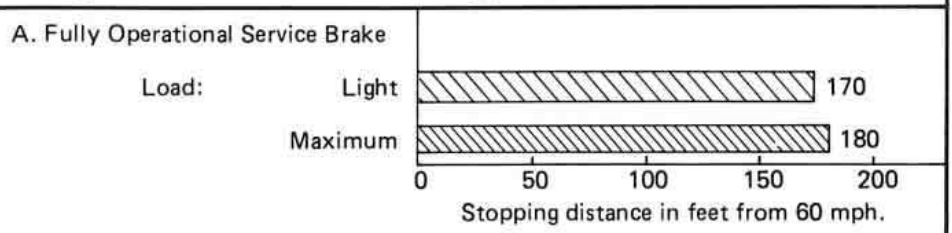
A. Engine Number

Vehicle Minimum Stopping Distance on Dry Pavement

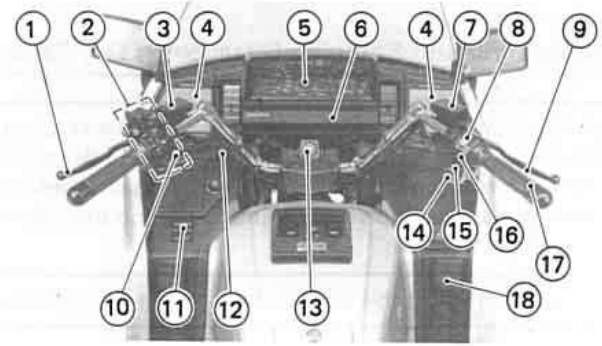
These figures indicate braking performance that can be met or exceeded by the vehicle to which they apply, without locking the wheels, under different conditions of loading. The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

Description of vehicle to which this table applies: Model ZG1200-B3

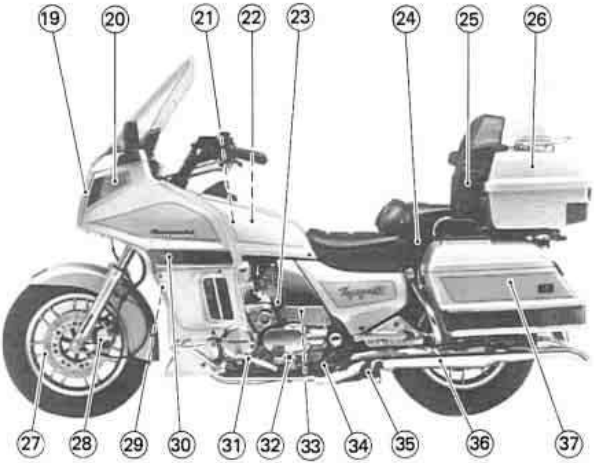
A. Fully Operational Service Brake



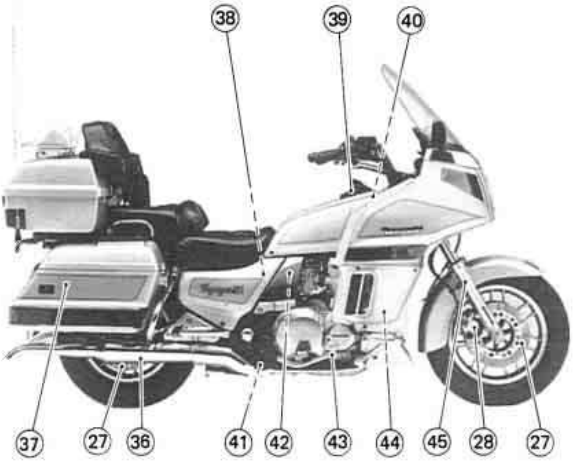
Manufacturer: **Kawasaki Heavy Industries, Ltd.**



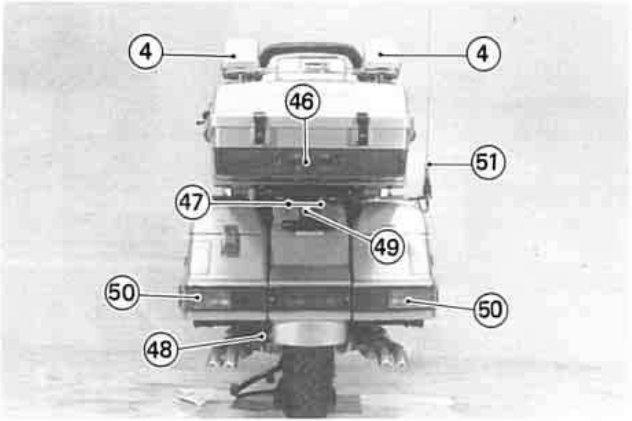
1. Clutch Lever
2. Left Handlebar Switches
3. Clutch Fluid Reservoir
4. Speaker
5. Instrument Panel
6. Audio System
7. Brake Fluid Reservoir (Front)
8. Engine Stop Switch
9. Front Brake Lever
10. Starter Lockout Switch
11. Fader Controller
12. Headlight Vertical Adjuster
13. Ignition Switch/ Steering Lock
14. Hazard Switch
15. Starter Button
16. Cruise Control Switch
17. Throttle Grip
18. Front Fork and Rear Shock Absorber Air Valves



19. Headlight
20. Turn Signal/Running Position Light
21. Battery
22. Air Cleaner Element
23. Idle Adjusting Screw
24. Rear Shock Absorber
25. Passenger Switches
26. Travel Trunk
27. Brake Disc
28. Brake Caliper
29. Radiator
30. Side Maker Light
31. Shift Pedal
32. Oil Level Gauge
33. Oil Filler Plug
34. Side Stand
35. Center Stand
36. Muffler
37. Saddlebag

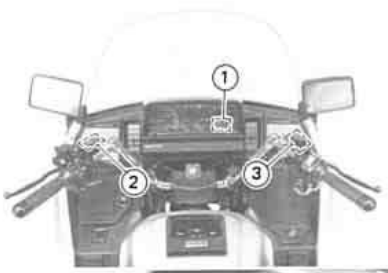


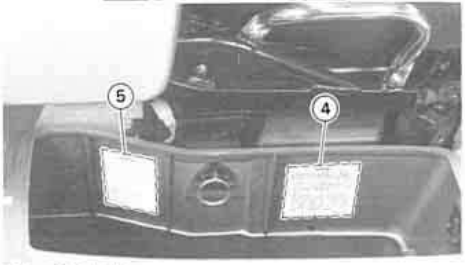
38. Fuel Tank
39. Cruise Control Unit
40. Fuse Case
41. Rear Brake Switch and Rear Brake Light Switch
42. Brake Fluid Reservoir (Rear)
43. Rear Brake Pedal
44. Horn
45. Front Fork

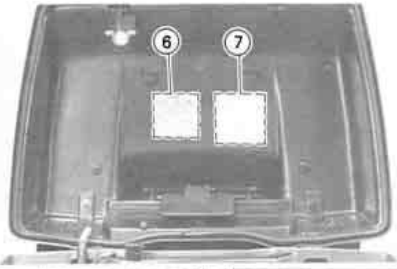


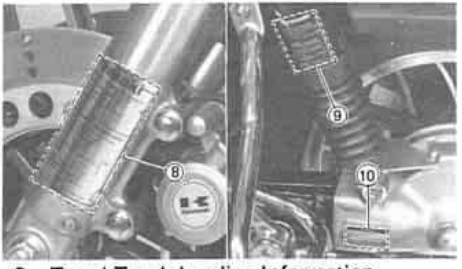
46. Tail/Brake Light
47. Helmet Hooks
48. Final Gear Case
49. License Plate Light
50. Turn Signal Light
51. Antenna

LOCATION OF LABELS

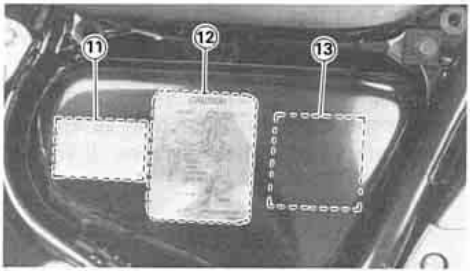


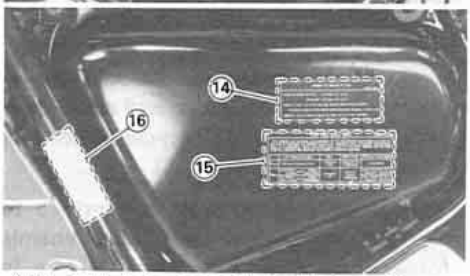




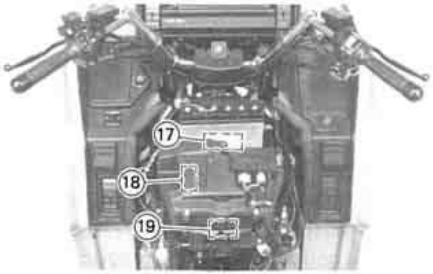


*1. Break-In
2. Clutch Fluid
3. Brake Fluid
4. Saddlebag Loading Information
5. Saddlebag Lock
6. Travel Trunk Loading Information
7. Daily Safety Checks
8. Air Suspension (Front Fork)
9. Air Suspension (Rear Shock Absorber)
10. Final Gear Case Oil





*11. Vehicle Emission Control Information
12. Battery Vent Hose Routing
**13. Fuel Tank
14. Engine Oil and Oil Filter
15. Tire and Load Data
*16. Noise Emission Control Information
17. Battery Poison/Danger



18. Air Cleaner Intake
19. Vacuum Hose Routing Diagram
20. Brake Fluid (Rear)
21. Riding and Safety

* : only on US model
** : only on California model

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 that the motorcycle is not overloaded (refer to page 27 for maximum load information) and that you have followed these instructions.**

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. 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 the fitting of additional accessories. The following general guidelines have been prepared to assist you in making your determinations.

1. 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 sit still while the motorcycle is in motion and not interfere with the operation of the motorcycle. Do not carry animals on your motorcycle.

2. You should instruct any passenger before riding to keep his feet on the passenger footboards and hold on to the operator, seat strap, or grab rail. Do not carry a passenger unless he or she is tall enough to reach to the footboards.

3. All baggage should be carried as low as possible to reduce the effect on the motorcycle 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.

4. 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.

5. Do not carry heavy or bulky items in the travel trunk. It is designed for light items, and overloading can affect handling due to changes in weight distribution and aerodynamic forces.

6. Do not install accessories or carry baggage that impairs the performance of the motorcycle. Make sure that you have not adversely affected any lighting component, road clearance,

banking capability (i.e., lean angle), control operation, wheel travel, front fork movement, or any other aspect of the motorcycle's operation.

7. Weight attached to the handlebar or front fork will increase the mass of the steering assembly and can result in an unsafe riding condition.

8. Fairings, windshields, backrests, and other large items have the capability of adversely affecting stability and handling of the motorcycle, not only because of their weight, but also due to the aerodynamic forces acting on these surfaces while the motorcycle is in operation. This motorcycle, with its original luxury equipment properly installed, is designed to optimize resistance to such effects. Please see Physical Characteristics of a Luxury-Equipped Motorcycle on p. 9 for more information.

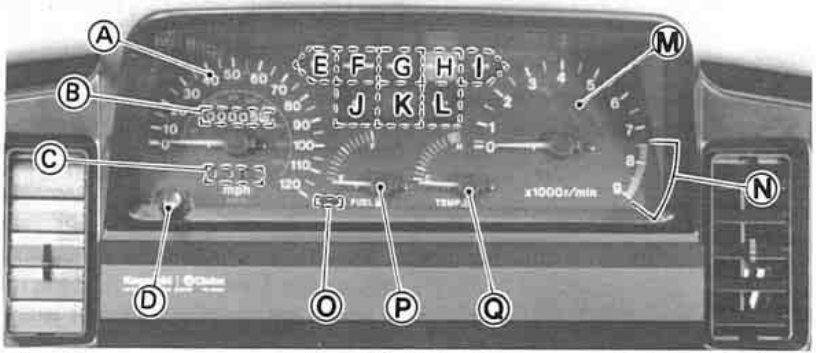
9. This motorcycle was not intended to be equipped with a sidecar or to be used to tow any trailer or other vehicle. Kawasaki does not manufacture sidecars or trailers and cannot predict the effects of such accessories on handling or stability, but can only warn that the effects can be adverse and that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

This motorcycle is designed to carry up to two people and baggage. Before riding, make sure the motorcycle is not overloaded and that the load is distributed according to the following instructions.

PAYLOAD WEIGHT LIMITS			
Total Payload must not exceed. . . . . 202 kg (445 lb) (Includes driver, passenger, and all accessories and baggage in the travel trunk and saddlebags)	**Travel Trunk Payload** must not exceed. . . . . 10 kg (22 lb) (Includes all accessories and baggage in the travel trunk)		
		Each	**Total RH/LH**
	Saddlebag Payload must not exceed. . . . . (Includes all accessories and baggage in the saddlebags)	10 kg (22 lb)	20 kg (44 lb)
Note: Standard equipment on this motorcycle includes a fairing, travel trunk, and two saddlebags. These standard items are included in the curb weight of the motorcycle. The Payload Weight Limits given above are for additions over and above these standard components.			

Note: Tire pressure (pg. 116) and rear shock absorber (pg. 110) must be adjusted to suit the road and loading conditions.

Instrument Panel



A. Speedometer
B. Odometer
C. Trip Meter
D. Trip Reset Button
E. Left Turn Signal Indicator Light
F. High Beam Indicator Light
G. Neutral Indicator Light
H. Headlight Failure Indicator Light
I. Right Turn Signal Indicator Light
J. Oil Pressure Warning Light
K. Overdrive Indicator Light
L. Battery Indicator Light
M. Tachometer
N. Red Zone
O. Fuel Level Warning Light
P. Fuel Gauge
Q. Coolant Temperature Gauge

Speedometer and Tachometer

The speedometer shows the speed of the vehicle. In the speedometer face are the odometer and trip meter. The odometer shows the total distance that the vehicle has been ridden. The trip meter shows the distance traveled since it was last reset to zero. The trip meter can be reset to zero by pushing the reset button.

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

CAUTION

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

Coolant Temperature Gauge

This gauge shows the temperature of coolant. Ordinarily, the needle should stay within the white zone. If the needle reaches the red zone, stop the engine and check the coolant level in the reserve tank after the engine cools down.

CAUTION

○**Do not let the engine continue running when the gauge needle reaches the red zone. Prolonged engine operation will result in severe damage from overheating.**

Fuel Gauge and Fuel Level Warning Light

The fuel gauge shows the amount of fuel in the fuel tank. When the needle comes near the E (empty) position or fuel level warning light is lit, refuel at the earliest opportunity. The warning light goes on whenever the fuel level in the tank becomes lower than the predetermined level or the ignition switch is in the ON position with the engine not running.

Indicator Lights

TURN: When the turn signal switch is turned to left or right, the corresponding turn signal indicator light flashes on and off.

HIGH BEAM: When the headlight is on high beam, the high beam indicator light is lit.

NEUTRAL: When the transmission is in neutral, the neutral indicator light is lit.

HEAD LAMP: If either the high or low beam burns out, the reserve lighting system switches over to the remaining filament automatically, and lights the headlight failure indicator light to show that the headlight bulb must be replaced.

OIL: The oil pressure warning light goes on whenever the oil pressure is dangerously low or the ignition switch is in the ON position with the engine not running, and goes off when the engine oil pressure is high enough. Refer to the Maintenance and Adjustment chapter for more detailed engine oil information.

OD: When the transmission is in the overdrive gear position, the overdrive indicator light is lit.

BATT: When the battery electrolyte level becomes lower than the predetermined level or the ignition switch is in the ON position with the engine not running, the battery indicator light is lit.

Key

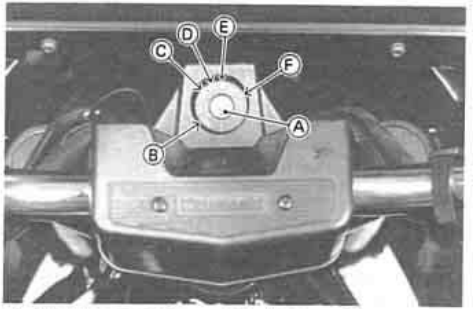
This motorcycle has a combination key, which is used for the ignition switch/steering lock, fuel tank cap cover, fairing pockets, helmet hooks, saddlebags and travel trunk.

Blank keys are available at your Kawasaki Dealers. Ask your Dealer to make any additional spare keys you may need, using your original key as a master.

Ignition Switch/Steering Lock

This is a five-position, key-operated switch. The key can be removed from the switch when it is in the OFF, LOCK, or P(PARK) position.

LOCK	Steering locked. Engine off. All electrical circuits off.
OFF	Engine off. All electrical circuits off.
ACC	Engine off. All electrical circuits off except for the accessory leads and audio system.
ON	Engine on. All electrical equipment can be used.
P (PARK)	Steering locked. Engine off. Taillights on and license plate light on. Turn signal circuit on. All other electrical circuits cut off.



A. Ignition Switch
B. LOCK position
C. OFF position
D. ACC position
E. ON position
F. P(PARK) position

NOTE

○The tail, running position, and license plate lights are on whenever the ignition switch is in the ON position. The headlight goes on when the starter button is released after starting the engine. To avoid battery discharge, always start the engine immediately after turning the ignition switch to ON.

○*If you leave the PARK position on for a long time (one hour), the battery may become totally discharged.*

To operate the ignition switch:

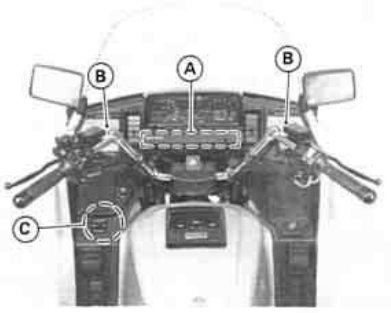
OFF [2] ACC [2] ON [3 a] P(PARK)

[3 b] LOCK

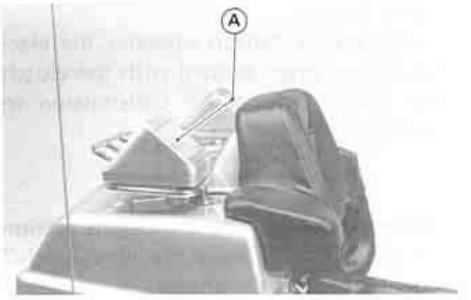
1. Turn the handlebar fully to the left.
2. Turn the key.
3. a. For parking push down the key in the ON position and turn it to P (Park).
   b. For locking push down the key in the OFF position and turn it to LOCK.

AM/FM Stereo Radio and Cassette Player, Speakers and Fader Controller

Refer to the Voyager XII Audio Systems Operator's Manual for detailed information.



A. AM/FM Stereo Radio and Cassette Player
B. Speaker
C. Fader Controller



A. Speakers

Radio Frequency/Time Display

This display on the AM/FM stereo radio and cassette player indicates both the radio frequency and the time. Ordinarily the time is indicated on the display even if the ignition switch is in the OFF position. Refer to the Voyager XII Audio Systems Operator's Manual for more detailed information.

A. Radio Frequency/Time Dispaly

Right Handlebar Switches

Engine Stop Switch

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

The engine stop switch is for emergency use. If some emergency requires stopping the engine, move the engine stop switch to the OFF position.

NOTE

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

Starter Button

The starter button operates the electric starter when pushed with the clutch lever pulled in or the transmission in neutral.

CAUTION

○Refer to the Starting the Engine section of the "How to Ride the Motorcycle" chapter to start the engine.

A. Engine Stop Switch
B. Starter Button
C. Hazard Switch
D. Cruise Control Switch

Hazard Switch

If an emergency requires you to park on the highway shoulder, turn on the hazard lights to warn other drivers of your location.

Move the hazard switch to the **ON** position with the ignition switch in the ON or PARK position. All the turn signals and turn signal indicator lights will flash on and off.

CAUTION

- **If you leave the switch on for a long time, the battery may become totally discharged. So be careful not to use the hazard lights for more than 30 minutes.**

Cruise Control Switch

Refer to the Cruise Control system for detailed information.

Left Handlebar Switches and Passenger Switches

Dimmer Switch

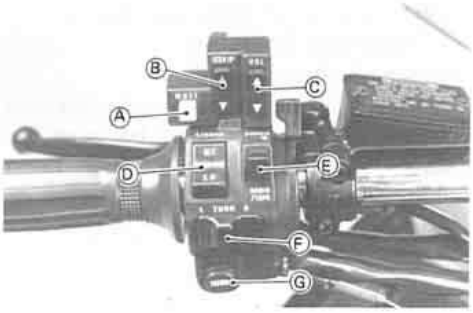
High or low beam can be selected with the dimmer switch. When the headlight is on high beam (HI), the high beam indicator light is lit.

Turn Signal Switch

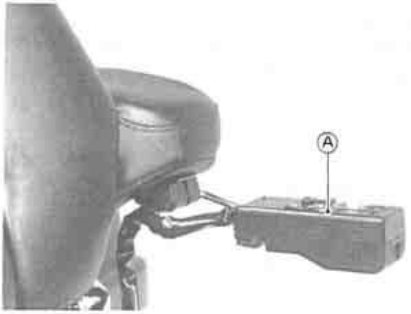
When the turn signal switch is turned to L (left) or R (right), the corresponding turn signals flash on and off. The turn signal switch is automatically canceled after it has first been on for 4 seconds, and then the motorcycle has traveled an additional 50 m (164 ft).

Horn Button

When the horn button is pushed, the horn sounds.



A. Muting Switch
B. Auto Seek Switch
(Program Change Switch in Cassette Mode)
C. Volume Control Switch
D. Dimmer Switch
E. Radio/Tape Button
F. Turn Signal Switch
G. Horn Button



A. Passenger Switches

Auto Seek Switch, Muting Switch, Volume Control Switch, Radio/Tape Button and Passenger Switches

Refer to the Voyager XII Audio Systems Operator's Manual for detailed information.

Cruise Control System

This motorcycle is equipped with Kawasaki's Cruise Control system which is designed to maintain any speed between **48 – 128 km/h (30 – 80 mph) in OD (5th gear).** Use the Cruise Control system on straight, uncongested roads or highways.

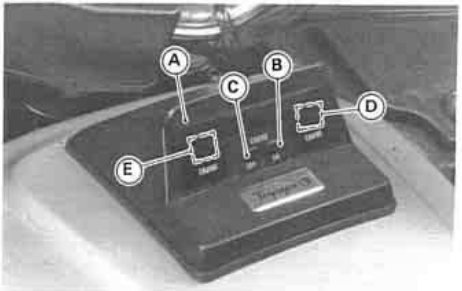
WARNING

○**Do not use the Cruise Control system when driving in heavy or varying traffic, on hills or winding roads, or in bad weather conditions.**

NOTE

○*When operating on public roadways, keep max. speed under traffic law limits.*

Cruise Control Unit:



A. Cruise Control Unit
B. Power Switch
C. Cancel Switch
D. ON Indicator Light
E. SET Indicator Light

○Power Switch

When the power switch is pushed on, the Cruise Control system is ready to set.

○Cancel Switch

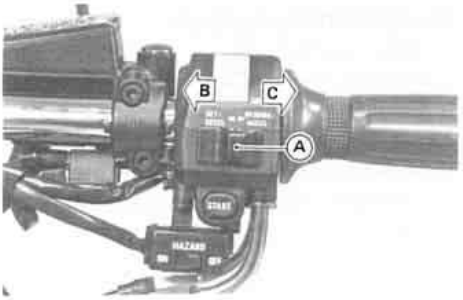
When cancel switch is pushed on, the set cruising speed is canceled.

○ON Indicator Light

When the power switch is pushed on, the ON indicator light comes on.

○ SET Indicator Light

When the motorcycle is running at a set speed, the SET indicator light is lit.



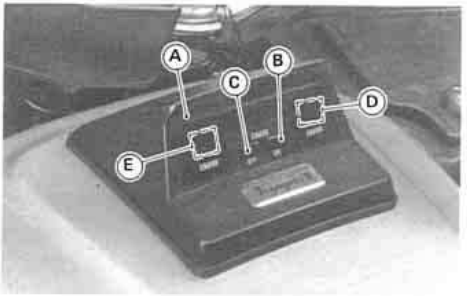
A. Cruise Control Switch
B. SET/DECEL position
C. RESUME/ACCEL position

Cruise Control Switch:

This switch has two positions: SET/ DECEL and RESUME/ ACCEL. These switch functions allow a cruising speed to be set or changed; the RESUME function can be used to return to the set speed after braking, changing gears, closing the throttle, or losing more than 8 km/h (5 mph) from the set speed on a hill.

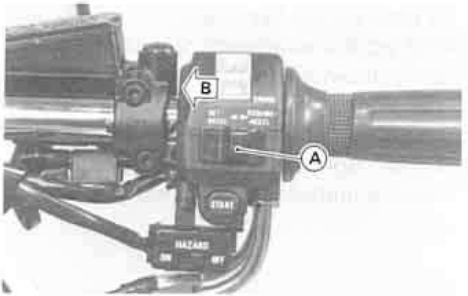
To Set the Cruise Control:

●Before starting, push the power switch of the cruise control unit to turn on the Cruise Control System. The ON indicator light will come on.



A. Cruise Control Unit
B. Power Switch
C. Cancel Switch
D. ON Indicator Light
E. SET Indicator Light

- Accelerate to the desired speed.
- Push the cruise control switch to the SET/DECEL position. The SET indicator light will come on.



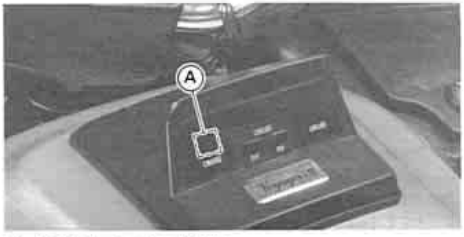
A. Cruise Control Switch
B. SET/DECEL position

- The speed you are going when you release the cruise control switch is the speed the Cruise Control will hold.

To Increase the Set Speed:

- For gradual acceleration, push the cruise control switch to the RESUME/ACCEL position until you reach the desired speed, and then release the switch. The Cruise Control system memory is now reprogrammed to the new set speed.
- For faster acceleration, operate the throttle grip until you reach the desired speed, push the cruise control switch to the SET/DECEL position and then release it. The SET indicator light is lit.

A. Cruise Control Switch
B. SET/DECEL position
C. RESUME/ACCEL position



A. SET Indicator Light

To Decrease the Set Speed:

- Push the cruise control switch to the SET/DECEL position until you slow down enough, and then release the switch. The Cruise Control system memory is now reprogrammed to the new set speed.

●For temporary acceleration above the set speed, such as for passing, use the throttle conventionally. When you want to return to the set speed, close the throttle and coast down without applying the front or rear brakes.

To Cancel the Cruise Control:

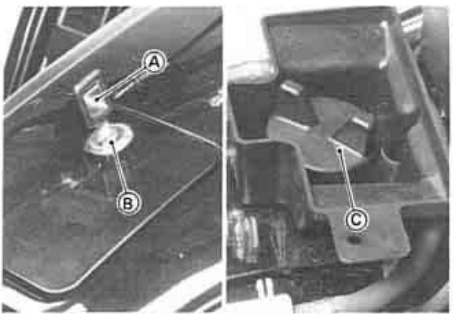
●The set speed can be canceled by any one of the following.

○Pull the brake lever.
○Pull the clutch lever.
○Shift gears.
○Step lightly on the brake pedal.
○Close the throttle completely.
○Push the cancel switch on the cruise control unit.
○Turn the engine stop switch off.
○Turn the ignition switch off.

Fuel Tank Cap

To open the fuel tank cap, insert the ignition switch key into the fuel tank cap cover lock, turn the key to the right, and swing up the tank cap cover. Then turn the fuel tank cap to the left, and remove the cap.

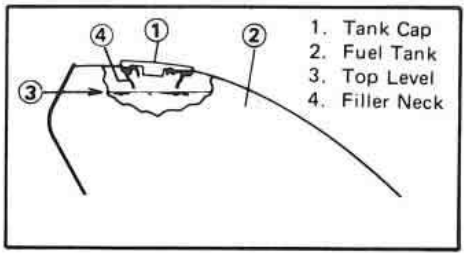
To lock the fuel tank cap cover, install the fuel tank cap, and push the fuel tank cap cover back into place.



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

Fuel Tank

The following octane rating gasoline is recommended in the fuel 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. 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 so the fuel level rises into the filler neck. If the tank is overfilled, 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.

CAUTION

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

Fuel Requirement:

Octane Rating

The octane rating of a gasoline is a measure of its resistance to detonation or "knocking." Use a gasoline with an octane rating equal to or higher than that shown in the table below.

Octane Rating Method	Minimum Rating
Antiknock Index $\frac{(RON + MON)}{2}$	87
Research Octane No. (RON)	91

The Antiknock Index is an average of the Research Octane No. (RON) and the Motor Octane No. (MON). The Antiknock Index is posted on service station pumps in the U.S.A. Research Octane No. is a commonly used term describing a gasoline's octane rating.

NOTE

○*If "knocking" or "pinging" occurs, use a different brand of gasoline or higher octane rating.*

Gasoline and Alcohol Blends

Blends of gasoline and alcohol called "gasohol" can be used on an occasional basis, however continued use is not recommended. Switch back immediately to gasoline which does not contain alcohol if you experience any operating irregularities. Any deterioration of fuel system components or degradation of performance resulting from the use of gasohol will not be covered by Kawasaki's Limited Warranty, Emissions Warranties, or Good Times Protection Plan. If you decide to use gasohol, be sure to follow these simple cautions:

CAUTION

- Never use gasohol with an octane rating lower than the minimum octane rating specified by Kawasaki for this product.
- Never use gasohol containing more than 10% ethanol (grain alcohol).
- Never use gasohol containing more than 5% methanol (wood alcohol). Gasoline containing methanol must also be blended with cosolvents and corrosion inhibitors.
- Never use gasohol for extended periods and never store this product with gasohol in the fuel system.
- Gasoline containing alcohol can cause paint damage. Be extra careful not to spill gasohol during refueling.

Stands

The motorcycle is equipped with two stands: a center stand and a side stand.

NOTE

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

Support the motorcycle on a firm, level surface with the side or center stand.

CAUTION

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

Whenever the side or center stand is used, make it a practice to kick the stand fully up before sitting on the motorcycle.

WARNING

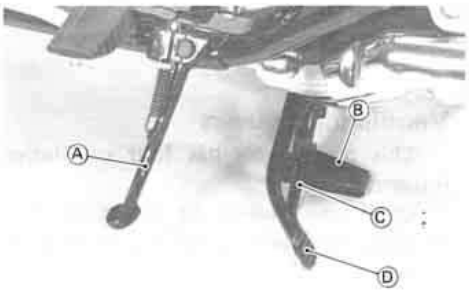
- **Forgetting and leaving the side stand down and riding away could cause an accident.**

To set the motorcycle up on the center stand:

- Set the motorcycle up on its side stand.
- Step down on the center stand arm so that the center stand legs contact the ground.
- Step down firmly on the center stand pedal, and lift the motorcycle up.

NOTE

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



A. Side Stand
B. Center Stand Arm
C. Center Stand Leg
D. Center Stand Pedal

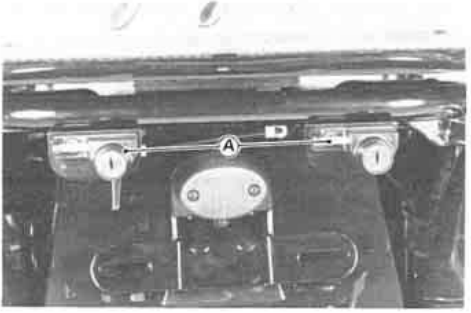
Air Cleaner Intake

The air cleaner intake allows air to enter the engine. 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

Helmet Hooks

Helmets can be secured to the motorcycle using the helmet hooks. The helmet hook can be unlocked by inserting the ignition switch key into the lock, and turning the key to the right.



A. Helmet Hooks

WARNING

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

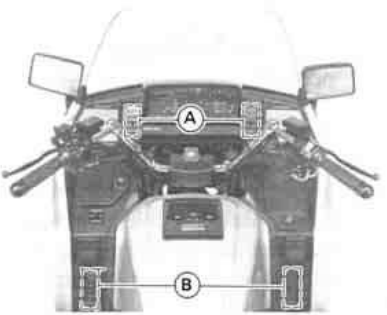
Ventilation Louvers

This motorcycle has four ventilation louvers.

Open the louvers to direct air flow through the fairing for warm weather riding.

To open the louvers, pull them up.

A. Louver



A. Louvers

WARNING

○Do not adjust the ventilation louvers while riding the motorcycle. The motorcycle must be stopped in a safe place to adjust the louvers.

Special Warning on the Use of Fairing Pockets, Saddlebags, and Travel Trunk

When preparing to ride the motorcycle, always double-check the saddlebags and travel trunk for secure mounting in their respective brackets. Be certain the luggage holders fully engage the saddlebags and travel trunk by attempting to

remove them from their brackets. Make sure the lids and saddlebag pockets and fairing pockets are securely latched or locked.

WARNING

- **The sudden detachment or loss of a saddlebag or travel trunk or one of the lids could distract or alarm the motorcycle rider, and the consequent loss of attention to road and traffic conditions could cause loss of control and a serious accident. Also the sudden change of vehicle balance resulting from the loss of a saddlebag or travel trunk could cause loss of control and a serious accident.**
- **A dislodged lid or saddlebag or travel trunk could physically obstruct the motorcycle's path, or interfere in the path of a following motorcycle or other vehicle. This could cause a loss of control by one of the motorcycle riders or another vehicle driver with a consequent accident.**
- **Keep all lids and pockets securely latched or locked when riding. A piece of clothing or other object could fall into the rear wheel which could result in rear wheel lockup and consequent skidding and loss of control. Make certain the fairing pockets are tightly closed, so as to prevent a loose object from interfering with the steering mechanism, vehicle controls, or the rider's attention to road and traffic conditions.**
- **Do not rest, store, or attach objects in the area between the movable parts of the steering mechanism (including handlebar, front fork, etc.) and the fixed parts of the chassis (including fairing, fuel tank, frame, etc.). A loose object which lodges in the steering mechanism could cause loss of control and a serious accident.**

Fairing Pockets

The left fairing pocket is a cassette storage area. Eight cassettes can be stored.

To open the right fairing pocket lid, turn the ignition switch key clockwise and pull up the lid.

To close the lid, turn the key counterclockwise and pull it out.

To open the left fairing pocket lid, turn the key to the open position and pull up the lid.

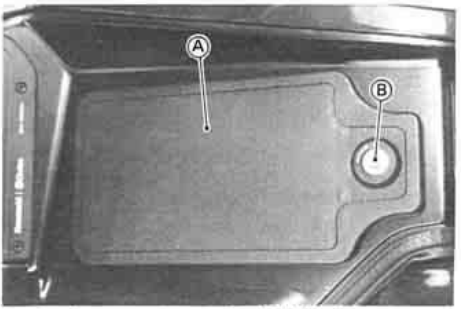
To close the lid, turn the key to the close position and pull it out.

CAUTION

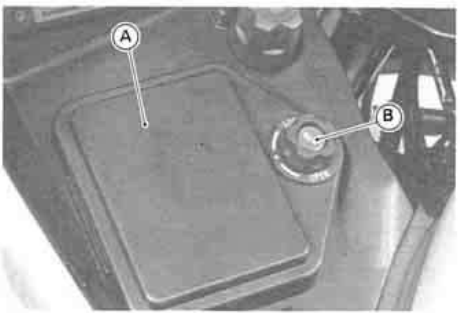
○**Do not carry loads of more than 1 kg (2 lb) in each fairing pocket.**

WARNING

○**It is dangerous to open the fairing pockets while riding the motorcycle. The motorcycle must be stopped in a safe place to open the fairing pockets.**



A. Pocket **B. Lid Lock**



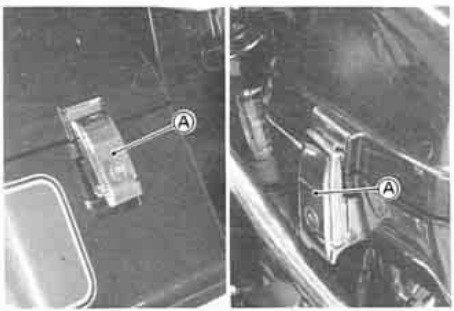
A. Pocket **B. Lid Lock**

Saddlebags and Saddlebag Pockets

Saddlebags are provided at both sides of the rear wheel to carry baggage. The saddlebag pockets are on top of the saddlebags.

To remove the saddlebag lid:

Insert the ignition switch key into each latch and unlock by turning the key clockwise. Then open the latches and pull up the lid.



A. Latch

To install the saddlebag lid:

Put the lid on the saddlebag and close both latches. Insert the ignition switch key into each latch and lock by turning the key counterclockwise, and then remove the key.

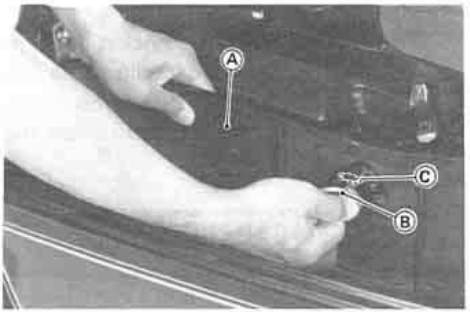
To remove the saddlebag:

Remove the lid from the saddlebag, pull the knob and unhook the saddlebag from the bracket. Then pull up the saddlebag.

A. Knob

To install the saddlebag:

Hook the saddlebag onto the saddlebag bracket, and push in the knob.



A. Saddlebag
B. Knob
C. Red Line

WARNING

- **When installing the saddlebags, be sure the locking pin is all the way in. If you can see the red line on the locking pin, it is not securely latched. Be sure the red line is out of sight. If the saddlebag is not secure, it could fall off while you are riding the motorcycle possibly causing a crash.**

CAUTION

- **Do not carry loads of more than 10 kg (22 lb) in each saddlebag including its pocket.**
- **Distribute loads equally on both sides to minimize imbalance.**
- **Read the "Loading Information" chapter before loading.**

Saddlebag Pockets

To open the saddlebag pocket lid, turn the knob clockwise and pull up the lid.

To close the lid, turn the knob clockwise, push down the lid, and release the knob.

CAUTION

○Do not carry loads of more than 1 kg (2 lb) in each saddlebag pocket.

A. Pocket
B. Knob

Tool Kit

The tool kit is stored in the left saddlebag. The minor adjustments and replacement of parts explained in this manual can be performed with the tool kit.

A. Tool Kit

Travel Trunk

The travel trunk is provided at the rear of the motorcycle to carry baggage.

CAUTION

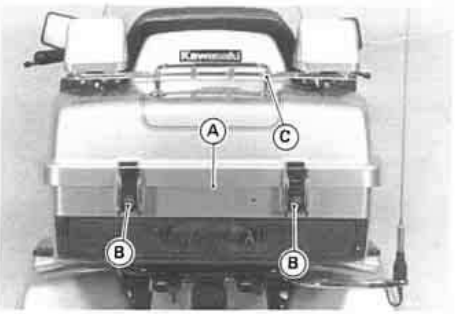
- **Do not carry loads of more than 10 kg (22 lb) in the travel trunk.**
- **Read the "Loading Information" chapter before loading.**

To open the travel trunk lid:

Insert the ignition switch key into the lock and unlock by turning the key clockwise, and then swing open the lid. The travel trunk room light is lit.

To close the travel trunk lid:

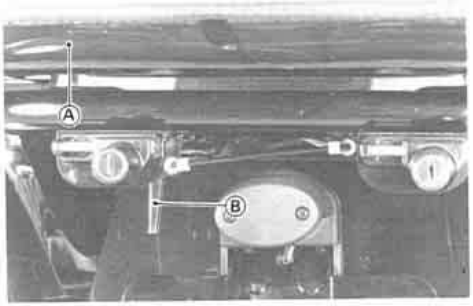
Push the lid down until latched. Insert the ignition switch key into the lock and lock by turning the key counterclockwise, and pull out the key.



A. Travel Trunk **C. Rack**
B. Latch

To adjust the trunk position:

The trunk can be set in three positions. Pull the trunk position adjust lever, and move the trunk toward the front or rear until you feel a click.



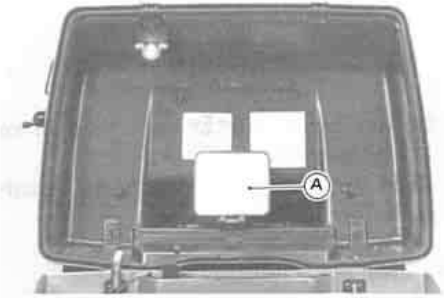
A. Trunk B. Adjust Lever

WARNING

○Never move the travel trunk while running the motorcycle. The motorcycle must be stopped in a safe place to adjust the travel trunk.

Vanity Mirror

The vanity mirror is located in the travel trunk lid.



A. Mirror

Rack

The motorcycle is equipped with a rack on the travel trunk.

CAUTION

○Do not carry loads of more than 1 kg (2 lb) on the rack.

Rear Seat

The rear seat can be set in two positions. Pull up the seat position adjust lever, and move the rear seat toward the front or rear until you feel a click.

WARNING

○Never move the seat while running the motorcycle. The motorcycle must be stopped in a safe place to adjust the rear seat.

A. Adjust Lever

Electric Accessory Leads

The electric power of the battery can be used through the electric accessory leads regardless of ignition switch position. Observe and follow the notes listed below.

Electric Accessory Leads

Location	Polarity	Lead Color
Under the seat	(+)	White/Yellow
	(–)	Black/Yellow
Maximum Current: 10 A		

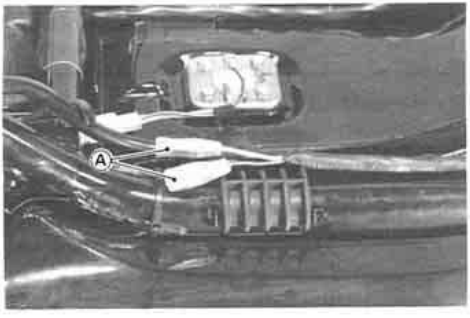
CAUTION

○Whenever you leave the motorcycle, stop using the electric accessories.
○Be careful not to discharge the battery totally. For example, if a current of 10 amperes is continuously taken out with the engine stopped, even an

originally-fully-charged battery may become totally discharged in about 20 minutes.

WARNING

- Take care not to pinch any lead between the seat and the frame or between other parts to avoid a short circuit.



A. Electric Accessory Leads

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

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

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

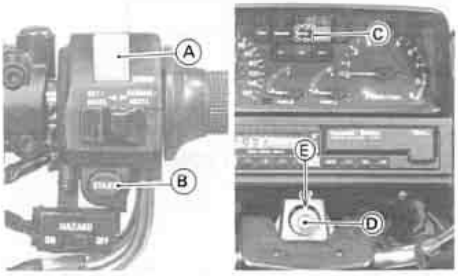
Distance traveled	Maximum engine speed
0 ~ 800 km (0 ~ 500 mi)	4,000 r/min (rpm)
800 ~ 1,600 km (500 ~ 1,000 mi)	6,000 r/min (rpm)

- Do not start moving or race the engine immediately after starting it, even if the engine is already warm. Run the engine for two or three minutes at idle speed to give the oil a chance to work up into all the engine parts.
- Do not race the engine while the transmission is in neutral.

In addition to the above, at 800 km (500 mi) it is extremely important that the owner have the initial maintenance service performed by a competent mechanic following the procedures in the Service Manual.

Starting the Engine

- Check that the engine stop switch is in the RUN position.
- Turn the ignition switch on.
- Make certain the transmission is in neutral or the clutch is disengaged.
- If the engine is cold, pull the choke lever all the way.



A. Engine Stop Switch
B. Starter Button
C. Neutral Indicator Light
D. Ignition Switch
E. ON position

A. Choke Lever

NOTE

○*When the engine is already warm or on hot days [higher than 35°C (95°F)], open the throttle part way instead of using the choke, and then start the engine.*

●Leaving the throttle completely closed, push the starter button with the clutch lever pulled in until the engine starts.

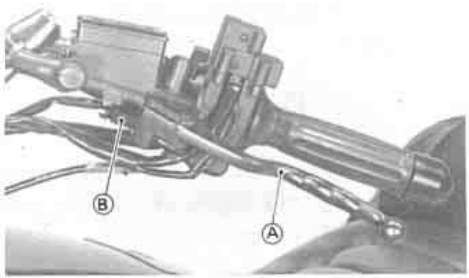
CAUTION

○**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

○*If the engine is flooded, crank the engine over with the throttle fully open until the engine starts.*

○*The motorcycle is equipped with a starter lockout switch. This switch prevents the electric starter from operating when the clutch is engaged and the transmission is not in neutral.*



A. Clutch Lever
B. Starter Lockout Switch

- Gradually return the choke toward the off position a little at a time as necessary to keep the engine speed below 2,000 r/min (rpm) during warm-up.
- When the engine is warmed up enough to idle without using the choke, return the choke to the off position.

NOTE

○*If you drive the motorcycle before the engine is warmed up, return the choke to the off position as soon as you start moving.*

CAUTION

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

Jump Starting

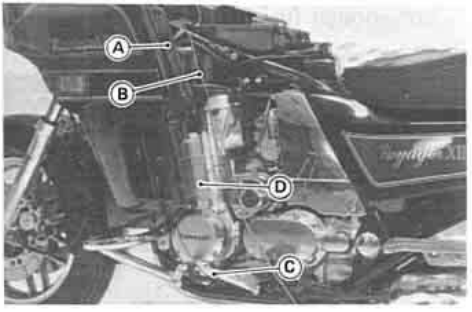
If your motorcycle battery is "run down," it should be removed and charged. If this is not practical, a 12 volt booster battery and jumper cables may be used to start the engine.

WARNING

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

Connecting Jumper Cables

- Make sure the ignition switch is turned "OFF."
- Remove the dummy tank cover.
- Connect a jumper cable from the positive (+) terminal of the booster battery to the positive (+) battery cable at the starter relay terminal.



A. Positive (+) Starter Relay Terminal
B. To Booster Battery Positive (+) Terminal
C. Unpainted Metal Surface
D. To Booster Battery Negative (–) Terminal

- Connect another jumper cable from the negative (–) terminal of the booster battery to your motorcycle rear brake pedal or other unpainted metal surface. Do not use the negative (–) terminal of the battery.

WARNING

- **Do not make this last connection at the carburetor or battery. Take care that you do not touch the positive and negative cables together, and do not lean over the battery when making this last connection. Do not jump start a frozen battery. It could explode.**
- **Do not reverse polarity by connecting positive (+) to negative (–) or a battery explosion and serious damage to the electrical system may occur.**

●Follow the standard engine starting procedure.

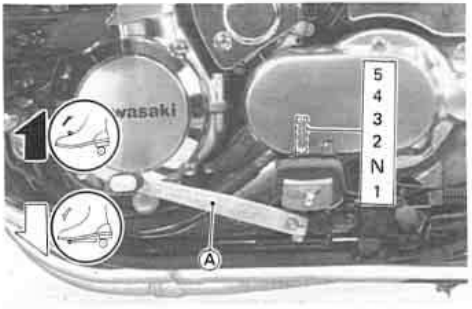
CAUTION

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

●After the engine starts, disconnect the jumper cables. Disconnect the positive (+) cable from the motorcycle first.

Moving Off

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



A. Shift Pedal

NOTE

○*The motorcycle is equipped with a side stand switch. This switch is designed so that the engine stops if the clutch is engaged with the transmission in gear when the side stand has been left down.*

Shifting Gears

●Close the throttle while pulling in the clutch lever.

●Shift into the next higher or lower gear. For smooth riding, shift up or down when the motorcycle is operated at the speeds shown in the table below.

WARNING

○**When shifting down to a lower gear, do not shift at such a high speed that the engine r/min (rpm) jumps excessively. Not only can this cause engine damage, but the rear wheel may skid and cause an accident. Downshifting should be done below 5,000 r/min (rpm) for each gear.**

●Open the throttle part way, while releasing the clutch lever.

NOTE

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

Vehicle speed when shifting

Shifting up	km/h (mph)	Shifting down	km/h (mph)
1st → 2nd	15 (9)	5th → 4th	30 (19)
2nd → 3rd	25 (15)	4th → 3rd	25 (15)
3rd → 4th	35 (21)	3rd → 2nd	20 (12)
4th → 5th	45 (27)	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; but if this is unavoidable, use only the rear brake.
- For emergency braking, disregard downshifting, and concentrate on applying the brakes as hard as possible without skidding.

CAUTION

- **In order to protect the emission control parts, do not turn off the ignition switch when the motorcycle is in motion.**

A. Front Brake Lever

A. Rear Brake Pedal

Stopping the Engine

- Close the throttle completely.
- Shift the transmission into neutral.
- Turn the ignition switch off.
- Support the motorcycle on a firm level surface with the side stand or center 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 and insufficient riding skills can create a dangerous situation known as throttle failure. Two of the most common causes of throttle failure are:

1. During removal of the air cleaner by the owner, dirt is allowed to enter and jam the carburetor.
2. A novice may forget which direction the throttle rotates; then jerk the throttle wide open thinking he has shut it off; panic when the machine accelerates suddenly instead of slowing down; and "freeze," holding the throttle wide open.

In an emergency situation such as throttle failure, your motorcycle may be stopped by disengaging the clutch and applying the brakes. 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

- Shift the transmission into neutral and turn the ignition switch OFF.
- Support the motorcycle on a firm level surface with the side or center stand.

CAUTION

- **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.**
- Lock the steering to help prevent theft.

NOTE

- *When stopping near traffic at night, you can leave the taillight on for greater visibility by turning the ignition switch to the P (park) position.*
- *Do not leave the switch at P position too long, or the battery will discharge.*

WARNING

- **Do not permit children or other persons who are unfamiliar with motorcycles to sit on a parked motorcycle or lean against it. The stand may be retracted accidently, and the falling motorcycle could injure someone.**
- **Further, do not permit children or other persons who are unfamiliar with motorcycles to get close to the motorcycle when it is hot. They may touch a hot portion of the engine or exhaust system and receive a serious burn.**

Safe Riding Technique

The points given below are applicable for everyday motorcycle use and should be carefully observed for safe and effective vehicle operation.

For safety, eye protection and a helmet are strongly recommended. Gloves and suitable footwear should also be used for added protection in case of a mishap.

A motorcycle does not provide the impact protection of an automobile, so defensive riding in addition to wearing protective apparel is extremely important. Do not let protective apparel give you a false sense of security.

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.

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

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.

When going down long slopes, control vehicle speed by closing the throttle. Use the front and rear brakes for auxiliary braking.

On rainy days, 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.

Riding at the proper rate of 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.

When riding in wet conditions or on loose roadway surfaces, the ability to maneuver will be reduced. All of your actions should be smooth under these conditions. Sudden acceleration, braking or turning may cause loss of control.

On rough roads, exercise caution, slow down, and grip the fuel tank with the knees for better stability.

When quick acceleration is necessary as in passing, shift to a lower gear to obtain the necessary power.

Do not downshift at too high an r/min (rpm) to avoid damage to the engine from overrevving.

Avoiding unnecessary weaving is important to the safety of both the rider and other motorists.

Daily Safety 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.

WARNING

○Failure to perform these checks every day before you ride may result in serious damage or a severe accident.

Fuel . . . . . Adequate supply in tank, no leaks.
Engine oil . . . . . Oil level between level lines.
Tires . . . . . Air pressure (when cold)

Front	———	225 kPa (2.25 kg/cm², 32 psi)
Rear	Up to 120 kg (265 lb) load	225 kPa (2.25 kg/cm², 32 psi)
	120 ~ 202 kg (265 ~ 445 lb) load	280 kPa (2.80 kg/cm², 40 psi)

Nuts, bolts, fasteners	Check that steering and suspension components, axles, and all controls are properly tightened or fastened.
Steering.	Action smooth but not loose from lock to lock. No binding of control cables.
Brakes.	No brake fluid leakage.
	Brake pad wear: Lining thickness more than 1 mm (0.04 in.) left.
Throttle.	Throttle grip play 2 ~ 4 mm (0.08 ~ 0.16 in.).
Clutch.	No clutch fluid leakage.
Coolant.	No coolant leakage.
	Coolant level between level lines (when engine is cold).
Radiator cap.	Properly installed.
Final gear case	No oil leakage.
Electrical equipment	All lights and horns work.
Engine stop switch.	Stops engine.
Side and center stands	Return to their fully up positions by spring tension.
	Return springs not weak or not damaged.

Additional Considerations for High Speed Operation

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

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

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

Spark Plugs: For demanding operation such as racing, install one heat range colder spark plugs NGK DPR9EA-9 or ND X27EPR-U9.

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

Engine Oil: To avoid seizure and resulting loss of control, make certain the oil level is at the upper level line.

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

Final Gear Case Oil: To avoid seizure and resulting loss of control, make certain the oil level is correct.

Electrical Equipment: Make certain that the headlight, tail/brake lights, turn signals, horns, etc., all work properly.

Miscellaneous: Make certain that all nuts and bolts are tight and that all safety related parts are in good condition.

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.**

The maintenance and adjustments outlined in this chapter are easily carried out and must be done in accordance with the Periodic Maintenance Chart to keep the motorcycle in good running condition. **The initial maintenance is vitally important and must not be neglected.**

If you are in doubt as to any adjustment or vehicle operation, please ask your authorized Kawasaki Dealer to check the motorcycle.

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

Periodic Maintenance Chart

	Operation / Frequency	Whichever comes first — Every	*Odometer Reading km (mi) 800 (500)	5,000 (3,000)	10,000 (6,000)	15,000 (9,000)	20,000 (12,000)	25,000 (15,000)	30,000 (18,000)	See Page
Emission Related	Engine Vacuum synchronization--check †		•	•	•	•	•	•	•	100
	Idle speed--check †		•	•	•	•	•	•	•	101
	Throttle grip play--check †		•		•		•		•	97
	Spark plug--clean and gap †			•	•	•	•	•	•	90
	Air suction valve--check †			•	•	•	•	•	•	93
	Air cleaner element--clean †		•		•		•		•	95
	Fuel system--check †				•		•		•	125
	Cylinder head bolt tightness --check †		•		•		•		•	129
	Evaporative emission control system (c)--check †		•	•	•	•	•	•	•	94
	Brake light switch--check †		•	•	•	•	•	•	•	106

	Operation \ Frequency	Whichever comes first — Every	*Odometer Reading km (mi) 800 (500)	5,000 (3,000)	10,000 (6,000)	15,000 (9,000)	20,000 (12,000)	25,000 (15,000)	30,000 (18,000)	See Page
Non-Emissions Related	Brake pad wear--check †			•	•	•	•	•	•	103
	Brake/clutch fluid level--check †	month	•	•	•	•	•	•	•	102,104
	K Brake/clutch fluid--change	2 years					•			102,106
	K Steering--check †		•	•	•	•	•	•	•	–
	Final gear case oil level--check †				•		•		•	87
	Final gear case oil--change		•						•	88
	K Propeller shaft joint--lubricate				•				•	–
	Nut, bolt, and fastener tightness --check †		•		•		•		•	129
	Tire wear--check †			•	•	•	•	•	•	116
	Engine oil--change	year	•		•		•		•	81
	Oil filter--replace		•		•		•		•	81
	General lubrication--perform			•	•	•	•	•	•	127
	K Front fork oil--change								•	–
	Air cleaner oil drain reservoir--check			•	•	•	•	•	•	96

	Operation \ Frequency	Whichever comes first: Every	*Odometer Reading km (mi): 800 (500)	5,000 (3,000)	10,000 (6,000)	15,000 (9,000)	20,000 (12,000)	25,000 (15,000)	30,000 (18,000)	See Page
Non-Emissions Related	K Swing arm pivot--lubricate				•				•	–
	K Coolant--change	2 years							•	87
	Radiator hoses, connections --check †	year	•		•		•		•	–
	K Steering stem bearing--lubricate	2 years					•			–
	K Brake/clutch master cylinder cup and dust seal--replace	2 years								–
	K Caliper piston seal and dust seal--replace	2 years								–
	K Clutch slave cylinder piston seal --replace	2 years								–
	K Brake/clutch hose and pipe--replace	4 years								–
	K Fuel hose--replace	4 years								–

K : Should be serviced by an authorized Kawasaki Dealer.
* : For higher odometer readings, repeat at the frequency interval established here.
† : Replace, add, adjust, or torque if necessary.
(C): California model only

Engine Oil

In order for the engine, transmission, and clutch to function properly, maintain the engine oil at the proper level, and change the oil and oil filter in accordance with the Periodic Maintenance Chart. Not only do dirt and metal particles collect in the oil, but the oil itself loses its lubricative quality if used too long.

WARNING

○**Motorcycle operation with insufficient, deteriorated, or contaminated engine oil will cause accelerated wear and may result in engine or transmission seizure, accident, and injury.**

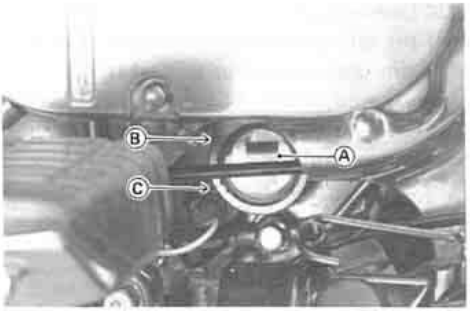
Oil Level Inspection

- If the oil has just been changed, start the engine and run it for several minutes at idle speed. This fills the oil filter with oil. Stop the engine, then wait several minutes until the oil settles.

CAUTION

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

- If the motorcycle has just been used, wait several minutes for all the oil to drain down.
- Check the engine oil level through the oil level gauge. With the motorcycle held level, the oil level should come up between the lines next to the gauge.



A. Oil Level Gauge
B. Upper Level
C. Lower Level

- If the oil level is too high, remove the excess oil, using a syringe or some other suitable device.
- If the oil level is too low, add the correct amount of oil through the oil filler opening. Use the same type and brand of oil that is already in the engine.

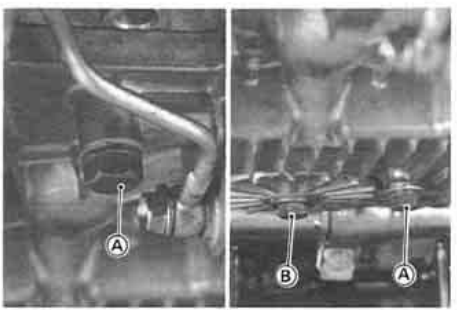
CAUTION

○If the engine oil gets extremely low or if the oil pump or oil passages clog up or otherwise do not function properly, the oil pressure warning light will light. If the light stays on when the engine speed is above 1,200 r/min (rpm), stop the engine immediately and find the cause.

A. Oil Pressure Warning Light

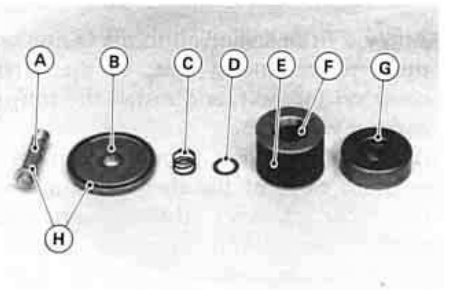
Oil and/or Oil Filter Change,

- Warm up the engine thoroughly, and then stop the engine.
- Set the motorcycle up on its center stand.
- Place an oil pan beneath the engine.
- Remove the engine drain plugs.



A. Drain Plug
B. Oil Filter Mounting Bolt

- If the oil filter is to be changed, remove the oil filter mounting bolt and drop out the oil filter.
- Replace the oil filter element with a new one.



A. Mounting Bolt
B. Filter Cover
C. Spring
D. Flat Washer
E. Element
F. Grommet
G. Element Fence
H. O-ring

NOTE

○*Check for O-ring damage. If necessary, replace them with new ones.*
○*When installing the oil filter, make sure the O-rings are in place.*

●Apply a little engine oil to the O-ring on the filter mounting bolt, fit the filter cover on the bolt, and install the spring and flat washer.
●Apply a little engine oil to the grommets on both sides of the element, and turn the filter to work the element into place. Be careful that the element grommets do not slip out of place.
●Install the element fence on the bolt.
●Install the oil filter, tightening its mounting bolt to the specified torque.

●After the oil has completely drained out, install the engine drain plugs with their gaskets. Proper torque for them is shown in the table.

NOTE

○*Replace the damaged gasket with a new one.*

●Fill the engine up to the upper level with a good quality motor oil specified in the table.
●Check the oil level.

Tightening Torque

Engine Oil Drain Plugs:
29 N-m (3.0 kg-m, 22 ft-lb)
Oil Filter Mounting Bolt:
20 N-m (2.0 kg-m, 14.5 ft-lb)

Engine Oil

Grade:	SE or SF class
Viscosity:	SAE 10W40, 10W50 20W40, or 20W50
Capacity:	3.2 L (3.4 US qt) [when filter is not removed] 3.5 L (3.7 US qt) [when filter is removed]

Cooling System

Radiator and Cooling Fan

Check the radiator fins for obstruction by insects or mud. Clean off any obstructions with a stream of low-pressure water.

WARNING

○The cooling fan turns on automatically, even with the ignition switch off. Keep your hands and clothing away from the fan blades at all times.

CAUTION

○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.**

Coolant

Coolant absorbs excessive heat from the engine and transfers it to the air at the radiator. If the coolant level becomes low, the engine overheats and may suffer severe damage. Check the coolant level each day before riding the motorcycle, and replenish coolant if the level is low. Change the coolant in accordance with the Periodic Maintenance Chart.

Information for Coolant:

To protect the cooling system (consisting of the aluminum engine and radiator) from rust and corrosion, the use of corrosion and rust inhibitor chemicals in the coolant is essential. If coolant containing corrosion and rust inhibitor chemicals is not used, over a period of time, the cooling system accumulates rust and scale in the water jacket and radiator. This will clog up the coolant passages, and considerably reduce the efficiency of the cooling system.

WARNING

○**Use coolant containing corrosion inhibitors made specifically for aluminum engines and radiators in accordance with the instructions of the manufacturer. Chemicals are harmful to the human body.**

Soft or distilled water must be used with the antifreeze (see below for antifreeze) in the cooling system.

CAUTION

○**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.**

If the lowest ambient temperature encountered falls below the freezing point of water, use permanent antifreeze in the coolant to protect the cooling system against engine and radiator freeze-up, as well as from rust and corrosion.

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.

CAUTION

○**Permanent types of antifreeze on the market have anti-corrosion and anti-rust properties. When it is diluted excessively, it loses its anti-corrosion property. Dilute a permanent type of antifreeze in accordance with the instructions of manufacturer.**

NOTE

○*A permanent type of antifreeze is installed in the cooling system when shipped. It is colored green, contains a 43% solution of ethylene glycol, and has the freezing point of −30°C (−22°F).*

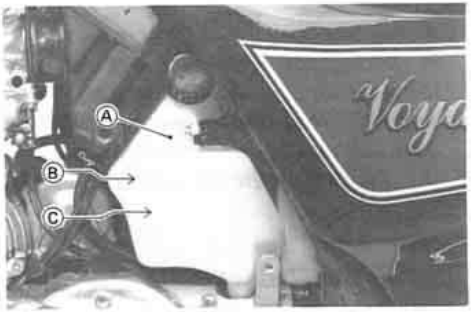
Coolant Level Inspection

●Situate the motorcycle so that it is perpendicular to the ground (on its center stand).

- Remove the reserve tank cover.
- Check the coolant level in the reserve tank. The coolant level should be between the FULL and LOW marks.

NOTE

- *Check the level when the engine is cold (room or atmospheric temperature).*



A. Reservoir Tank
B. FULL Mark
C. LOW Mark

- If the amount of coolant is insufficient, unscrew the cap from the reserve tank, and add coolant through the filler opening to the FULL mark. Install the 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.*

CAUTION

- **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.

Coolant Change

Have the coolant changed by your authorized Kawasaki Dealer.

Final Gear Case Oil

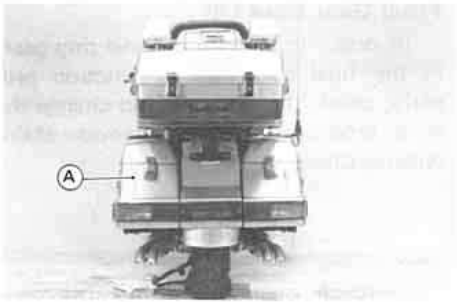
In order for the pinion and ring gears in the final gear case to function properly, check the oil level, and change the oil in accordance with the Periodic Maintenance Chart.

WARNING

○**Motorcycle operation with insufficient, deteriorated, or contaminated oil causes accelerated wear and may result in seizure of the pinion and ring gears. Seizure can lock the rear wheel and skid the rear tire, with consequent loss of control.**

Oil Level Inspection

- Put the motorcycle on its center stand.
- Remove the left saddlebag. Refer to the Saddlebags and Pockets section of the "General Information" chapter to remove the saddlebag.



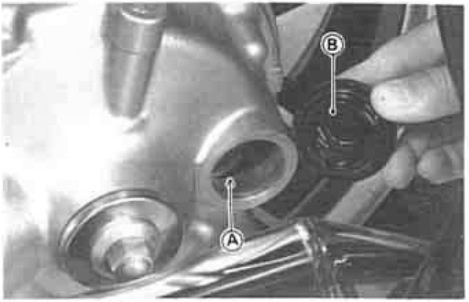
A. Left Saddlebag

●Remove the filler cap.

CAUTION

○**Be careful not to allow any dirt or foreign materials to enter the gear case.**

●Check the oil level. If it is low, add oil as necessary. The oil level should come to the bottom thread of the filler opening.



A. Bottom Thread **B. Filler Cap**

NOTE

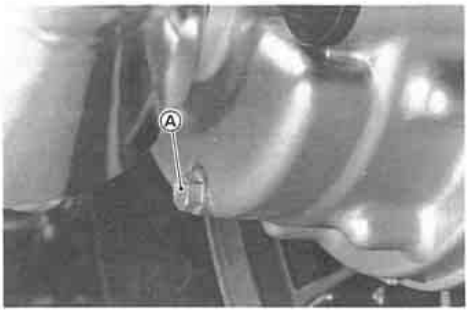
○*Use the same type and brand of oil that is already in the final gear case.*

Oil Change

NOTE

○*Final gear case oil drains easily and picks up any sediment when the oil is warmed up by running the motorcycle.*

- Put the motorcycle on its center stand.
- Remove the left saddlebag. Refer to the Saddlebags and Pockets section of the "General Information" chapter to remove the saddlebag.
- Place an oil pan beneath the gear case.
- Remove the filler cap and the drain plug.



A. Drain Plug

WARNING

- **When draining or filling the gear case, be careful that no oil gets on the tire, rim, or brake disc. Clean off any oil that inadvertently gets on them with soap and water.**

- After the oil has completely drained out, install the drain plug and gasket. Replace the damaged gasket with a new one.
- Fill the gear case up to the bottom thread of the filler opening with the oil specified below.

Final Gear Case Oil

Oil Capacity	about 210 mL (0.22 US qt)
Oil Type	API "GL-5" Hypoid gear oil SAE 80

NOTE

○*"GL-5" indicates a quality and additive rating. "GL-6" rated hypoid gear oils can also be used.*

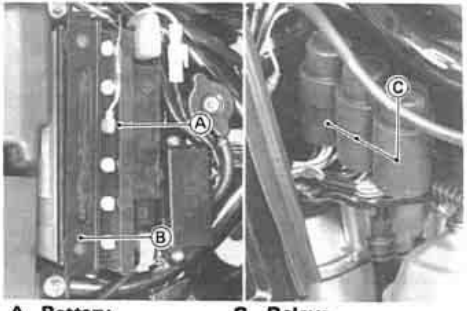
- Install the filler cap.
- Install the left saddlebag.

Spark Plugs

The standard spark plug is shown in the table. The spark plugs should be taken out periodically in accordance with the Periodic Maintenance Chart for cleaning, inspection, and resetting of the plug gap.

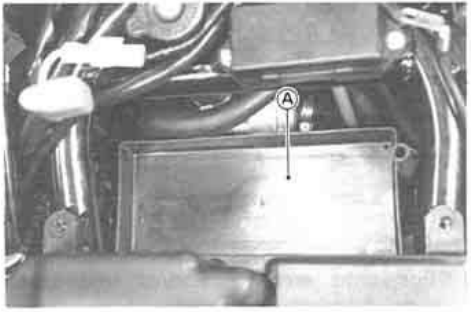
Spark Plug Removal

- Remove the dummy tank cover.
- Remove the battery holder and battery, and take off the relays at the left side of the battery case.



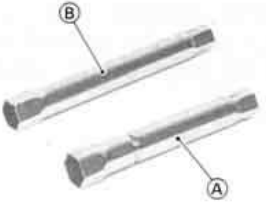
A. Battery
B. Battery Holder
C. Relays

●Remove the #1 and #4 spark plugs.
●Remove the battery tray.



A. Battery Tray

●Connect the spark plug wrench and joint, and remove the #2 and #3 spark plugs.

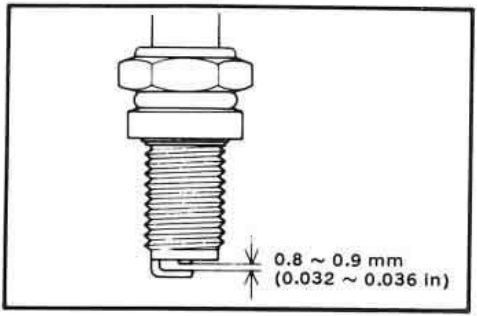


A. Spark Plug Wrench **B. Joint**

Maintenance

If the plug is oily or has carbon built up on it, have it cleaned, preferably in a sand-blasting device, and then clean off any abrasive particles. The plug may also be cleaned using a high flash-point solvent and a wire brush or other suitable tool.

Measure the gap with a wire-type thickness gauge, and adjust the gap if incorrect by bending the outer electrode. If the spark plug electrodes are corroded or damaged, or if the insulator is cracked, replace the plug. Use the standard plug.



Spark Plug

Standard Plug	NGK DPR8EA-9 or ND X24EPR-U9
Plug Gap	0.8 ~ 0.9 mm (0.032 ~ 0.036 in)
Tightening Torque	14 N-m (1.4 kg-m, 10.0 ft-lb)

CAUTION

○For cold weather and/or low speed riding, a hotter spark plug shown in the table may be used for quicker warm-ups and more efficient engine operation.

Hotter Spark Plug

NGK DPR7EA-9 or ND X22EPR-U9

Kawasaki Clean Air System

The Kawasaki Clean Air System (KCA) is a secondary air suction system that helps the exhaust gases to burn more completely. When the spent fuel charge is released into the exhaust system, it is still hot enough to burn. The KCA System allows extra air into the exhaust system so that the spent fuel charge can continue to burn. This continued burning action tends to burn up a great deal of the normally unburned gases, as well as changing a significant portion of the poisonous carbon monoxide into harmless carbon dioxide.

Air Suction Valves:

The air suction valve is essentially a check valve which allows fresh air to flow only from the air cleaner into the exhaust port. Any air that has passed the air suction valve is prevented from returning.

Inspect the air suction valves in accordance with the Periodic Maintenance Chart. Also, inspect the air suction valves whenever stable idling cannot be obtained, engine power is greatly reduced, or there are abnormal engine noises.

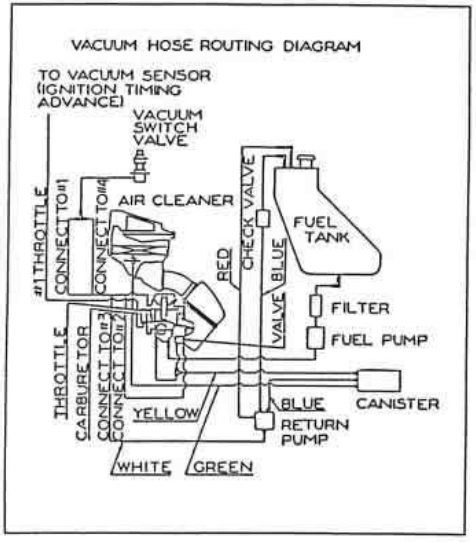
Air suction valve removal and inspection should be done only by a competent mechanic following the instructions in the Service Manual.

Valve Clearance

Valve and valve seat wear is automatically compensated for the valve clearance. So inspection and adjustment of the valve clearance are not necessary on this motorcycle.

Evaporative Emission Control System (California model only)

This system routes fuel vapors from the fuel system into the running engine or stores the vapors in a canister when the engine is stopped. Although no adjustments are required, a thorough visual inspection must be made at the intervals specified by the Periodic Maintenance Chart.



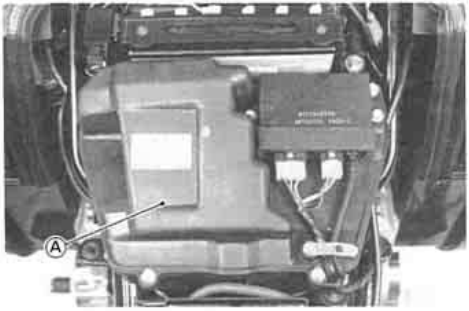
Inspection

- Check that the hoses are securely connected.
- Replace any kinked, deteriorated, or damaged hoses.

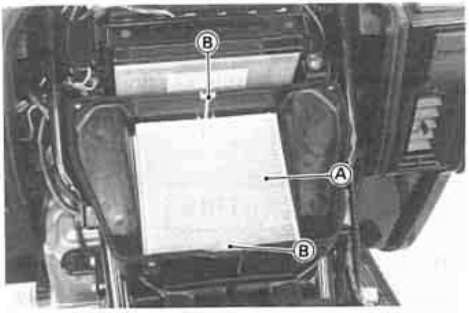
Air Cleaner

A clogged air cleaner restricts the engine's air intake, increasing fuel consumption, reducing engine power, and causing spark plug fouling.

The air cleaner element must be cleaned in accordance with the Periodic Maintenance Chart. In dusty areas, the element should be cleaned more frequently than the recommended interval. After riding through rain or on muddy roads, the element should be cleaned immediately. The element should be replaced if it is damaged.



A. Air Cleaner Cover



A. Air Cleaner Element B. Holder

Element Removal

- Remove the dummy tank cover.
- Remove the air cleaner cover and holders, and then pull out the element.

●Push a clean, lint-free towel into the air cleaner housing to keep dirt or other foreign material from entering.
●Inspect the element material and sponge gasket for damage. If any part of the element is damaged, the element must be replaced.

WARNING

○**If dirt or dust is allowed to pass through into the carburetors, the throttle may become stuck, possibly causing accident.**

CAUTION

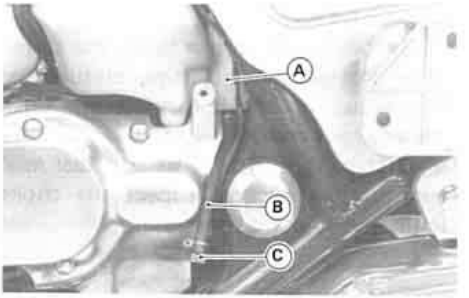
○**If dirt gets through into the engine, excessive engine wear and possibly engine damage will occur.**

NOTE

○*Element installation is performed in the reverse order of removal.*

Element Cleaning
●Clean the element by tapping it lightly to loosen dust.
●Blow away the remaining dust by applying compressed air from the inside to outside (from the clean side to the dirty side).

Oil Draining
●In accordance with the Periodic Maintenance Chart inspect the transparent reservoir above the swing arm pivot section to see if any oil has run down from the air cleaner housing.



A. Reservoir
B. Drain Hose
C. Plug

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

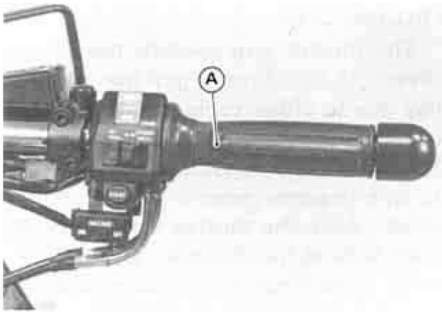
WARNING

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

Throttle Grip

The throttle grip controls the throttle valves. If the throttle grip has excessive play due to either cable stretch or maladjustment, it will cause a malfunction of the cruise control system or a delay in throttle response, especially at low engine speed. Also, the throttle valves may not open fully at full throttle. On the other hand, if the throttle grip has no play, the throttle will be hard to control, and the idle speed will be erratic. Check the throttle grip play periodically in accordance with the Periodic Maintenance Chart.

Inspection and adjustment should be done only by a competent mechanic following the instructions in the Service Manual.



A. Throttle Grip

Choke Lever

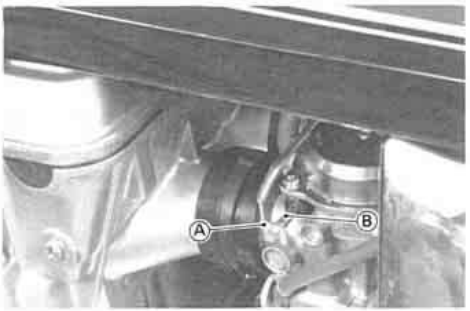
By pulling the choke lever, the carburetor provides a rich starting mixture that is necessary to enable easy starting when the engine is cold.

If starting difficulty or rich fuel mixture trouble occurs, inspect the choke lever, and adjust it if necessary.

Inspection

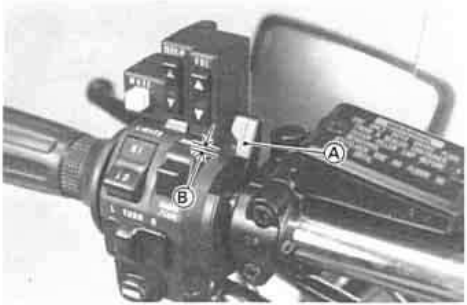
- Check that the choke lever returns properly and that the inner cable slides smoothly. If there is any irregularity, have the choke cable checked by a competent mechanic following the instructions in the Service Manual.
- Push the choke lever back all the way to its released position.
- Determine the amount of choke cable play at the choke lever. Pull the choke lever until the starter plunger lever at

the carburetor touches the starter plunger; the amount of choke lever travel is the amount of choke cable play.



A. Starter Plunger Lever
B. Starter Plunger

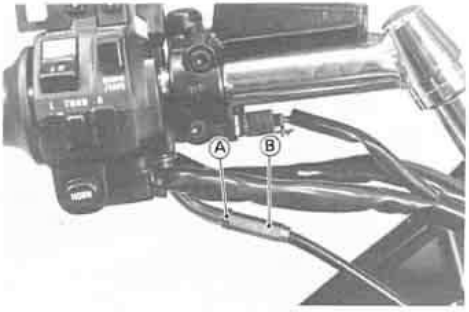
- The proper amount of play is 2 ~ 3 mm (0.08 ~ 0.12 in) at the bottom of the choke lever. If there is too much or too little play, adjust the choke cable.



A. Choke Lever
B. 2 ~ 3 mm (0.08 ~ 0.12 in)

Adjustment

- Loosen the locknut at the upper end of the choke cable, and turn the adjuster until the cable has the proper amount of play.



A. Locknut B. Adjuster

●Tighten the locknut after adjustment.

Carburetors

The carburetor adjustments, idle speed and synchronization, should be performed in accordance with the Periodic Maintenance Chart or whenever the idle speed is disturbed.

The following procedure covers the idle speed adjustment. Carburetor synchronization should be done only by a competent mechanic using vacuum gauges, following the instructions in the Service Manual.

NOTE

○*Poor carburetor synchronization will cause unstable idling, sluggish throttle response, and reduced engine power and performance.*

Adjustment

- Start the engine, and warm it up thoroughly.
- Adjust the idle speed to 750 ~ 850 r/min (rpm) by turning the idle adjusting screw.

A. Idle Adjusting Screw

- Open and close the throttle a few times to make sure that the idle speed does not change. Readjust if necessary.
- With the engine idling, turn the handlebar to each side. If handlebar movement changes the idle speed, the throttle cables may be improperly adjusted or incorrectly routed, or they may be damaged. Be sure to correct any of these conditions before riding.

WARNING

- **Operation with damaged cables could result in an unsafe riding condition.**

Handlebar

Handlebar position can be adjusted to suit you. Handlebar position should be adjusted by a competent mechanic following the instructions in the Service Manual.

A. Handlebar

Clutch

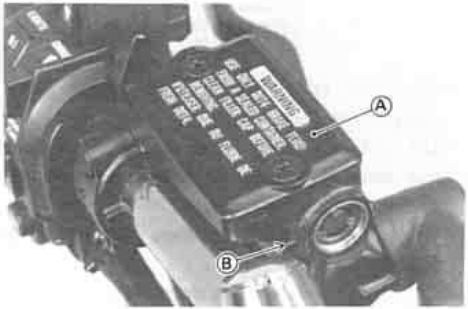
The motorcycle is equipped with a hydraulically operated clutch that requires no adjustment except fluid level inspection in accordance with the Periodic Maintenance Chart.

Fluid level Inspection

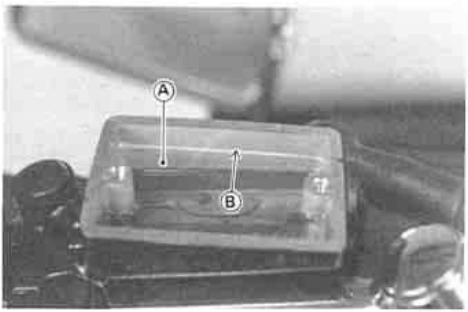
- The fluid level in the reservoir must be kept between the upper and lower level lines (reservoir held horizontal).
- Fill the reservoir to the upper level line inside it.

NOTE

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



A. Reservoir B. Lower Level

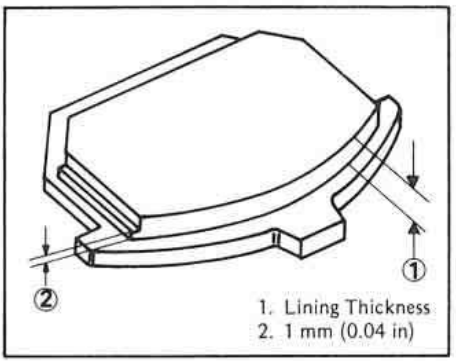


A. Reservoir B. Upper Level

Brakes

Brake Wear Inspection

In accordance with the Periodic Maintenance Chart, inspect the brakes for wear. For each front and rear disc brake caliper, if the thickness of either pad is less than 1 mm (0.04 in), replace both pads in the caliper as a set. Pad replacement should be done by an authorized Kawasaki Dealer.



1. Lining Thickness
2. 1 mm (0.04 in)

Disc Brake Fluid:

In accordance with the Periodic Maintenance Chart, inspect the brake fluid level in the reservoirs and change the brake fluid. The brake fluid should also be changed if it becomes contaminated with dirt or water.

Fluid Requirement

Recommended fluids are given in the table below. If none of the recommended brake fluids are available, use extra heavy-duty brake fluid only from a container marked D.O.T.4.

Recommended Disc Brake Fluid

Castrol Girling-Universal
Castrol GT (LMA)
Castrol Disc Brake Fluid
Check Shock Premium Heavy Duty

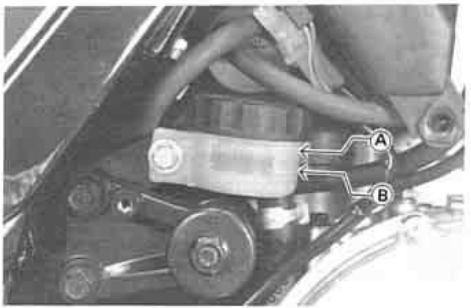
CAUTION

○Do not spill brake fluid onto any painted surface.
○Do not use fluid from a container that has been left open or that has been unsealed for a long time.
○Check for fluid leakage around the fittings.
○Check for brake hose damage.

Fluid Level Inspection

●The brake fluid level in the reservoir must be kept between the upper and lower level lines (reservoir held horizontal).

A. Lower Level



A. Upper Level B. Lower Level

A. Upper Level

●Fill the reservoir to the upper level line.

WARNING

○Do not mix two brands of fluid. Change the brake fluid in the brake line completely if the brake fluid must be refilled but the type and brand of the brake fluid that is already in the reservoir are unidentified.

Fluid Change

Have the brake fluid changed by an authorized Kawasaki Dealer.

Front and Rear Brakes:

Disc and disc pad wear is automatically compensated for and has no effect on the brake lever or pedal action. So there are no parts that require adjustment on the front and rear brakes.

WARNING

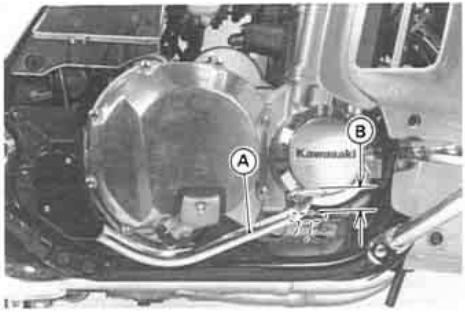
- **If the brake lever or pedal feels mushy when it is applied, there might be air in the brake lines or the brake may be defective. Since it is dangerous to operate the motorcycle under such conditions, have the brake checked immediately by an authorized Kawasaki Dealer.**

Brake Light Switches

When either the front or rear brake is applied, the brake light goes on. The front brake light switch requires no adjustment, but the rear brake light switch should be adjusted in accordance with the Periodic Maintenance Chart.

Inspection

- Turn on the ignition switch.
- The front brake light should go on when the front brake is applied.
- If it does not, ask your authorized Kawasaki Dealer to inspect the front brake light switch.
- Check the operation of the rear brake light switch by depressing the brake pedal. The brake light should go on after about 15 mm (0.6 in) of pedal travel.



A. Brake Pedal B. 15 mm (0.6 in)

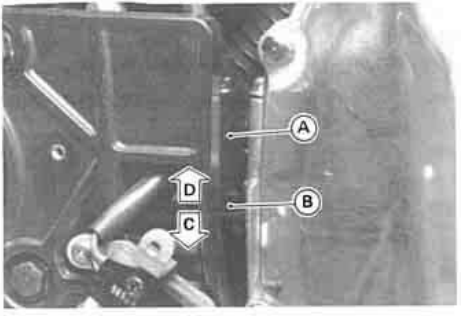
●If it does not, adjust the rear brake light switch.

Adjustment

●Adjust the rear brake light switch by moving the switch up or down. To change the switch position, turn the adjusting nut.

CAUTION

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



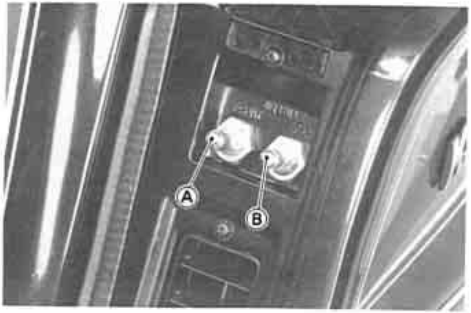
A. Rear Brake Light Switch
B. Adjusting Nut
C. Lights sooner.
D. Lights later.

Front Fork

The condition of the front fork is very important for steering stability, and front fork performance is dependent on front fork oil viscosity, quantity, quality, and front fork air pressure.

Alteration of the stiffness or softness of the shock absorption can be achieved by using fork oil of a different viscosity or changing the fork air pressure. When altering the shock absorption by changing the fork air pressure, carry out the following steps:

- Put the motorcycle up on its center stand.
- Raise the front wheel off the ground by using a jack.
- Open the air valve cover at the right side of the fairing.
- Take off the front fork air valve cap.



A. Front Fork Air Valve
B. Rear Shock Absorber Air Valve

- Check the air pressure with the air pressure gauge.

Air Pressure

Standard	50 kPa (0.5 kg/cm^2, 7.1 psi)
Usable Range	40 ~ 60 kPa (0.4 ~ 0.6 kg/cm^2, 5.7 ~ 8.5 psi)

NOTE

- *Check the air pressure when the front fork is cold (room temperature).*
- *Do not use the side stand when the air pressure is checked.*
- *Do not use tire gauge for checking air pressure. They may not indicate the correct air pressure because of air leaks that occur when the gauge is applied to the valve.*

- Inject air through the valve with a hand pump to raise and adjust the pressure.

CAUTION

- **Inject air little by little so that air pressure does not rise rapidly. Air pressure exceeding 250 kPa (2.5 kg/cm^2, 36 psi) may damage the oil seal.**

WARNING

- **Be sure to adjust the air pressure within the usable range. Pressure too high or too low can produce a hazardous riding condition.**
- **Only air or nitrogen gas can be used. Never inject oxygen or any kind of explosive gas.**
- **Do not incinerate the front fork.**

Rear Shock Absorbers

The rear shock absorbers can be adjusted by changing the air pressure and damping force to suit various riding and loading conditions.

Before making any adjustments, however, read the following procedures:

Air Pressure

The air pressure in the rear shock absorbers can be adjusted for different road and loading conditions.

The following table shows an example of air pressure adjustment. To obtain stable handling and a suitable ride, adjust the air pressure as indicated.

The standard air pressure for an average-build rider of 68 kg (150 lb) with no passenger and no accessories is 150 kPa (1.5 kg/cm^2, 21 psi).

Air Pressure Adjustment

Air Pressure kPa (kg/cm^2, psi)	Setting	Load	Road
150 kPa (1.5 kg/cm^2, 21 psi)	Soft	Light	Good
↕	↕	↕	↕
250 kPa (2.5 kg/cm^2, 36 spi)	Hard	Heavy	Bad

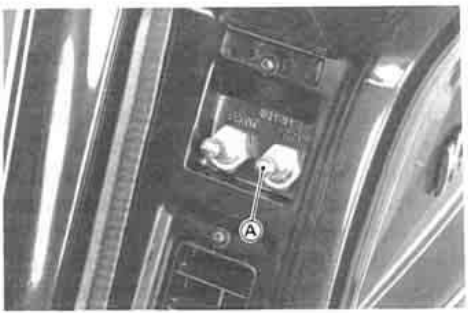
To adjust the air pressure:

NOTE

○*Check and adjust the air pressure when the rear shock absorbers are cold (room temperature).*

- Put the motorcycle on its center stand.
- Open the air valve cover at the right side of the fairing.
- Take off the rear shock absorber air valve cap.

A. Air Valve Cover



A. Rear Shock Absorber Air Valve

●Check the air pressure with the air pressure gauge.

NOTE

○*Do not use tire gauges for checking air pressure. They may not indicate the correct air pressure because of air leaks that occur when the gauge is applied to the valve.*

●To lower the air pressure, push the valve core in slightly. To raise the pressure, inject air through the valve with a tire pump. Change the air pressure within the range specified in the preceding table to suit various riding conditions.

CAUTION

○**Inject air little by little so that air pressure does not rise rapidly. Air pressure exceeding 500 kPa (5.0 kg/cm^2, 71 psi) may damage the oil seal.**

WARNING

- Be sure to adjust the air pressure within the usable range. Pressure too high or too low can produce a hazardous riding condition.
- Only air or nitrogen gas can be used. Never inject oxygen or any kind of explosive gas.
- Do not incinerate the rear shock absorber.

A. Damping Adjuster B. Number

Damping Force

The adjuster on each rear shock absorber has 4 positions so that the rebound damping force can be adjusted for different road and loading conditions. The numbers on the adjuster show the setting position.

The following table shows an example of damping force adjustment. To obtain stable handling and a suitable ride, adjust the damping force as indicated. The damping force can be left soft for average riding. But it should be adjusted harder for high speed riding or riding with a passenger. If the damping feels too soft or too stiff, adjust it in accordance with the following table:

Rebound Damping Adjustment

Adjuster Position	Damping Force	Setting	Load	Road	Speed
1	Stronger	Soft	Light	Good	Low
2	↓	↑↓	↑↓	↑↓	↑↓
3					
4	↓	Hard	Heavy	Bad	High

The standard setting position under the same conditions as in air pressure adjustment is No. 2.

To adjust the damping force:

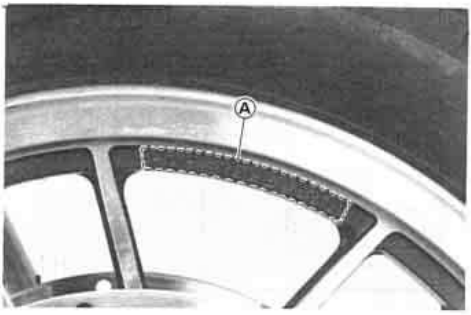
- Turn the adjusters to the desired position until you feel a click.
- Check to see that both adjusters are turned to the same relative position.

WARNING

- **If both damping adjusters are not adjusted equally, handling may be impaired and a hazardous condition may result.**

Wheels

Tubeless tires are installed on the wheels of this motorcycle. The indications of TUBELESS on the tire side wall and the rim show that the tire and rim are specially designed for tubeless use.



A. TUBELESS Mark

A. TUBELESS Mark

The tire and rim form a leakproof unit by making airtight contacts at the tire chafers and the rim flanges instead of using an inner tube.

WARNING

○The tires, rims, and air valves on this motorcycle are designed only for

tubeless type wheels. The recommended standard tires, rims, and air valves must be used for replacement.

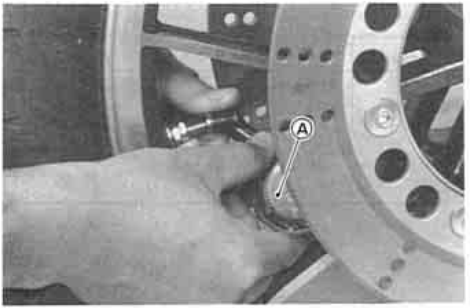
- **Do not install tube-type tires on tubeless rims. The beads may not seat properly on the rim causing tire deflation.**
- **Do not install a tube inside a tubeless tire. Excessive heat build-up may damage the tube causing tire deflation.**

Tires:

Payload and Tire Pressure

Failure to maintain proper inflation pressures or observe payload limits for your tires may adversely affect handling and performance of your motorcycle and can result in loss of control. The maximum recommended load in addition to vehicle weight is 202 kg (445 lb), including rider, passenger, baggage, and accessories.

- Check the tire pressure often, using an accurate gauge.



A. Tire Pressure Gauge

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.*

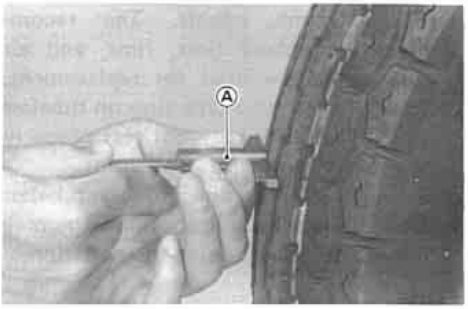
Tire Air Pressure (when cold)

Front	225 kPa (2.25 kg/cm², 32 psi)	
Rear	Up to 120 kg (265 lb) load	225 kPa (2.25 kg/cm², 32 psi)
	120 ~ 202 kg (265 ~ 445 lb) load	280 kPa (2.8 kg/cm², 40 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.

- In accordance with the Periodic Maintenance Chart, 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.
- Remove any imbedded stones or other foreign particles from the tread.

NOTE

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

WARNING

○To ensure safe handling and stability, use only the recommended standard tires for replacement, inflated to the standard pressure.

○Tires that have been punctured and repaired do not have the same capabilities as undamaged tires. Do not exceed 100 km/h (60 mph) within 24 hours after repair, and 180 km/h (110 mph) at any time after that.

Standard Tire

Front	M130/90-16 DUNLOP F21 Tubeless
Rear	M150/90-15 MC DUNLOP K425A Tubeless

NOTE

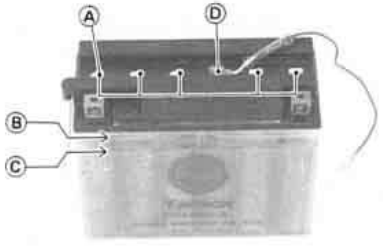
○When operating on public roadways, keep max. speed under traffic law limits.

Battery

Battery Electrolyte Level Inspection

The battery electrolyte level must be kept between the upper and lower level lines.

- Remove the battery from the motorcycle (See Battery Removal).
- Check that the electrolyte level in each cell is between the upper and lower level lines.



A. Filler Caps
B. Upper Level
C. Lower Level
D. Electrolyte Level Sensor

- If the electrolyte level is low in any cell, fill with distilled water as follows.
- Remove the battery filler caps and fill with distilled water until the electrolyte level in each cell reaches the upper level line.

CAUTION

- **Add only distilled water to the battery. Ordinary tap water is not a substitute for distilled water and will shorten the life of the battery.**

Battery Charging

- Remove the battery from the motorcycle (See Battery Removal).

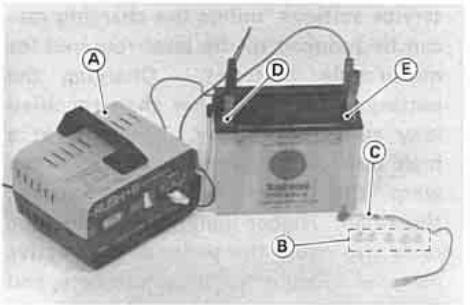
CAUTION

○**Always remove the battery from the motorcycle for charging. If the battery is charged while still installed, battery electrolyte may spill and corrode the frame or other parts of the motorcycle.**

- Before charging, check the electrolyte level in each cell. If the electrolyte level is low in any cell, fill to above the lower level line but not up to the upper level line since the level rises during charging.
- Remove the caps from all the cells, and connect the battery charger leads to the battery terminals (red to +, black to −).

WARNING

○**Because the battery gives off an explosive gas mixture of hydrogen and oxygen, keep any sparks or open flame away from the battery during charging. When using a battery charger, connect the battery to the charger before turning on the charger. This procedure prevents sparks at the battery terminals which could ignite any battery gases.**



A. Battery Charger
B. Filler Caps
C. Electrolyte Level Sensor
D. (−) Terminal
E. (+) Terminal

- Charge the battery at a rate that is 1/10th of the battery capacity. For

example, the charging rate for a 10Ah battery would be 1.0 ampere.

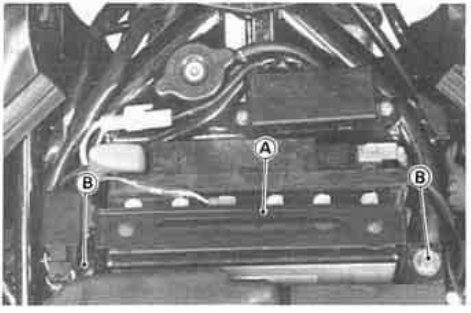
CAUTION

○**Do not use a high rate battery charger, as is typically employed at automotive service stations, unless the charging rate can be reduced to the level required for motorcycle batteries. Charging the battery at a rate higher than specified may ruin the battery. Charging at a high rate causes excess heat which can warp the plates and cause internal shorting. Higher-than-normal charging rates also cause the plates to shed active material. Deposits will accumulate, and can cause internal shorting. If the temperature of the electrolyte rises above 45°C (115°F) during charging, reduce the charging rate to lower the temperature, and increase charging time proportionately.**

- After charging, check the electrolyte level in each cell. If the level has fallen, add distilled water to bring it back up to the upper level line.
- Install the caps on the cells.
- Install the battery.

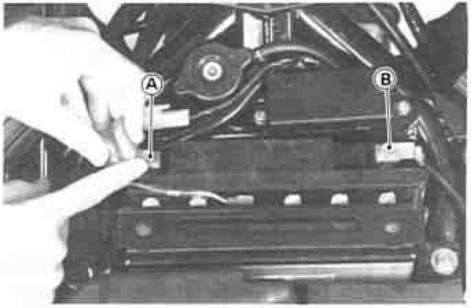
Battery Removal

- Remove the dummy tank cover.
- Unscrew the battery holder bolts and remove the battery holder.



A. Battery Holder B. Bolt

- Disconnect the leads from the battery, first from the (–) terminal and then the (+) terminal.



A. (+) Terminal **B. (–) Terminal**

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

Battery Installation

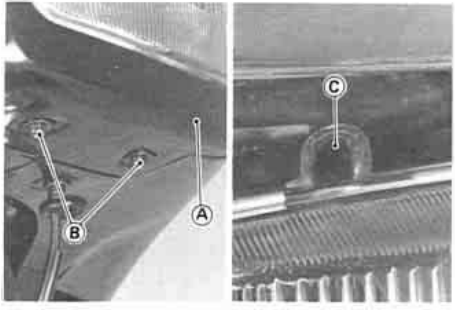
- Check that the battery case rubber dampers are properly in place.
- Put the battery in the battery case.
- Put a light coat of grease on the terminals to prevent corrosion.
- Connect the capped lead to the (+) terminal, and then connect the black lead to the (–) terminal.
- Cover the (+) terminal with its protective cap.

Headlight Beam

Horizontal Adjustment

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

- Remove the headlight cover screws and take off the headlight cover.
- Turn the adjuster on the headlight in or out until the beam points straight ahead.



A. Headlight Cover
B. Screws
C. 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.

WARNING

- **It is dangerous to adjust the vertical headlight beam while riding the motorcycle. The motorcycle must be stopped in a safe place to adjust the vertical headlight beam.**

- Sit on the motorcycle.
- Turn the ignition switch on.

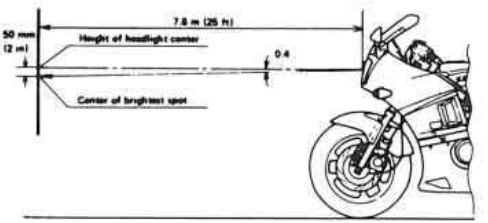
- Check the vertical height of the headlight beam with motorcycle held level.
- If the vertical headlight beam height is too high or too low, adjust it so that the vertical beam will be the correct height by turning the headlight vertical adjuster to up or to down.

UP . . . . . to raise headlight beam.
DOWN . . . . to lower headlight beam.

A. Headlight Vertical Adjuster

NOTE

○On high beam, the brightest point should be slightly below horizontal. The proper angle is 0.4 degrees below horizontal. This is a 50 mm (2 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.

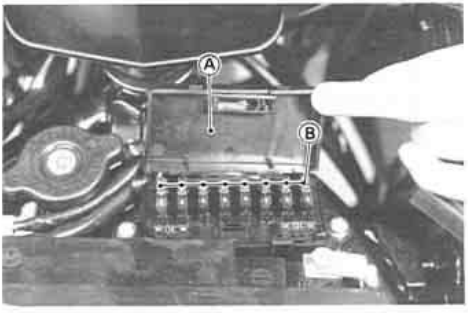


Fuses

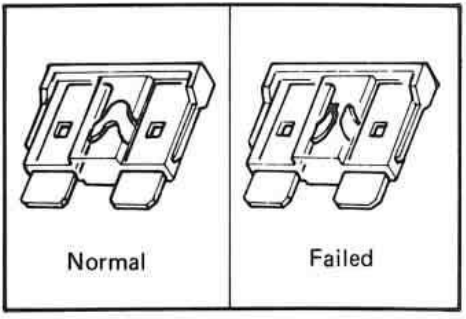
Fuses are arranged in the fuse case located inside the dummy tank cover. If a fuse fails during operation, inspect the electrical system to determine the cause, and then replace it with a new fuse of proper amperage.

WARNING

- **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 case.**



A. Fuse Case **B. Fuses**



Fuel System

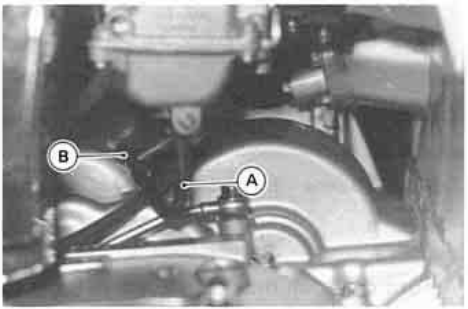
Accumulation of moisture or sediment in the fuel system will restrict the flow of fuel and cause carburetor malfunction. The system should be checked in accordance with the Periodic Maintenance Chart.

WARNING

- **Gasoline is extremely flammable and can be explosive under certain conditions. 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.**
- **Make sure the engine is cold before working. Wipe any fuel off the engine before starting it.**

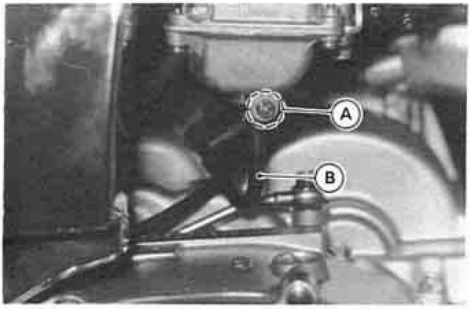
Inspection

- Remove the carburetor overflow hoses from the air cleaner case fittings.



A. Carburetor Overflow Hose
B. Air Cleaner Case Fitting

- Run the lower ends of the carburetor overflow hoses into a suitable container.



A. Drain Screw B. Carburetor Overflow Hose

- Turn out each drain screw a few turns to drain the carburetors, and check to see if water or dirt has accumulated in the carburetors.
- Tighten the drain screws.
- Connect the lower ends of the carburetor overflow hoses on the air cleaner case fittings.

NOTE

○*If any water or dirt appears during the above operation, have the fuel system checked by a competent mechanic following the procedure in the Service Manual.*

General Lubrication

Lubricate the points shown below, with either motor 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.

NOTE

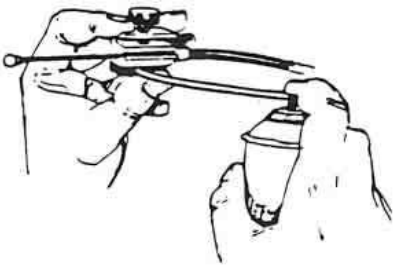
○*A few drops of oil are effective to keep bolts and nuts from rusting and sticking. This makes removal easier. Badly rusted nuts, bolts, etc., should be replaced with new ones.*

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:

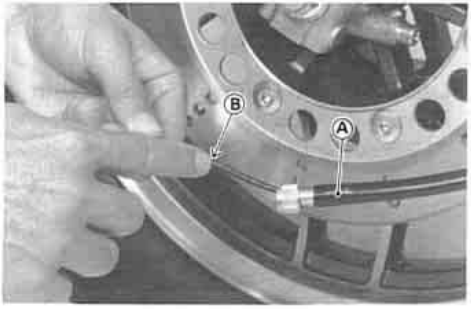
○Throttle Inner Cables



Apply Grease to the following Points:

○Throttle Inner Cable Upper End
*○Speedometer Inner Cable

*Grease the lower part of the inner cable sparingly.



A. Speedometer Cable B. Grease

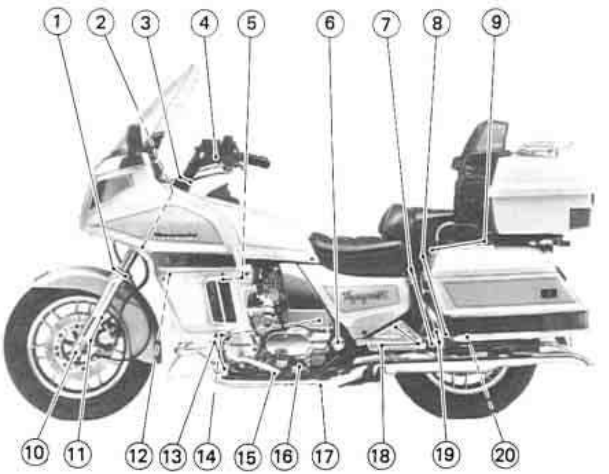
A. Projection B. Hole

NOTE

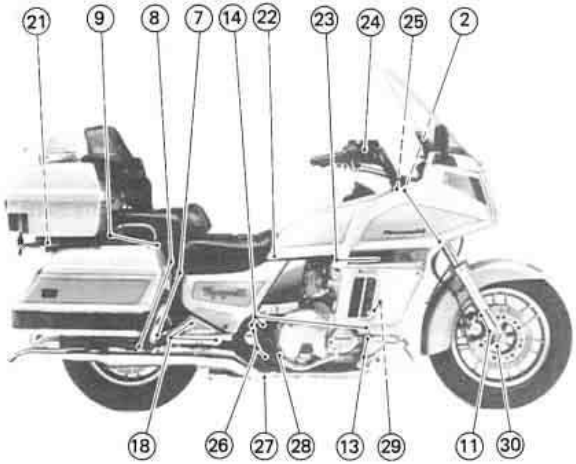
- *After connecting the cables, adjust them.*
- *Making sure that the projection in the switch housing fits into the hole in the handlebar, assemble the switch housing. And after installing the switch housing, check the throttle grip play and adjust it if necessary.*
- *Insert the speedometer inner cable into the speedometer gear housing while turning the wheel so that the slot in the end of the cable will seat in the tongue of the speedometer pinion.*

Bolt and Nut Tightening

In accordance with the Periodic Maintenance Chart, it is very important to check the tightness of the bolts and nuts listed here. Also, check to see that each cotter pin is in place and in good condition. Please ask your authorized Kawasaki Dealer for torque values.



1. Front Fender Mounting Bolts
2. Front Fork Clamp Bolts
3. Handlebar Clamp Bolts
4. Clutch Lever Holder Bolt
5. Cylinder Head Bolts
6. Pivot Shaft Locknut
7. Bumper Mountig Bolts
8. Rear Shock Absorber Mounting Nuts and Bolts
9. Grab Rail Mounting Bolts
10. Front Axle Nut
11. Caliper Mounting Bolts
12. Radiator Mounting Bolts
13. Engine Guard Mounting Bolts
14. Engine Mounting Nuts and Bolts
15. Shift Pedal Bolt
16. Side Stand Bolt
17. Center Stand Bolt
18. Passenger Footboard Mounting Bolts
19. Final Bevel Gear Case Mounting Nuts
20. Rear Axle Nut



21. Travel Trunk Mounting Bolts
22. Dummey Tank Mounting Screw
23. Cylinder Head Cover Bolts
24. Front Brake Lever Holder Bolt
25. Steering Stem Head Bolt
26. Brake Pedal Bracket Bolts
27. Exhaust Pipe and Muffer Clamp Bolts
28. Brake Pedal Bolt
29. Exhaust Piep Mounting Nuts
30. Front Axle Clamp Bolt

Cleaning

For the prolonged life of your motorcycle, wash it down immediately after it has been splashed with seawater or exposed to the sea breeze; operated on rainy days, rough roads, or in dusty areas; or operated on roads on which salt has been scattered for ice removal.

Preparation for Washing

Before washing, precautions must be taken to keep water off the following places:

- Rear openings of each muffler; Cover with plastic bags secured with rubber bands.
- Clutch and brake levers, switch housings on the handlebar; Cover with plastic bags.
- Ignition switch; Cover the keyhole with tape.
- Air cleaner intake; Close up the intake with tape, or stuff with rags.
- Audio system; Keep the tape slot door closed and cover the AM/FM radio and cassette player with the provided dust cover.

Where to be Careful

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

- Meter instruments
- Disc brake/clutch master cylinders and brake calipers
- Windshield; Wash the windshield with a soft cloth or sponge and plenty of water. Dry with a soft clean cloth. Do not use an abrasive scouring pad or steel wool.
- Fairing, travel trunk, saddlebags; Prepare a mixture of water and mild soap, such as dishwashing detergent. Do not use a high alkaline content soap as commonly found at commercial car washes because it leaves a residue. Wash them with a soft cloth or sponge. Dry with a soft clean cloth.

CAUTION

○**To prevent surface damage, do not clean plastic parts with organic solutions such as gasoline, thinner, or benzine.**

- Audio system
- Speakers
- Cruise Control Unit
- Under the dummy tank; If water gets into the ignition coils, battery or spark plug caps, the spark will jump through the water and be grounded out. When this happens, the motorcycle will not start and the affected parts must be wiped dry.

NOTE

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

After Washing

- Remove the plastic bags and tape, and clean the air cleaner intake.
- Lubricate the points listed in the General Lubrication section.
- Test the brakes before motorcycle operation.
- Start the engine and run it for 5 minutes.

WARNING

○**Never wax or lubricate the brake discs. Loss of braking and an accident could result. Clean the disc with an oilless solvent such as trichloroethylene or acetone. Observe the solvent manufacturer's warnings.**

Preparation for Storage:

- Clean the entire vehicle thoroughly.
- Empty the fuel from the fuel tank, and empty the carburetors by unscrewing the drain screw at each float bowl. (If left in for a long time, the fuel will break down and could clog the carburetors.)
- Remove the empty fuel tank, pour about 250 mL (1/2 pint) of motor oil into the tank, roll the tank around to coat the inner surfaces thoroughly, and pour out the excess oil.

WARNING

- **Gasoline is extremely flammable and can be explosive under certain conditions. 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.**

- Remove the spark plugs and put several drops of SE class SAE 30 oil into each cylinder. Push the starter button for a few seconds to coat the cylinder walls with oil, and install the spark plugs.
- Reduce tire pressure by about 20%.
- Set the motorcycle on a box or stand so that both wheels are raised off the ground. (If this cannot be done, put boards under the front and rear wheels to keep dampness away from the tire rubber.)

- Spray oil on all unpainted metal surfaces to prevent rusting. Avoid getting oil on rubber parts or in the brakes.
- Lubricate 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 during cold weather so that the electrolyte does not freeze and crack open the battery. The more discharged the battery becomes, the more easily it freezes.
- Tie plastic bags over the exhaust pipes to prevent moisture from entering.
- Put the provided dust cover on the AM/FM radio and cassette player.
- Put a cover over the motorcycle to keep dust and dirt from collecting on it.

Preparation after Storage:

- Check the electrolyte level in the battery, charge the battery if necessary, and install it in the motorcycle. Be careful that the battery vent hose is not pinched and that it is kept away from the driving system and other frame parts.
- Make sure the spark plugs are tight.
- Fill the fuel tank with fuel.
- Change the engine oil.
- Check all the points listed in the Daily Safety Checks section.
- Lubricate the points listed in the General Lubrication section.

Engine Does Not Start:

Starter Motor Won't Turn

- Engine stop switch off
- Clutch lever not pulled in or transmission not in neutral
- Fuse blown
- Battery leads do not make good electrical contact with battery terminals
- Battery discharged

Engine Cranks, But Won't Start

- No fuel in tank
- Fuel line clogged
- Fuel broken down
- Choke is not used when engine is cold
- Engine flooded
- Spark plugs not in good contact
- Spark plugs fouled or wet
- Incorrect spark plug gap
- Battery discharged

Engine Stalls:

Just When Shifting into 1st Gear

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

While Riding

- Choke is used too long after moving off
- No fuel in tank
- Fuel tank air vent is obstructed
- Overheating
- Battery discharged

OWNER SATISFACTION

Your satisfaction is important to your authorized Kawasaki dealer and to Kawasaki Motors Corp., U.S.A. If you have a problem concerning warranty or service, please take the following action:

Contact the owner and/or service manager of your authorized Kawasaki dealer. Fully explain your problem and ask for assistance in resolving the situation. The OWNER of the dealership is concerned with your satisfaction and your future business. For this reason the owner is in the best position to assist you. Also, all warranty and service matters are handled and resolved through the authorized Kawasaki dealer network.

If you are unsatisfied after working with your Kawasaki dealer and feel you still require further assistance, WRITE to the address below. Please be certain to provide the model, product identification number, 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 names of the dealership personnel with whom you have been working in the resolution of your problem.

Upon receipt of your WRITTEN correspondence we will contact the dealership and work with them in resolving your problem.

In order to provide a permanent record, all warranty and service resolutions take place only through WRITTEN correspondence.

Please send your correspondence to:

CONSUMER RELATIONS
KAWASAKI MOTORS CORP., U.S.A.
P.O.Box 25252
SANTA ANA, CA. 92799-5252

MAINTENANCE RECORD

Vehicle Identification No. _____

Owner Name _____

Warranty Start Date _____

Engine Displacement _____

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

ZG1200-B3

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