



KZ1000R

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" 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.

EMISSION CONTROL INFORMATION

To protect the environment in which we all live, Kawasaki has incorporated two emission control systems in compliance with applicable regulations of the United States Environmental Protection Agency.

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.

High Altitude Performance Adjustment Information

High altitude adjustment is not required for this motorcycle.

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 Systems 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 to your motorcycle. To assist you in keeping this record, we have provided space on pages 97 through 100 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.

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.
MOTORCYCLE GROUP**

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//////////////////// SPECIFICATIONS //////////////////////

PERFORMANCE

Minimum Turning Radius	2.5 m (98.4 in)
Braking Distance	12.5 m from 50 kph (41 ft from 31 mph)

DIMENSIONS

Overall Length	2,240 mm (88.19 in)
Overall Width	820 mm (32.3 in)
Overall Height	1,230 mm (48.43 in)
Wheelbase	1,525 mm (60.04 in)
Road Clearance	120 mm (4.72 in)
Dry Weight	2,180 N (222 kg, 490 lb)

ENGINE

Type	DOHC, 4-cylinder, 4-stroke, air-cooled
Displacement	998 mL (60.9 cu in)
Bore x Stroke	69.4 x 66.0 mm (2.73 x 2.60 in)
Compression Ratio	9.2
Starting System	Electric Starter
Cylinder Numbering Method	Left to right, 1-2-3-4
Firing Order	1-2-4-3
Carburetors	MIKUNI BS34 x 4

Ignition System
Ignition Timing
(Mechanically advanced)
Spark Plugs

Lubrication System
Engine Oil
Engine Oil Capacity

TRANSMISSION

Transmission Type
Clutch Type
Driving System
Primary Reduction Ratio
Final Reduction Ratio
Overall Drive Ratio
Gear Ratio: 1st
 2nd
 3rd
 4th
 5th

Battery and coil (Transistorized ignition)
10° BTDC @1,000 r/min (rpm) –
40° BTDC @3,400 r/min (rpm)
NGK B8ES or ND W24ES-U
© NGK BR8ES or ND W24ESR-U
Forced lubrication (wet sump)
SE class SAE 10W40, 10W50, 20W40, or 20W50
3.7 L (3.9 US qt)

5-speed, constant mesh, return shift
Wet, multi disc
Chain drive
1.732 (97/56)
2.733 (41/15)
4.923 (Top gear)
2.642 (37/14)
1.833 (33/18)
1.428 (30/21)
1.173 (27/23)
1.040 (26/25)

FRAME

Castor	29°
Trail	115 mm (4.53 in)
Tire Size: Front	100/90V19 TUBELESS
Rear	120/90V18 TUBELESS
Fuel Tank Capacity	21.4 L (5.7 US gal)

ELECTRICAL EQUIPMENT

Battery	12V 18AH
Headlight	12V 60/55W
Tail/Brake Light	12V 8/27W x 2
Turn Signal/Running Position Lights	12V 23/8W
Turn Signal Lights	12V 23W

© : Canadian model

Specifications subject to change without notice.

..... CONSUMER INFORMATION

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 KZ1000-R2

A. Fully Operational Service Brake

Load:

Light



155 feet

Maximum



168 feet

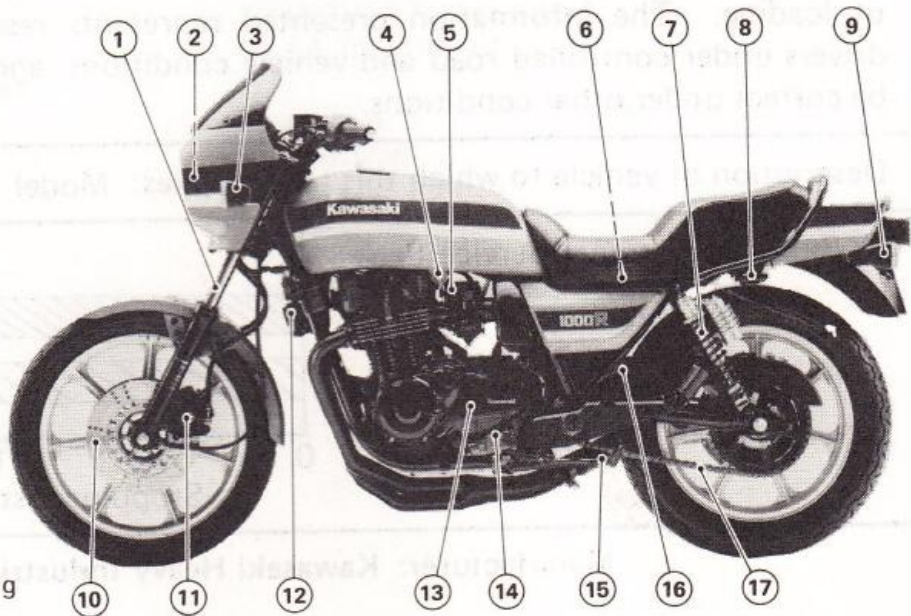
0 50 100 150 200

Stopping distance in feet from 60 mph.

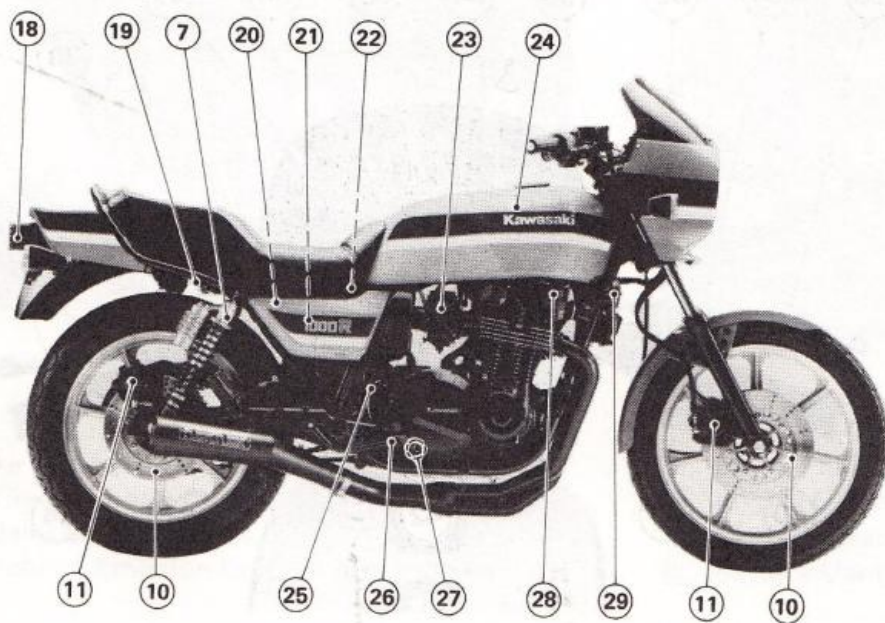
Manufacturer: **Kawasaki Heavy Industries, Ltd.**

LOCATION OF PARTS

1. Front Fork
2. Headlight
3. Turn Signal/Running
Position Light
4. Fuel Tap
5. Choke Knob
6. Tool Kit
7. Rear Shock Absorber
8. Seat Lock/Helmet Hook
9. Turn Signal Light
10. Brake Disc
11. Brake Caliper
12. Oil Cooler
13. Clutch Adjusting Cover
14. Shift Pedal
15. Side Stand
16. Anti-Theft Cable Lock Plug
17. Drive Chain

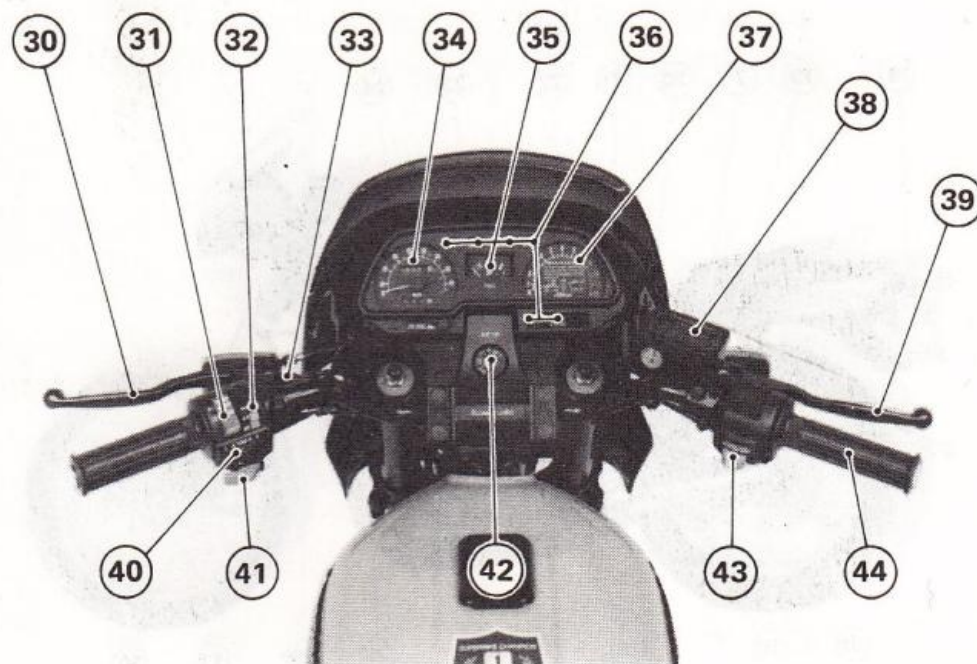


LOCATION OF CAUTION LABELS

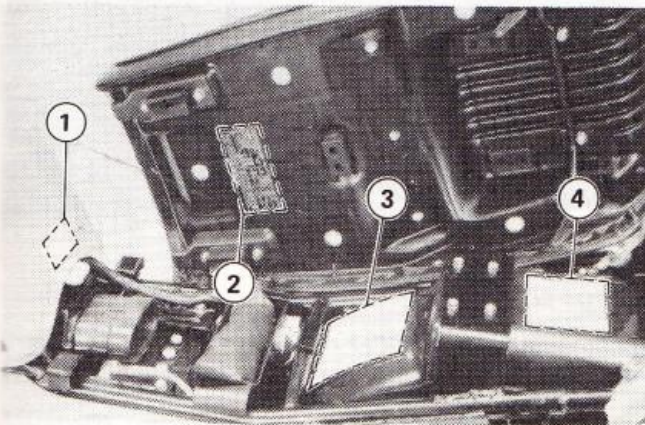


- 18. Tail/Brake Light
- 19. Helmet Hook
- 20. Fuses
- 21. Battery
- 22. Air Cleaner Element
- 23. Carburetors
- 24. Fuel Tank
- 25. Rear Brake Light Switch
- 26. Rear Brake Pedal
- 27. Oil Level Gauge
- 28. Air Suction Valve Cover
- 29. Horn

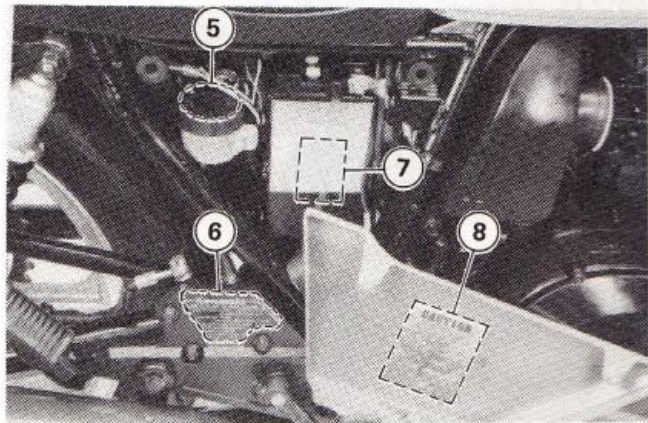
- 30. Clutch Lever
- 31. Dimmer Switch
- 32. Hazard Switch
- 33. Starter Lockout Switch
- 34. Speedometer
- 35. Fuel Gauge
- 36. Indicator Lights
- 37. Tachometer
- 38. Front Brake Fluid Reservoir
- 39. Front Brake Lever
- 40. Turn Signal Switch
- 41. Horn Button
- 42. Ignition Switch/Steering Lock
- 43. Engine Stop/Starter Switch
- 44. Throttle Grip



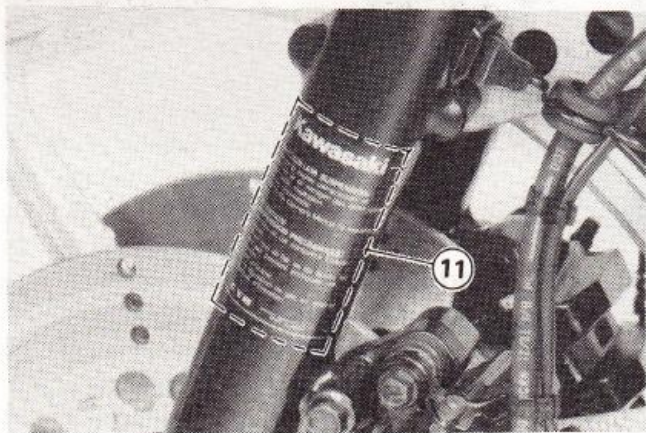
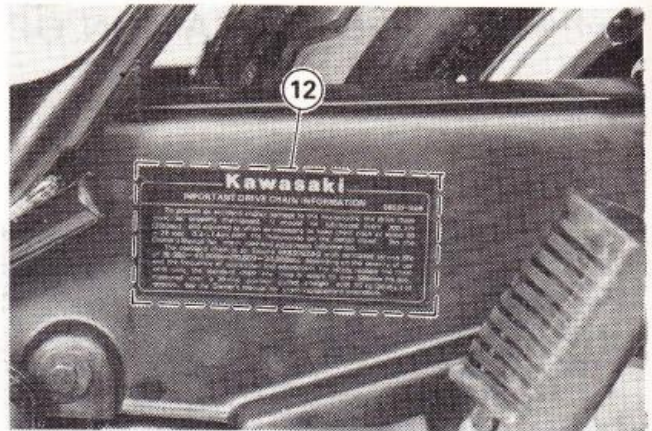
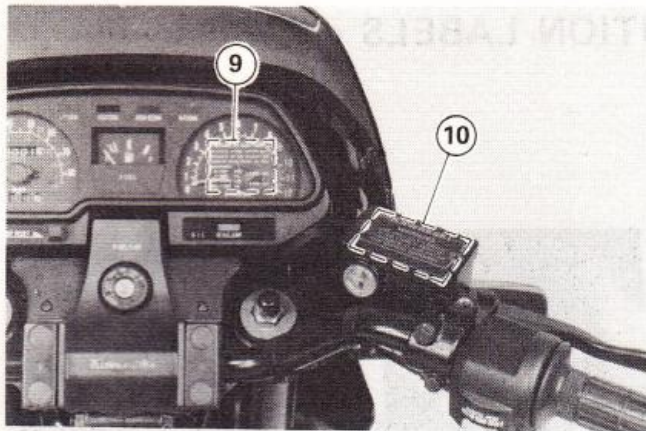
////////////////// LOCATION OF CAUTION LABELS //////////////////



- 1. Air Cleaner Intake
- 2. Tire and Load Data
- 3. Daily Safety Checks
- 4. Vehicle Emission Control Information



- 5. Brake Fluid (Rear)
- 6. Engine Oil and Oil Filter
- 7. Battery Poison/Danger
- 8. Battery Vent Hose



- 9. Break-In
- 10. Brake Fluid (Front)
- 11. Air Suspension (Front Fork)
- 12. Important Drive Chain Information

////////////////////// LOADING INFORMATION ////////////////////////

WARNING Incorrect loading, improper installation or use of accessories, or modification of your motorcycle may result in an unsafe riding condition. Before you ride the motorcycle, make sure that the motorcycle is not overloaded (refer to page 76 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, sudden movements, and by interfering with the operator.

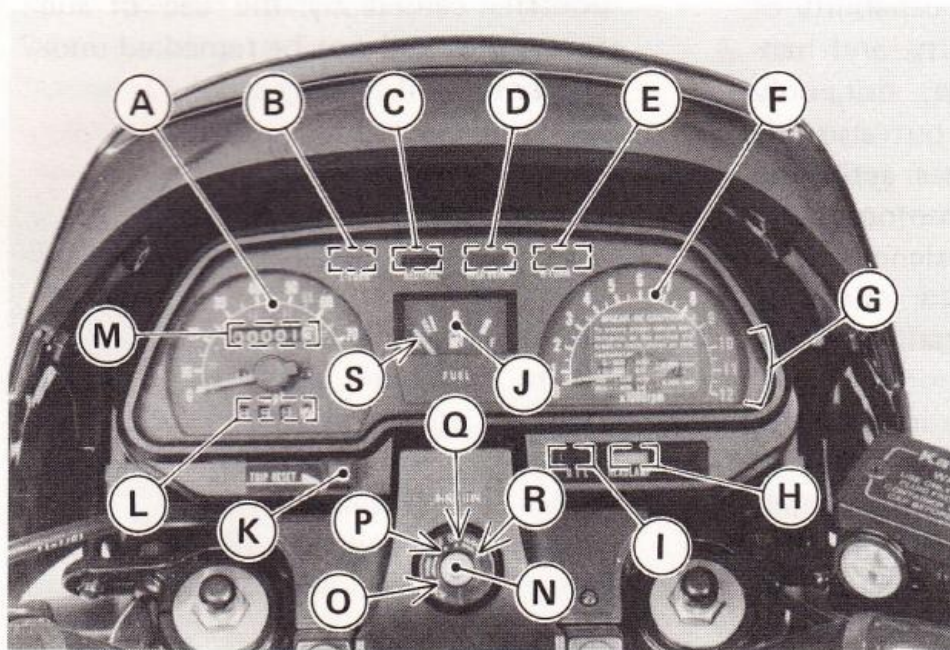
- It is important that the passenger sit still while the motorcycle is in motion and not interfere with the operation of the motorcycle. Do not carry animals on your motorcycle.
2. You should instruct any passenger before riding to keep his feet on the passenger footpegs and hold on to the operator, seat strap or grab rail. Do not carry a passenger unless he or she is tall enough to reach the footpegs and footpegs are provided.
 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 on a luggage rack. They are 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. Poorly designed or installed items can result in an unsafe riding condition.
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.

GENERAL INFORMATION

Meter Instruments



- A. Speedometer
- B. Left Turn Signal Indicator Light
- C. Neutral Indicator Light
- D. High Beam Indicator Light
- E. Right Turn Signal Indicator Light
- F. Tachometer
- G. Red Zone
- H. Headlight Failure Indicator Light
- I. Oil Pressure Warning Light
- J. Fuel Gauge
- K. Reset Button
- L. Trip Meter
- M. Odometer
- N. Ignition Switch
- O. LOCK position
- P. OFF position
- Q. ON position
- R. PARK position
- S. E (Empty) position

Speedometer and Tachometer

The speedometer shows the speed of the vehicle.

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.

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.

Fuel Gauge

The fuel gauge shows the amount of fuel in the fuel tank. When the needle comes near the E (empty) position, turn the fuel tap lever to RES, and refuel at the earliest opportunity.

Note: Make certain that the fuel tap is turned to ON (Not RES), after filling up the fuel tank.

Indicator Lights

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

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

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

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.

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.

Key

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

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

OFF	Engine off. All electrical circuits off.
ON	Engine on. All electrical equipment can be used.
LOCK	Steering locked. Engine off. All electrical circuits off.
P (PARK)	Steering locked. Engine off. Tail lights on. All other electrical circuits cut off.

Note: ○The head, tail, and running position lights are on whenever the ignition switch is in the ON position. 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 → ON 3 → P(PARK)

3 ↓

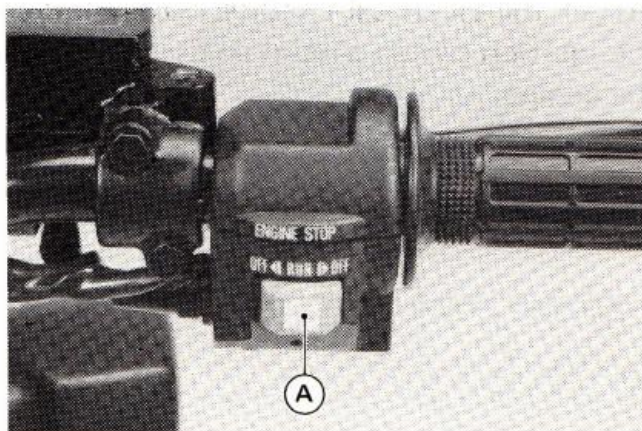
LOCK

1. Turn the handlebar fully to the left.
2. Turn.
3. Push down and turn to LOCK or P(PARK).

Engine Stop/Starter Switch

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

To start the engine, push the engine stop/starter switch with the clutch lever pulled in.



A. Engine Stop/Starter Switch

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

If some emergency requires stopping the engine, operate the engine stop/starter switch to either of the OFF positions.

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

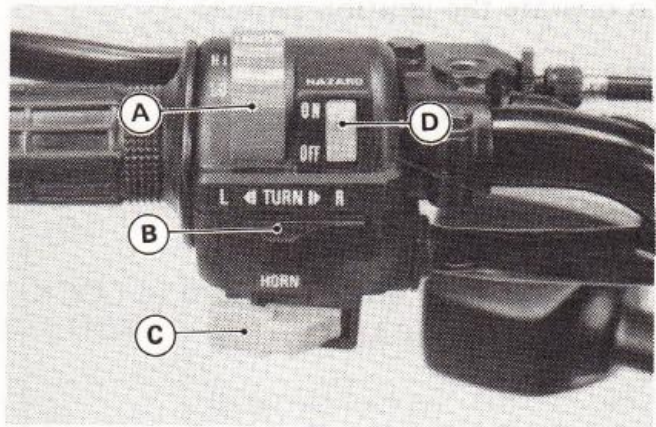
Left Handlebar Switches

Dimmer Switch

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

Horn Button

When the horn button is pushed, the horn sounds.



A. Dimmer Switch
B. Turn Signal Switch

C. Horn Button
D. Hazard Switch

Turn Signal Switch

When the turn signal switch is turned to L (left) or R (right), the turn signals flash on and off.

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.

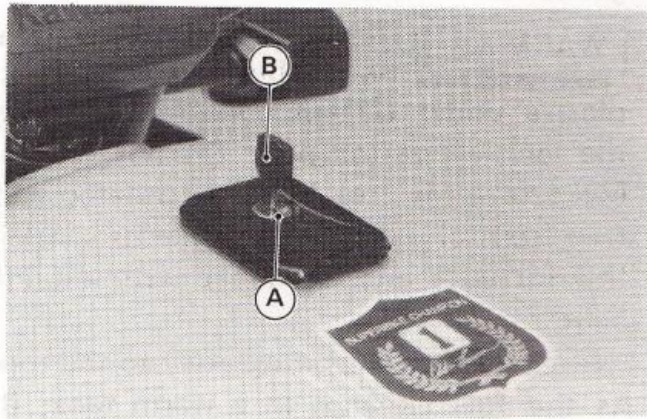
Flick the hazard switch to ON position with the ignition switch in the ON or PARK position. All the turn signals and turn signal indicator light will flash on and off.

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.

Fuel Tank Cap

To open the fuel tank cap, insert the ignition switch key into the cap, turn the key to the right, and open the cap.

The fuel tank cap is locked when pushed back into place.



A. Fuel Tank Cap

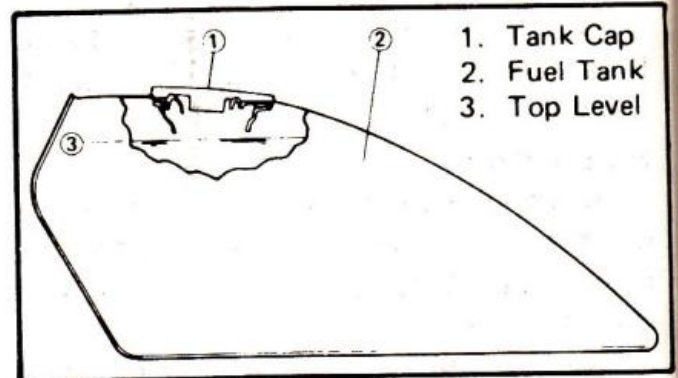
B. Ignition Switch Key

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 completely to the top. As the fuel expands in a warm tank, it may overflow from the vents in the tank cap. After refueling, make sure the tank cap is closed securely.



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.

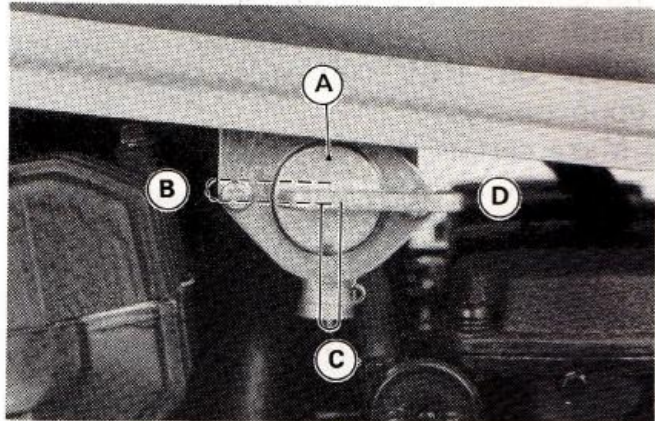
Octane Rating Method	Minimum Rating
Antiknock Index $\frac{(\text{RON} + \text{MON})}{2}$	87
Research Octane No. (RON)	91

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, try a different brand of gasoline or a higher octane grade.

Fuel Tap

The fuel tap is an automatic type which shuts off the fuel supply when the engine is stopped in the ON or RES position.



- | | |
|-----------------|-----------------|
| A. Fuel Tap | C. PRI position |
| B. RES position | D. ON position |

The fuel tap has three positions: ON, RES (reserve), and PRI (prime). If the fuel runs out with the tap in the ON position, turn the tap to PRI, leave it for a few seconds, and then turn it to RES.

The last 4.2 L (1.1 US gal) of fuel can be used by turning the fuel tap to RES.

The PRI position bypasses the automatic control and is useful for priming the engine after running out of gas, or for completely draining the tank.

Note: ○ Since riding distance is limited when on RES, refuel at the earliest opportunity.

○ Make certain that the fuel tap is turned to ON (Not RES), after filling up the fuel tank.

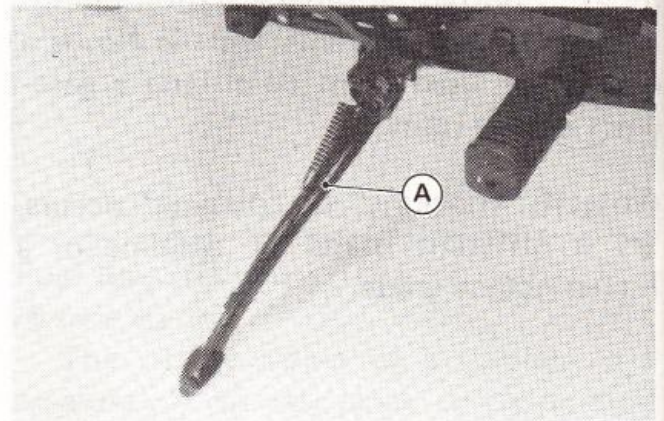
○ To start a cold engine after the motorcycle has been stored a long time, first turn the tap to PRI, leave it for a moment, and return it to ON.

WARNING ○ Practice operating the fuel tap with the motorcycle stopped. To prevent an accident you should be able to operate the fuel tap while riding without taking your eyes off the road.

○ Be careful not to touch the hot engine while operating the fuel tap.

Stand

The motorcycle is equipped with a side stand.



A. Side Stand

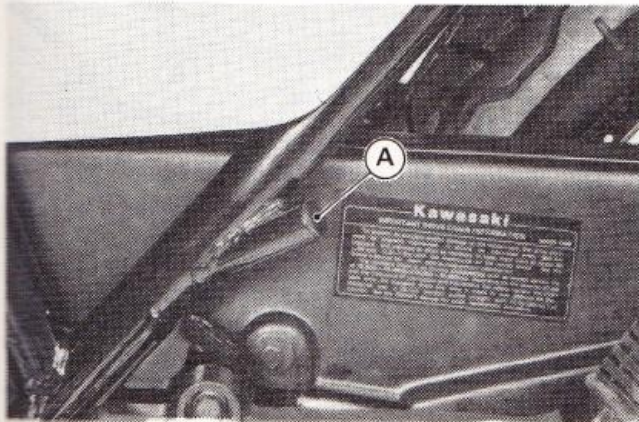
Whenever the side stand is used, make it a practice to kick the stand fully up before sitting on the motorcycle.

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

Anti-Theft Cable Lock

There is the opening near the left side cover to install the anti-theft cable lock, and the anti-theft cable lock is available as a Kawasaki Accessory Part.

CAUTION Do not remove the plug when the anti-theft cable lock is not installed.

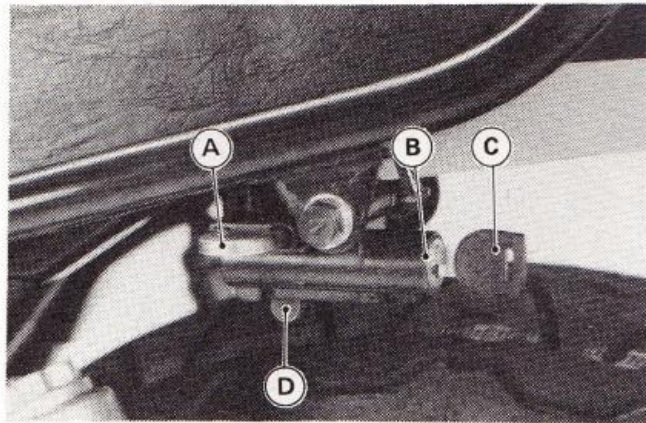


A. Plug

Seat Lock

To remove the seat, insert the ignition switch key into the seat lock, turn the key to the right, push the ratch forward, and pull up the rear of the seat.

To lock the seat, pull the ratch backward, and push the helmet hook into the seat lock.



A. Helmet Hook
B. Seat Lock

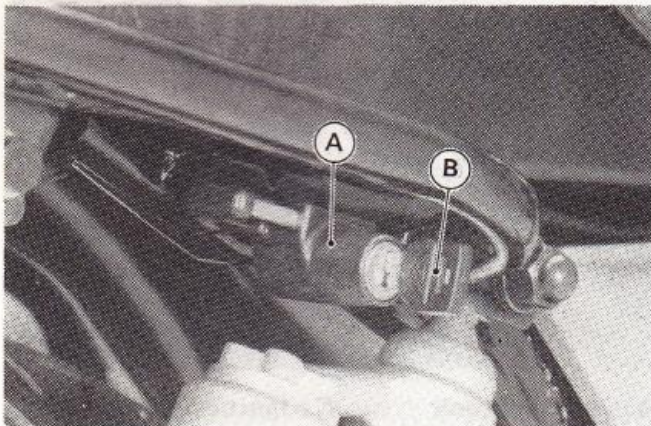
C. Ignition Switch Key
D. Ratch

Helmet Hooks

The helmets can be secured to the motorcycle using the helmet hooks.

The helmet hook can be unlocked by inserting the ignition switch key into it, and turning the key to the right.

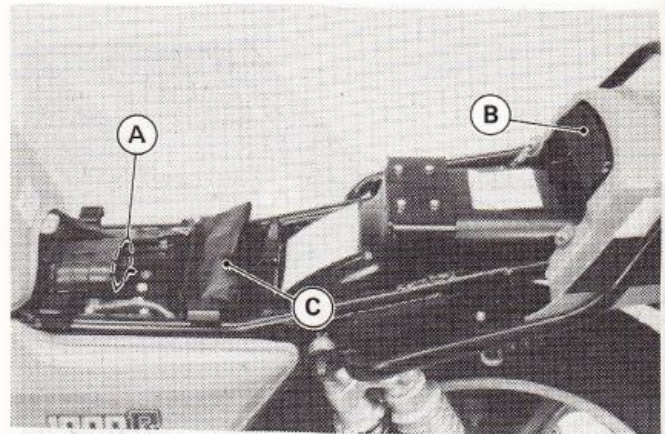
WARNING Do not ride the motorcycle with helmets attached to the hooks. The helmets could cause an accident by distracting the operator or interfering with normal vehicle operation.



A. Helmet Hook B. Ignition Switch Key

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 C. Tool Kit
B. Document Container

Document Container

Use a document container to keep the owner's manual and any papers or documents that should be kept with the motorcycle.

Tool Kit

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

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.

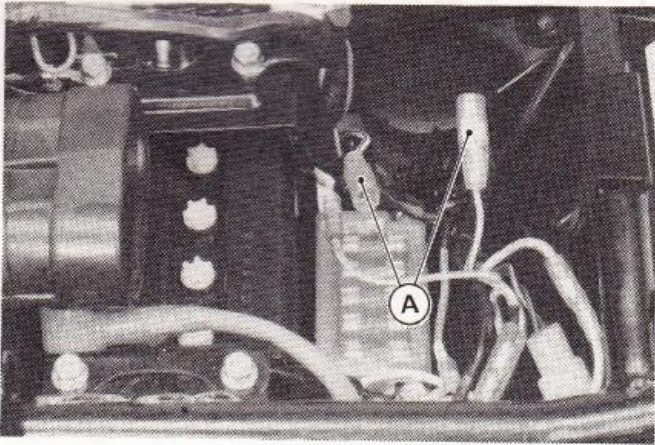
Electric-Accessory Leads

Location	Polarity	Lead Color
Under Seat	+	White/Black
	-	Yellow/Black
Inside Headlight Housing	+	White/Blue
	-	Yellow/Black
Maximum Current: 10A		

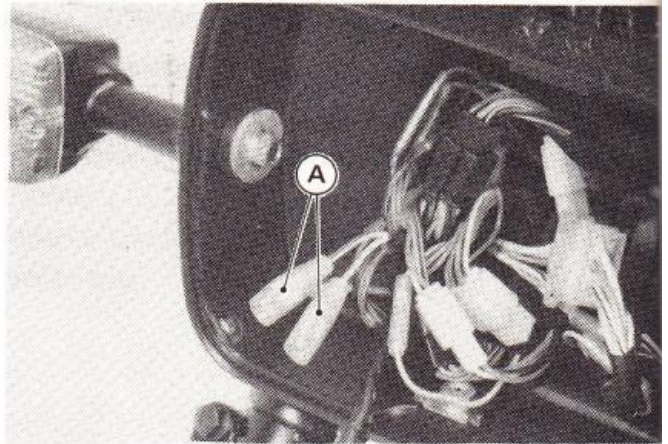
CAUTION ○Whenever you leave the motorcycle, stop using the electric accessories.

○Be careful not to discharge the battery totally. For example, if the current of 20 amperes are 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



A. Electric-Accessory Leads

//////////////////// BREAKING IN //////////////////////

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

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

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

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

- 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 gears are 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.

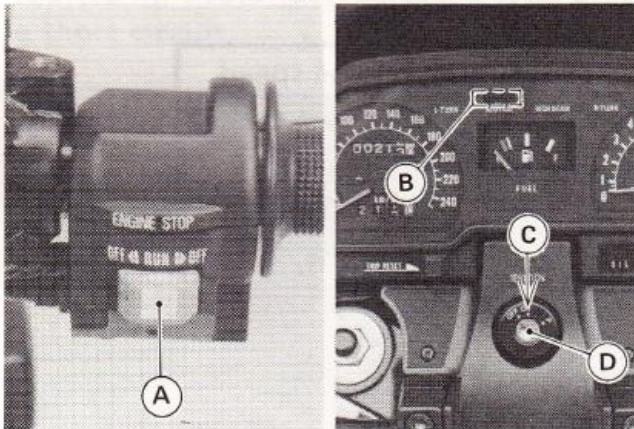
HOW TO RIDE THE MOTORCYCLE

Starting the Engine

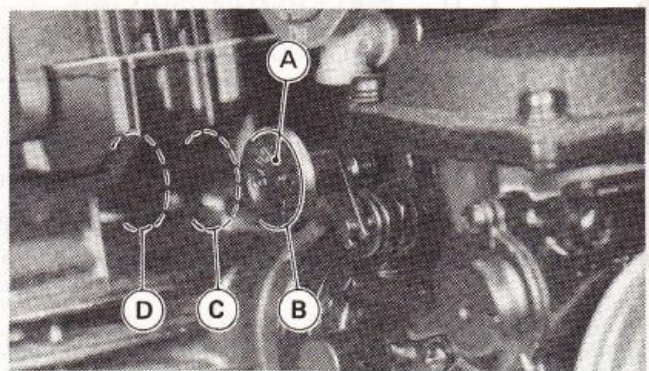
- Check that the steering is unlocked.
- Check that the engine stop/starter switch is in the RUN position.
- Turn the ignition switch on.
- Make certain the gears are in neutral.

- If the engine is cold, pull out the choke knob all the way (On position).

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.



- A. Engine Stop/Starter Switch
- B. Neutral Indicator Light
- C. ON position
- D. Ignition Switch



- A. Choke Knob
- B. OFF position
- C. HALF position
- D. ON position

- Leaving the throttle completely closed, push the engine stop/starter switch 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.

○ This motorcycle is equipped with the starter lockout switch. This switch prevents the electric starter from operating when the clutch is engaged.



A. Clutch Lever B. Starter Lockout Switch

- Return the choke to the halfway position after the length of time shown in the table.

Ambient temperature

10°C (50°F) – 35°C (95°F)	Immediately
Below 10°C (50°F)	About 30 seconds

- Continue warming up with the choke in this position.
- When the engine is warmed up enough to idle without using the choke, return the choke to the off position.

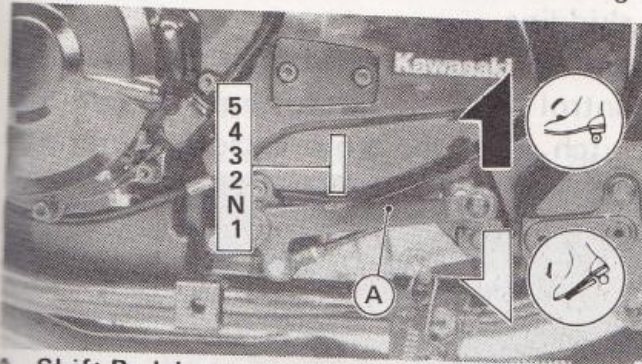
Note: If you drive the motorcycle before the engine is warmed up, return the choke to the off position after you have driven the motorcycle for 15 seconds.

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

Immediately	10°C (50°F)
Adjust	35°C (95°F)
30 seconds	Below 10°C (50°F)

Moving Off

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



A. Shift Pedal

Shifting Gears

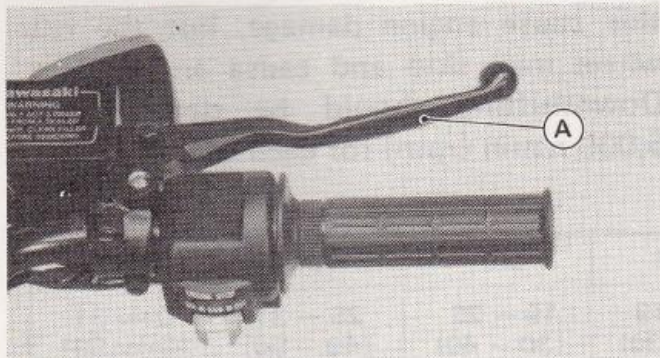
- Close the throttle while pulling in the clutch lever.
- Shift into the next higher or lower gear. For smooth riding, each gear position should cover the proper rate of speed shown in the table below.
- Open the throttle part way, while releasing the clutch lever.

WARNING When shifting down to a lower gear, do not shift at such a high speed that the engine rpm (r/min) 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.

Gear Position		1st	2nd	3rd	4th	5th
Vehicle Speed	mph (kph)	0 – 12 (0 – 20)	12 – 19 (20 – 30)	19 – 25 (30 – 40)	25 – 31 (40 – 50)	Over 31 (Over 50)

Braking

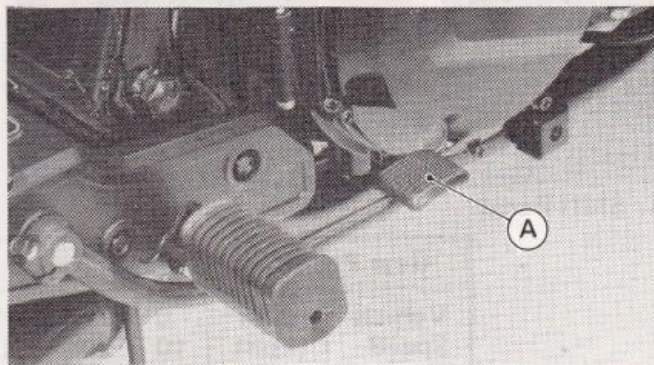
- Close the throttle completely, leaving the clutch engaged (except when shifting gears) so that the engine will help slow down the motorcycle.
- Shift down one gear at a time so that you are finally in 1st gear just when you get completely stopped.
- When stopping, always apply both brakes at the same time if stopping quickly; normally the front brake should be applied a little more than the rear. Downshift or fully disengage the



A. Front Brake Lever

- clutch as necessary to keep the engine from stalling or to stop more quickly.
- Never lock the brakes and 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.

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



A. Rear Brake Pedal

Stopping the Engine

- Close the throttle completely.
- Shift the gears into neutral.
- Turn the ignition switch off.
- 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 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 tail light on for greater visibility by turning the ignition switch to P (Park).

○ Do not leave the switch at P for too long, or the battery will discharge.

Jump Starting

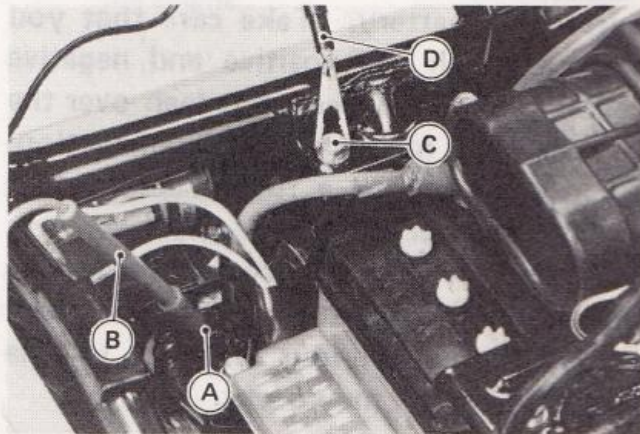
If your motorcycle battery is "run down," it should be removed and charged. If this is not practical, a 12 volt booster battery and jumper cables may be used to start the engine.

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".
- 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 surfaces. 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. Wait 15 seconds between each operation of the starter to let it cool.
- After the engine starts, disconnect the jumper cables. Disconnect the positive (+) cable from the motorcycle first.

SAFE OPERATION

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 rpm (r/min) 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 your 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	196 kPa (2.00 kg/cm ² , 28 psi)	
Rear	Up to 956 N (97.5 kg, 215 lb) load	221 kPa (2.25 kg/cm ² , 32 psi)
	956 – 1,620 N (97.5 – 165 kg, 215 – 364 lb) load	245 kPa (2.50 kg/cm ² , 36 psi)

- Drive chain Slack 30 – 40 mm (1.2 – 1.6 in).
- 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 Brake pad wear: Lining thickness more than 1 mm (0.04 in) left.
No brake fluid leakage.
- Throttle Throttle grip play 2 – 3 mm (0.08 – 0.12 in).
- Clutch Clutch lever play 2 – 3 mm (0.08 – 0.12 in).
Clutch lever operates smoothly.
- Electrical equipment All lights and horn work.
- Engine stop switch Stops engine.
- Side stand Return to its fully up position by spring tension.
Return spring not weak or not damaged.

Refer to "Daily Safety Checks" caution label attached to the rear fender.

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.

Fuel: Have sufficient fuel for 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 lines.

Electrical Equipment: Make certain that the headlight, tail/brake light, turn signals, horn, 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.

MAINTENANCE AND ADJUSTMENT

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 the 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.

Note: The Clean Air Act Amendments of 1977 direct the U.S. EPA to adopt replacement parts certification regulations within 2 years. MAINTENANCE, REPLACEMENT OR REPAIR OF THE EMISSION CONTROL DEVICES OR SYSTEMS MAY BE PERFORMED BY ANY MOTORCYCLE REPAIR ESTABLISHMENT OR INDIVIDUAL USING ANY MOTORCYCLE PART WHICH IS CERTIFIED UNDER THOSE REGULATIONS.

Periodic Maintenance Chart

Operation	Frequency	*Odometer Reading mi (km)								
	Whichever comes first ↓ Every	500 (800)	3,000 (5,000)	6,000 (10,000)	9,000 (15,000)	12,000 (20,000)	15,000 (25,000)	18,000 (30,000)	See Page	
Emissions Related	Carburetor synchronization —check †	•	•	•	•	•	•	•	59	
	Idle speed—check †	•	•	•	•	•	•	•	59	
	Throttle grip play—check †	•	•	•	•	•	•	•	58	
	Spark plug—clean and gap †	•	•	•	•	•	•	•	54	
	Valve clearance—check †	•	•	•	•	•	•	•	56	
	Air suction valve—check †		•	•	•	•	•	•	55	
	Air cleaner element—clean		•		•		•		56	
	Air cleaner element—replace	5 cleanings		•		•		•	56	
	Timing advancer—lubricate			•		•		•	53	
	Fuel system—clean			•		•		•	86	
	Cylinder head bolts and nuts —check †		•		•		•		•	90

Operation	Frequency	Whichever comes first ↓	*Odometer Reading mi (km)							See Page
			500 (800)	3,000 (5,000)	6,000 (10,000)	9,000 (15,000)	12,000 (20,000)	15,000 (25,000)	18,000 (30,000)	
Battery electrolyte level—check †	month	Every	•	•	•	•	•	•	•	79
Brake light switch—check †			•	•	•	•	•	•	•	69
Brake lining wear—check †				•	•	•	•	•	•	67
Brake fluid level—check †	month		•	•	•	•	•	•	•	67
K Brake fluid—change	year				•		•		•	68
Clutch—adjust			•	•	•	•	•	•	•	60
K Steering play—check †			•	•	•	•	•	•	•	—
Drive chain wear—check †				•	•	•	•	•	•	65
K Front fork oil seal—clean				•	•	•	•	•	•	72
Nuts, bolts, fasteners—check †			•		•		•		•	90
Tire wear—check †				•	•	•	•	•	•	77
Engine oil—change	year		•	•	•	•	•	•	•	50
Oil filter—replace			•		•		•		•	50
General lubrication—perform				•	•	•	•	•	•	88

Operation	Frequency	Whichever comes first ↓	*Odometer Reading mi (km)						See Page	
			500 (800)	3,000 (5,000)	6,000 (10,000)	9,000 (15,000)	12,000 (20,000)	15,000 (25,000)		18,000 (30,000)
K Front fork oil—change					•		•		•	72
K Swing arm pivot—lubricate					•		•		•	—
K Wheel bearing—lubricate	2 years						•			—
K Steering stem bearing—lubricate	2 years						•			—
K Master cylinder cup and dust seal—replace	2 years									—
K Caliper piston seal and dust seal—replace	2 years									—
K Brake hose—replace	4 years									—
K Fuel hose—replace	4 years									—
Drive chain—lubricate	Every 200 mi (300 km)								66	
Drive chain slack—check †	Every 500 mi (800 km)								62	

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.

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.

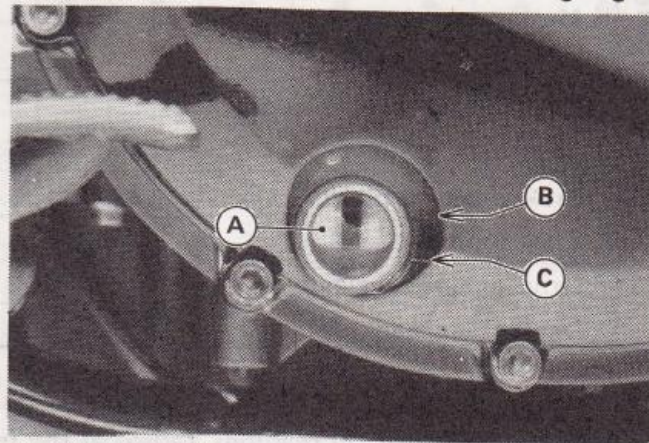
WARNING Motorcycle operation with insufficient, deteriorated, or contaminated engine oil will cause accelerated wear and may result in engine or transmission seizure, accident, and injury.

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.



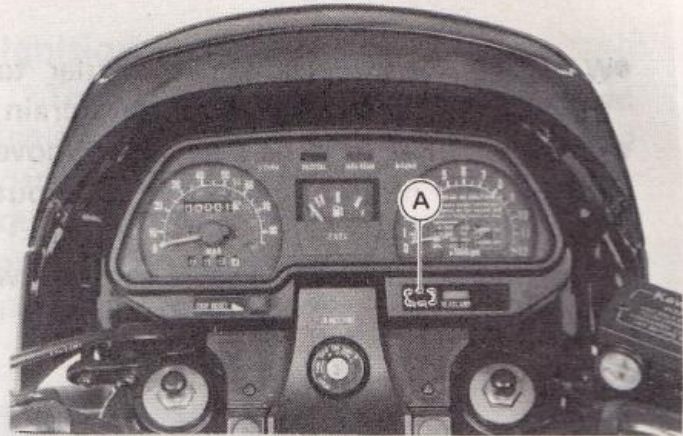
A. Oil Level Gauge C. Lower Level Line
B. Upper Level Line

- 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 make of oil that is already in the engine.

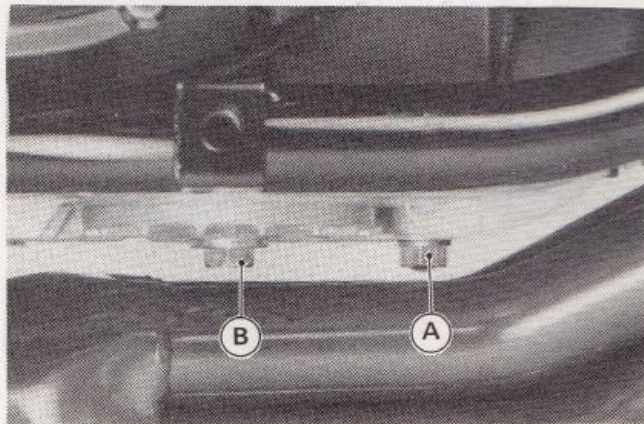
CAUTION If the engine oil gets extremely low or if the oil pump or oil passages clog up or otherwise do not function properly, the oil pressure warning light will light. If this light stays on when the engine speed is above 1,300 rpm (r/min), stop the engine immediately and find the cause.

Oil and/or Oil Filter Change

- Remove the muffler assembly, then stop the engine.
- Place an oil pan beneath the engine.
- Remove the engine drain plug.



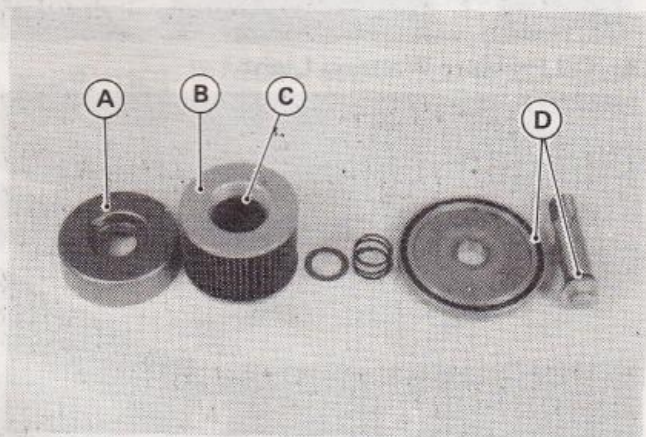
A. Oil Pressure Warning Light



A. Drain Plug

B. Oil Filter Mounting Bolt

- With the motorcycle perpendicular to the ground, let the oil completely drain.
- 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. Element Fence C. Grommet
B. Element D. O-Rings

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 plug with its gasket. Proper torque for it is shown in the table.

Note: Replace the damaged gasket with a new one.

- Install the muffler assembly.
 - Fill the engine up to the upper level with a good quality motor oil specified in the table.
 - Check the oil level.
- Tightening Torque

<p>Engine Drain Plug: 29 N-m (3.0 kg-m, 22 ft-lb)</p> <p>Oil Filter Mounting Bolt: 20 N-m (2.0 kg-m, 14.5 ft-lb)</p>
--

Engine Oil

<p>Grade: SE class</p> <p>Viscosity: SAE 10W40, 10W50, 20W40, or 20W50</p> <p>Capacity: 3.0 L (3.2 US qt) [when filter is not removed] 3.7 L (3.9 US qt) [when filter is removed]</p> <p>Oil Cooler and Hose 0.2 L (0.21 US qt)</p>

Ignition System

This motorcycle has a transistorized ignition system which has no moving parts in the electrical circuit. Consequently, there are no parts except an automatic timing advancer to require periodic maintenance.

Automatic Timing Advancer:

Lubrication

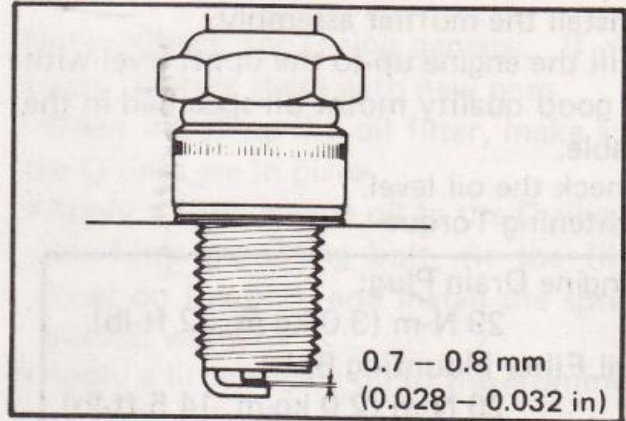
In accordance with the Periodic Maintenance Chart, the timing advancer should be lubricated by a competent mechanic following the instructions in the Service Manual.

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.

Maintenance

If any 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 or its equivalent.



Spark Plug

Standard Plug	NGK B8ES or ND W24ES-U
	©NGK BR8ES or ND W24ESR-U
Plug Gap	0.7 - 0.8 mm (0.028 - 0.032 in)
Tightening Torque	27 N-m (2.8 kg-m, 20 ft-lb)

© : Canadian model

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 instruction in the Service Manual.

Valve Clearance

Valve and valve seat wear decreases valve clearance, upsetting valve timing.

CAUTION If valve clearance is left unadjusted, the wear will eventually cause the valves to remain partly open; which lowers performance, burns the valves and valve seats, and may cause serious engine damage.

Valve clearance for each valve should be checked and adjusted in accordance with the Periodic Maintenance Chart.

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

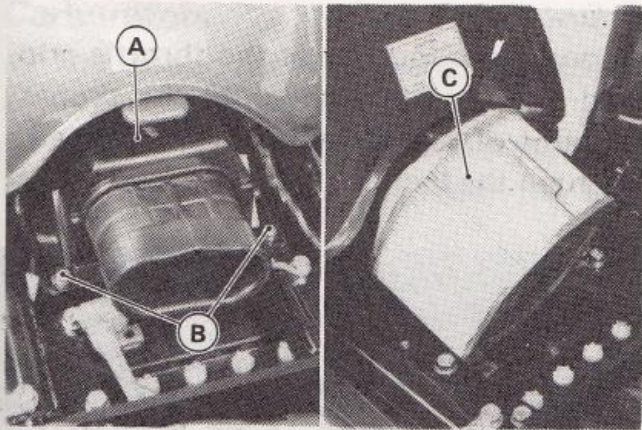
Air Cleaner

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 and replaced 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.

Element Removal

- Unlock the seat and remove it.
- Remove the air cleaner cap screws.
- Remove the air cleaner cap, and pull out the element.



A. Air Cleaner Cap
B. Screws

C. 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 or it will allow dirt into the carburetors.

WARNING

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

CAUTION

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

Element Cleaning

- Clean the element in a bath of a high flash-point solvent.
- Dry the element with compressed air or by shaking it. Don't oil the element, or carburetion will be up set.

WARNING

Clean the element in a well ventilated area, and take care that there are no sparks or flame anywhere near the working area; this includes any appliance with a pilot light. Do not use gasoline or a low flash-point solvent to clean the element. A fire or explosion could result.

Throttle Grip

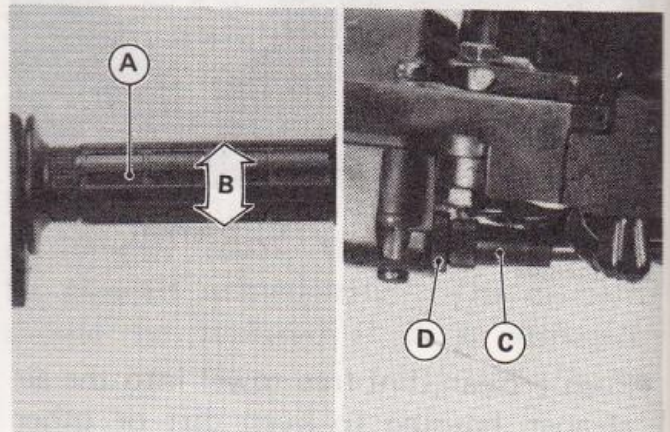
The throttle grip controls the throttle valves. If the throttle grip has excessive play due to either cable stretch or maladjustment, it will cause a delay in throttle response, especially at low engine speed. Also, the throttle valves may not open fully at full throttle. On the other hand, if the throttle 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, and adjust the play if necessary.

Inspection

- Check that there is 2 – 3 mm (0.08 – 0.12 in) throttle grip play when lightly turning the throttle grip back and forth.
- If there is improper play, adjust it.

Adjustment

- Loosen the locknut at the throttle grip, and turn the adjuster until the proper amount of throttle grip play is obtained. Tighten the locknut.



A. Throttle Grip

B. 2 – 3 mm
(0.08 – 0.12 in)

C. Adjuster

D. Locknut

Carburetors

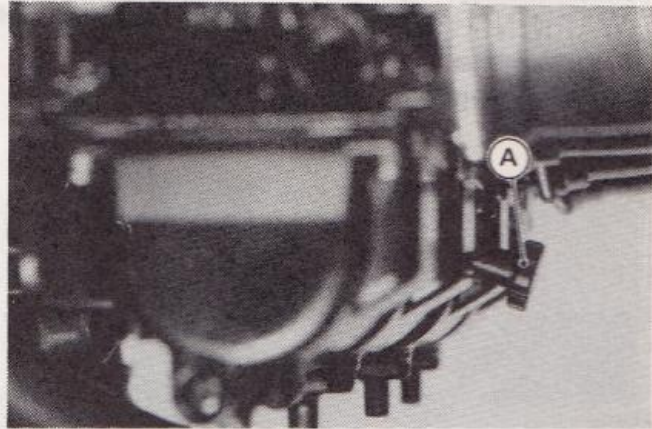
The carburetor adjustments, idle speed and synchronization, should be performed in accordance with the Periodic Maintenance Chart or whenever the idle speed is disturbed.

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

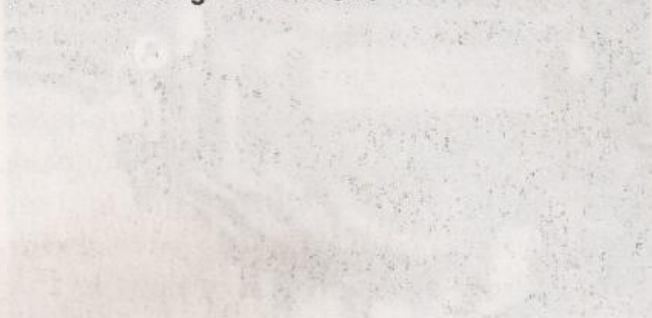
- Start the engine, and warm it up thoroughly.
- Adjust the idle speed to 950 – 1,050 r/min (rpm) by turning the idle adjusting screw.



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 cable may be improperly adjusted or incorrectly routed, or it may be damaged. Be sure to correct any of these conditions before riding.

WARNING Operation with a damaged cable could result in an unsafe riding condition.



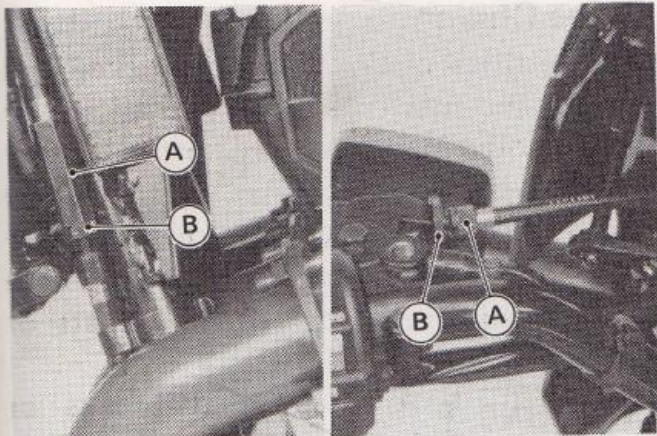
Clutch

Due to the friction plate wear and the clutch cable stretch over a long period of use, the clutch must be adjusted in accordance with the Periodic Maintenance Chart.

WARNING To avoid a serious burn, never touch the hot engine or an exhaust pipe during clutch adjustment.

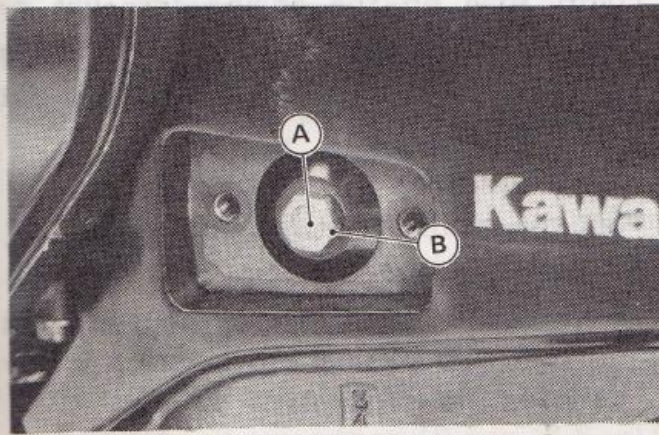
Adjustment

- Remove the clutch release adjusting cover.
- Loosen the locknuts, and turn in fully the clutch cable adjusters to give the cable plenty of play.
- Loosen the locknut, and turn the clutch release adjusting screw counterclockwise until it becomes hard to turn.
- Turn the release adjusting screw clockwise $\frac{1}{4}$ turn from that point, and tighten the locknut.



A. Adjuster

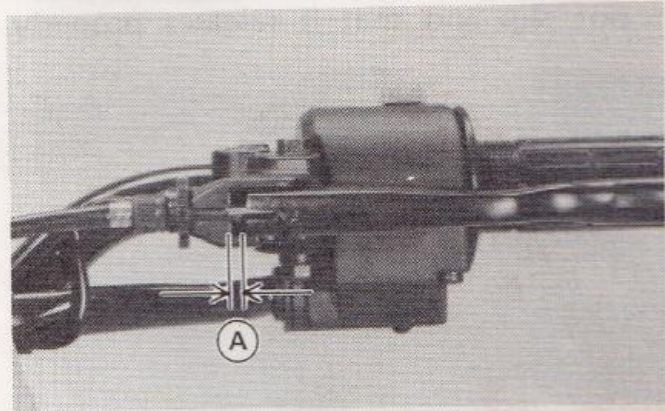
B. Locknut



A. Adjusting Screw

B. Locknut

- Turn the clutch cable adjusters so that the clutch lever will have 2 – 3 mm (0.08 – 0.12 in) of play as shown in the figure.



A. 2 – 3 mm (0.08 – 0.12 in)

WARNING Be sure each end of the clutch outer cable is fully seated in its fitting, or it could slip into place later, creating enough cable play to prevent clutch disengagement, resulting in a hazardous riding condition.

- Tighten the locknuts, and install the removed parts.
- After the adjustment is made, start the engine and check that the clutch does not slip and that it releases properly.

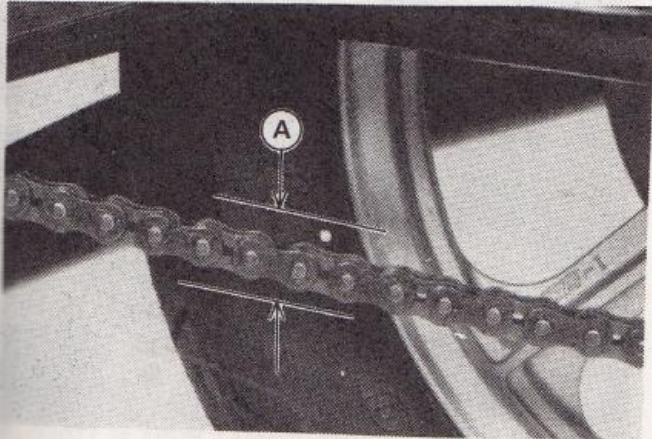
Drive Chain

The drive chain must be checked, adjusted, and lubricated in accordance with the Periodic Maintenance Chart for safety and to prevent excessive wear. If the chain becomes badly worn or maladjusted — either too loose or too tight — the chain could jump off the sprockets or break.

WARNING A chain that breaks or jumps off the sprockets could snag on the engine sprocket or lock the rear wheel, severely damaging the motorcycle and causing it to go out of control.

Slack Inspection

- Set the motorcycle up on its side stand.
- Rotate the rear wheel to find the position where the chain is tightest, and measure the vertical movement midway between the sprockets.



A. 30 – 40 mm (1.2 – 1.6 in)

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

Drive Chain Slack

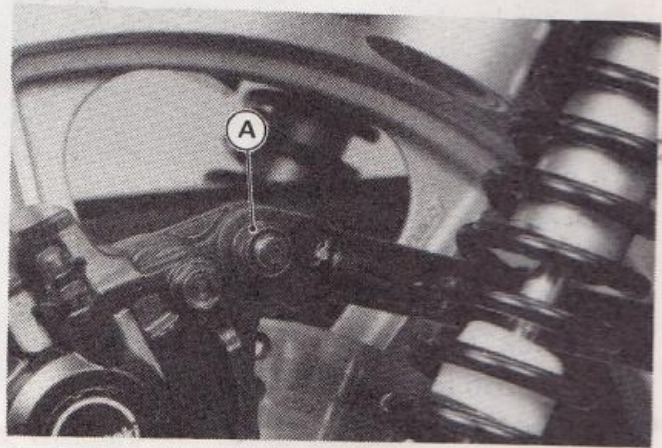
Standard	30 – 35 mm (1.2 – 1.4 in)
Too tight or too loose	less than 30 mm (1.2 in) more than 40 mm (1.6 in)

Adjustment

- Loosen the rear torque link nut.

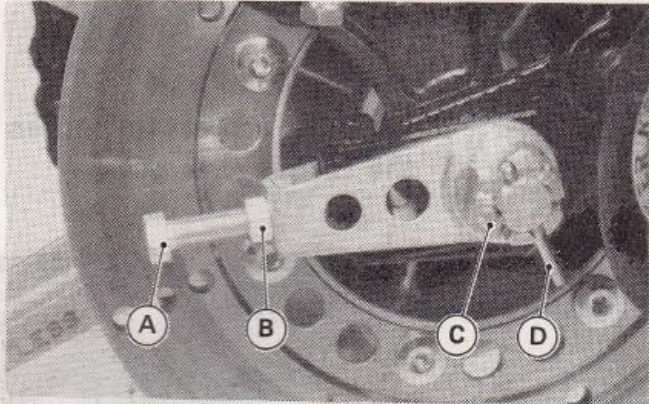
CAUTION

Do not forget to loosen the torque link nut.



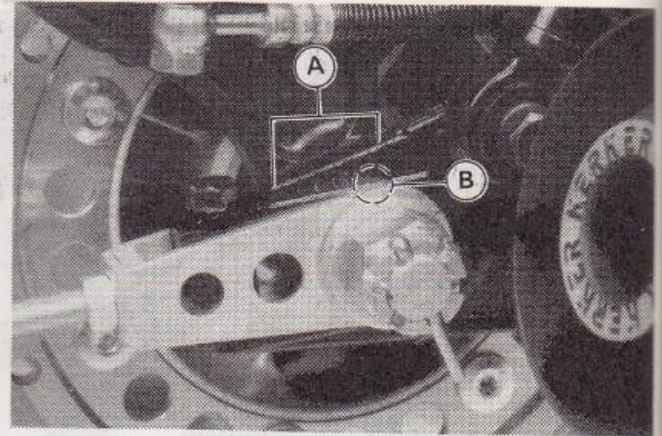
A. Torque Link Nut

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



A. Adjusting Bolt C. Axle Nut
B. Locknut D. Cotter Pin

- If the chain is too tight, back out the left and right chain adjusting bolts evenly, and kick the wheel forward until the chain is too loose.
- Turn both chain adjusting bolts evenly until the drive chain has the correct amount of slack. To keep the chain and wheel properly aligned, the notch on the left chain adjuster should align with the same swing arm mark that the right chain adjuster notch aligns with.



A. Alignment Marks B. Notch

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

WARNING Misalignment of the wheel will result in abnormal wear, and may result in an unsafe riding condition.

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

Tightening Torque

Axle Nut	120 N-m (12.0 kg-m, 87 ft-lb)
Torque Link Nut	29 N-m (3.0 kg-m, 22 ft-lb)

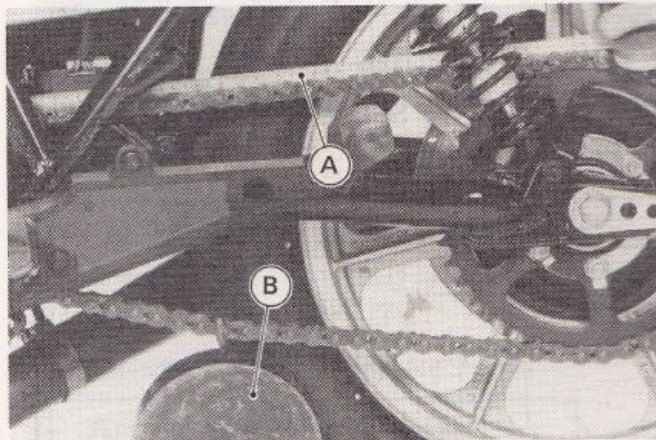
- Rotate the wheel, measure the chain slack again at the tightest position, and readjust if necessary.
- Insert a new cotter pin through the axle nut and axle, and spread its ends.
- Tighten the rear torque link nut to the specified torque.

WARNING If the axle and torque link nuts are not securely tightened, an unsafe riding condition may result.

Wear Inspection

- Stretch the chain taut either by using the chain adjusters, or by hanging a 98 N (10 kg, 20 lb) weight on the chain.

- Measure the length of 20 links. If the distance from the center of the 1st pin to the 21st pin is more than 389 mm (15.3 in), the chain should be replaced.



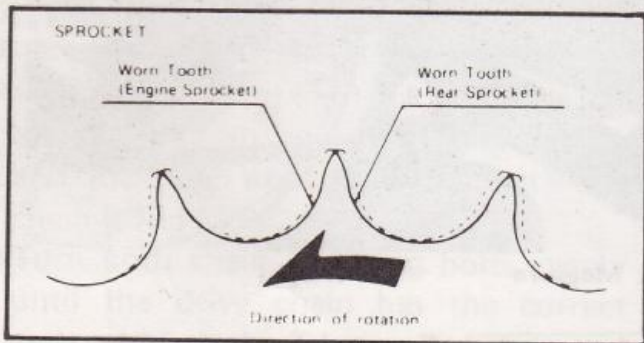
A. Measure

B. Weight

WARNING For safety, use only the standard chain. It is an endless type and should not be cut for installation; have it installed by an authorized Kawasaki Dealer.

- Rotate the rear wheel to inspect the drive chain for damaged rollers, and loose pins and links.
- Also inspect the sprockets for unevenly or excessively worn teeth, and damaged teeth.

Note: Sprocket wear is exaggerated for illustration. See Service Manual for wear limits.

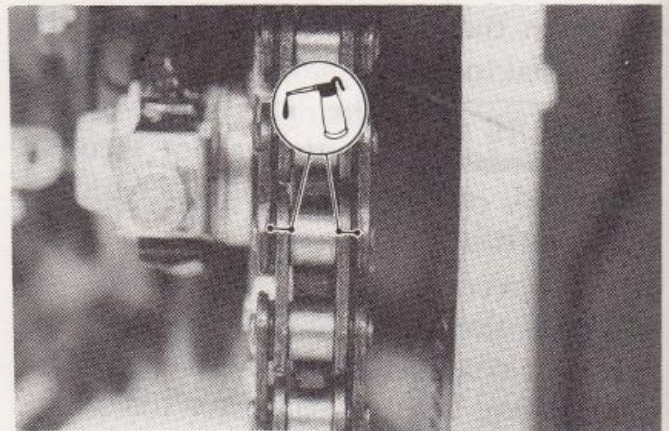


- If there is any irregularity, have the drive chain and/or the sprockets replaced by an authorized Kawasaki Dealer.

Lubrication

Lubrication is also necessary after riding through rain or on wet roads, or any time that the chain appears dry. A heavy oil such as SAE 90 is preferred to a lighter oil because it will stay on the chain longer and provide better lubrication.

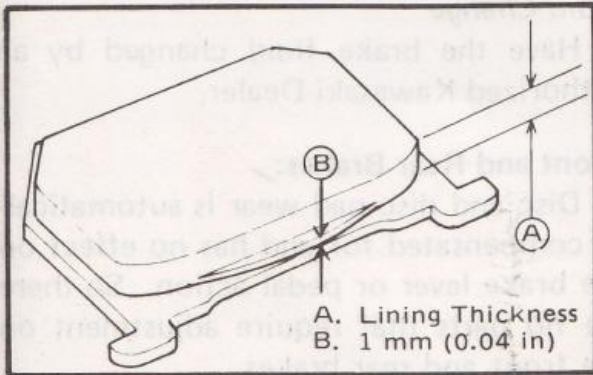
- Apply oil to the sides of the rollers so that it will penetrate to the rollers and bushings. Wipe off any excess oil.



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.



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.3.

Recommended Disc Brake Fluid

Atlas Extra Heavy Duty
Shell Super Heavy Duty
Texaco Super Heavy Duty
Wagner Lockheed Heavy Duty
Castrol Girling-Green
Castrol GT (LMA)
Castrol Disc Brake Fluid

CAUTION

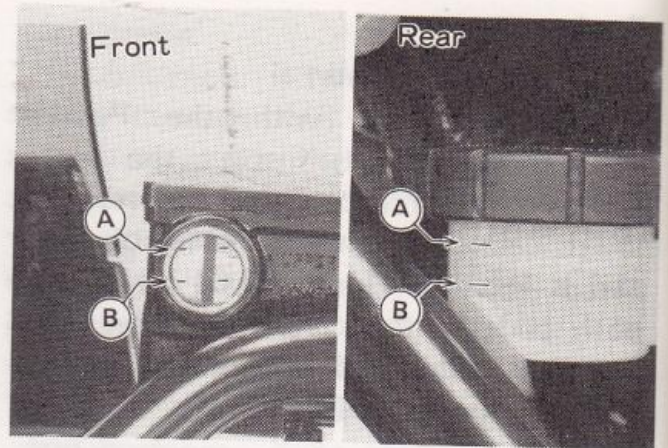
- Do not spill brake fluid onto any painted surface.
- Do not use fluid from a container that has been left open or that has been unsealed for a long time.
- Check for fluid leakage around the fittings.
- Check for brake hose damage.

Fluid Level Inspection

- The brake fluid level in the reservoir must be kept between the upper and lower level lines (reservoir held horizontal).
- 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 already is in the reservoir are unidentified.



A. Upper Level

B. Lower Level

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.

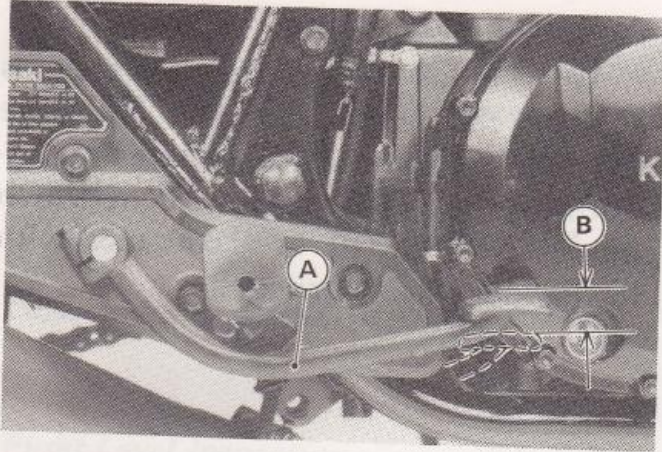
WARNING If the brake lever or pedal feels mushy when it is applied, there might be air in the brake lines or the brake may be defective. Since it is dangerous to operate the motorcycle under such conditions, have the brake checked immediately by an authorized Kawasaki Dealer.

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 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.



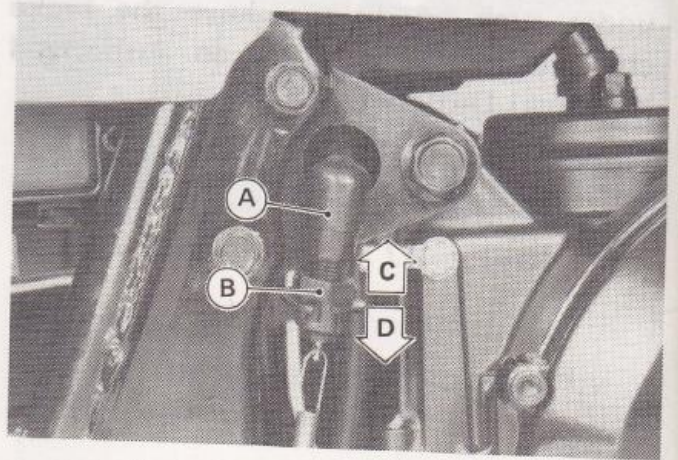
A. Rear Brake Pedal B. 15 mm (0.6 in)

- 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.



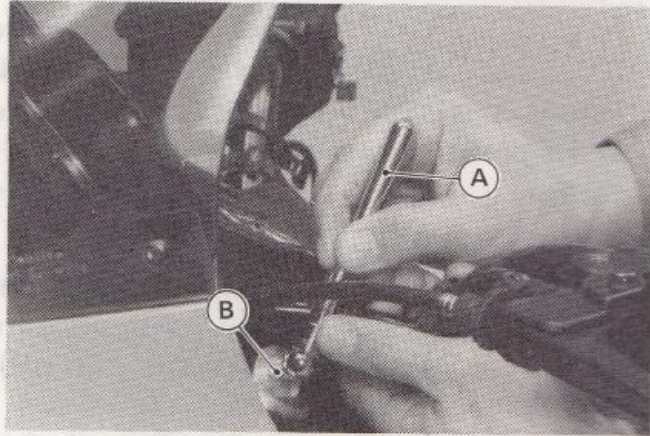
A. Rear Brake Light Switch C. Lights sooner
B. Adjusting Nut D. Lights later

Front Fork

The front fork legs of this model contain compressed air for optimum performance. This type of front fork is especially effective when the fork is almost fully compressed. It also has the advantage that the air pressure can be varied within the usable range to suit various riding conditions. Lower air pressure is for comfortable riding, but it should be increased for high speed riding, or riding on bad roads.

Air Pressure Adjustment

- Raise the front wheel off the ground by using a jack.
- Take off the air valve cap on the top of the front fork.
- Check the air pressure with the air pressure gauge. The standard air pressure is 49 kPa (0.5 kg/cm², 7.1 psi), and the usable range of air pressure is 39 – 59 kPa (0.4 – 0.6 kg/cm², 5.7 – 8.5 psi).



A. Air Pressure Gauge

B. Air Valve

Note: ○ Check the air pressure when the front fork is cold (room temperature).
○ 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.

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

Note: A normal tire pump can be used.

CAUTION ○Try to set the air pressure of the right and left fork legs as equally as possible. The difference in air pressure between the right and left fork legs must be within 10 kPa (0.1 kg/cm², 1.4 psi).

○Inject air little by little so that air pressure does not rise rapidly. Air pressure exceeding 245 kPa (2.5 kg/cm², 36 psi), may damage the oil seal.

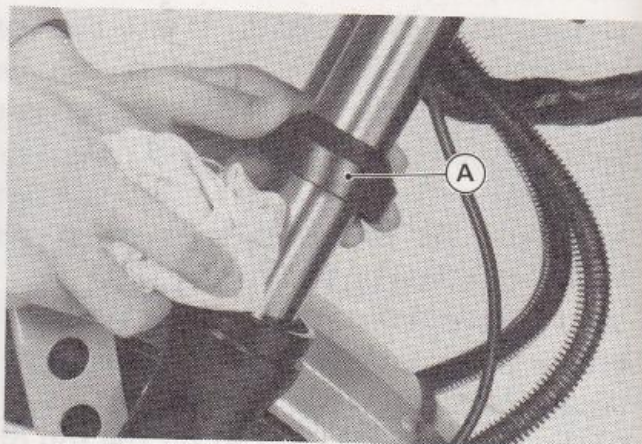
WARNING ○Be sure to adjust the air pressure within the usable range. Pressure too high or too low can produce a hazardous riding condition. ○Only air or nitrogen gas can be used. Never inject oxygen or any kind of explosive gas.

○Do not incinerate the front fork.

Cleaning

Dirt or sand that has worked its way past a dust seal will eventually damage the oil seal, causing oil leakage. In accord-

ance with the Periodic Maintenance Chart, slide up the dust seals and clean out any dirt or sand. Be careful not to damage either the oil seal or the inner tube surface.



A. Dust Seal

Fork Oil Change

Since the front fork oil deteriorates with use, have the oil in both tubes changed in accordance with the Periodic Maintenance Chart by your authorized Kawasaki Dealer.

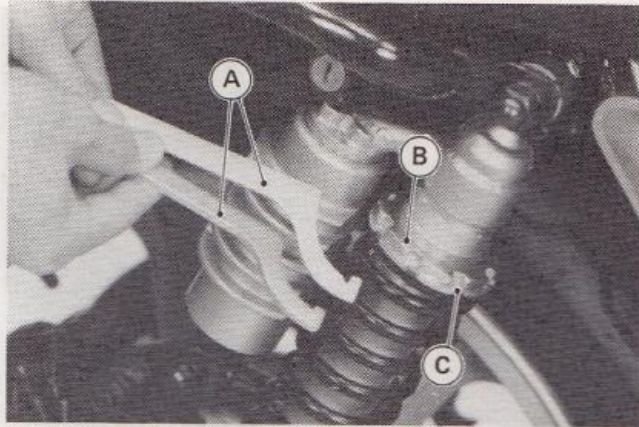
Rear Shock Absorbers

Spring Adjustment

The spring adjusting sleeve on each rear shock absorber can be adjusted for different road and loading conditions. If the spring action feels too soft or too stiff, adjust it in accordance with the following procedure:

- Using the hook wrenches, loosen the locknut and turn the adjusting nut as required.
- Adjust the spring by turning the adjusting nut counterclockwise to get softer or clockwise to get harder.
- Tighten the locknut.

WARNING If both spring adjusting sleeves are not adjusted equally, handling may be impaired and a hazardous condition may result.



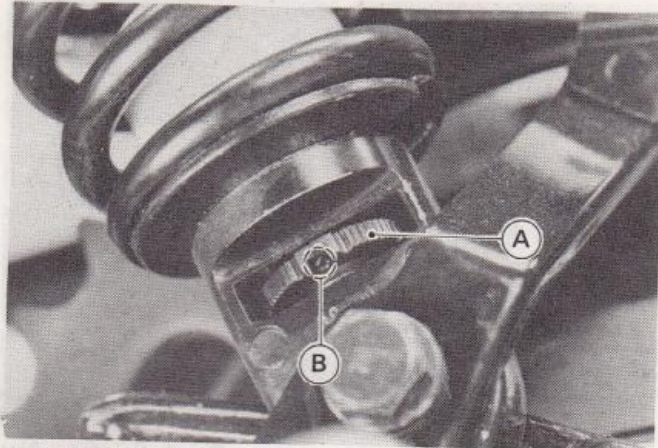
A. Hook Wrenches

B. Locknut

C. Adjusting Nut

Damper Adjustment

The damper adjuster on each rear shock absorber has 5 positions so that the damping force can be adjusted for different road and loading conditions. The numbers on the damper adjuster show the setting position of the damper.



A. Damper Adjuster

B. Number

If the damper setting feels too soft or too stiff, adjust it in accordance with the following table:

Position	1	2	3	4	5
Damping Force	Larger →				

WARNING If both damper adjusters are not adjusted equally, handling may be impaired and a hazardous condition may result.

Note: When setting the damping force, turn the damper adjuster to the desired number until you feel a click.

Rear Shock Absorber Setting

To obtain the stable handling or suitable riding condition, adjust the spring force or damping force for different road and loading conditions if necessary. For instance, the initial setting (spring adjusting sleeve position is the softest; damper adjuster position is 1) is softest and designed for an average-built rider of 68 kg (150 lbs) with no accessories. Ordinarily, the heavier the total load becomes, the harder the suspension should be set.

Wheels

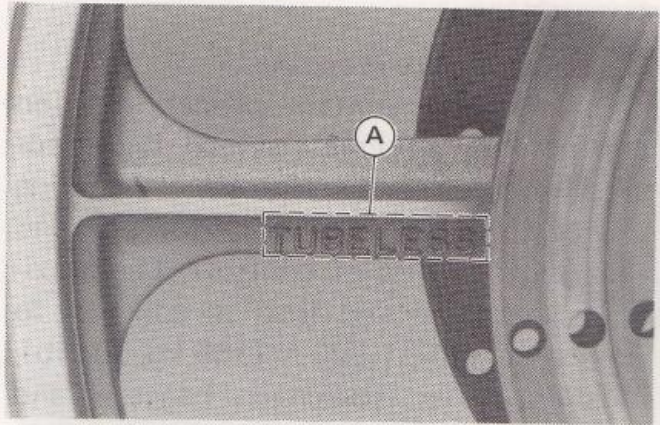
Tubeless tires are installed on the wheels of this motorcycle. The indications of TUBELESS on the tire side wall and the rim show that the tire and rim are specially designed for tubeless use.

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.

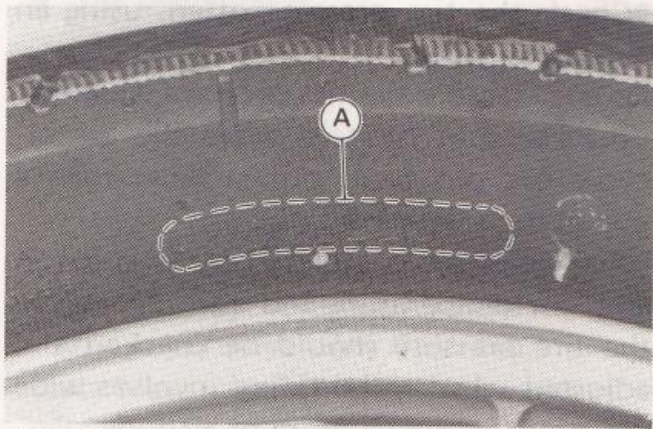
WARNING ○The tires, rims, and air valves on this motorcycle are designed only for tubeless type wheels. The recommended standard tires, rims, and air valves must be used for replacement.

○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.



A. TUBELESS Mark



A. TUBELESS Mark

Tires:

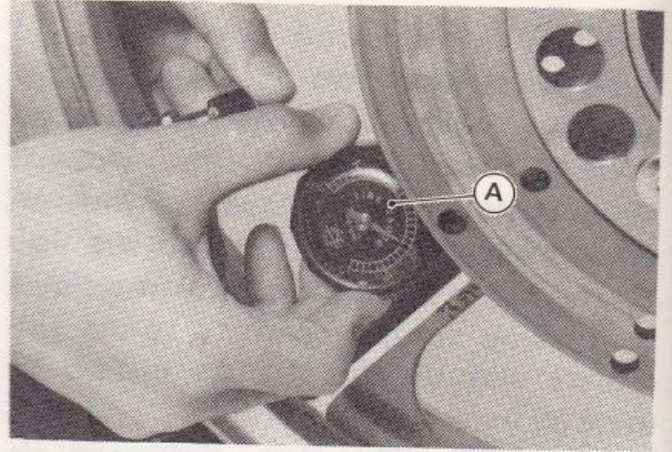
Payload and Tire Pressure

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 1,620 N (165 kg, 364 lb), including rider, passenger, baggage, and accessories.

● Check the tire pressure often, using an accurate 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.



A. Tire Pressure Gauge

Air Pressure

Front	196 kPa (2.00 kg/cm ² , 28 psi)	
Rear	Up to 956 N (97.5 kg, 215 lb) load	221 kPa (2.25 kg/cm ² , 32 psi)
	956 – 1,620 N (97.5 – 165 kg, 215 – 364 lb) load	245 kPa (2.50 kg/cm ² , 36 psi)

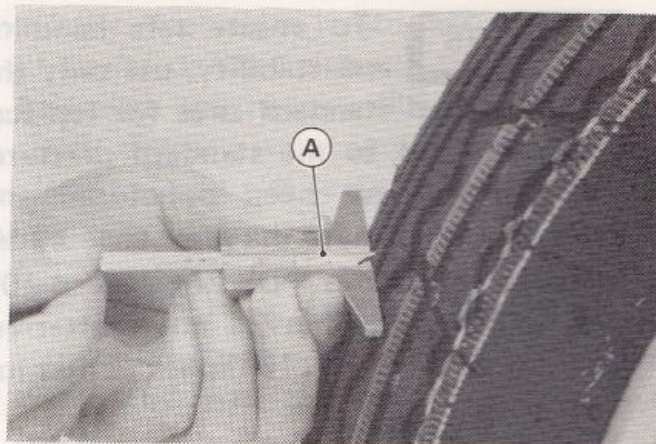
Tire Wear, Damage

As the tire tread wears down, the tire becomes more susceptible to the 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.

Minimum Tread Depth

Front	_____	1 mm (0.04 in)
Rear	Under 130 kph (80 mph)	2 mm (0.08 in)
	Over 130 kph (80 mph)	3 mm (0.12 in)



A. Tire Depth Gauge

- 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 kph (60 mph) within 24 hours after repair, and 180 kph (110 mph) at any time after that.

Standard Tire

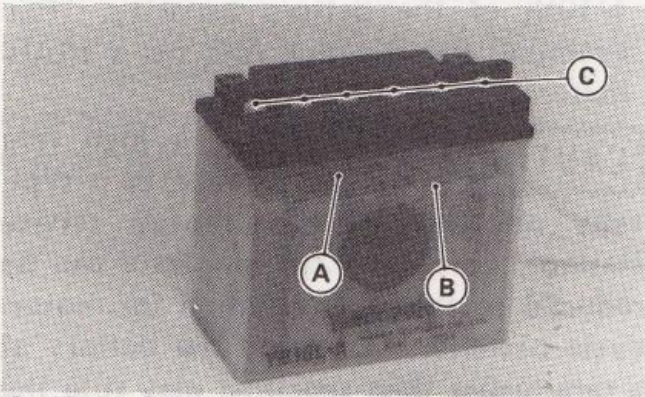
Front	100/90-V19 Tubeless DUNLOP K300M
Rear	120/90-V18 Tubeless DUNLOP K300

Battery

Battery Electrolyte Level Inspection

The battery electrolyte level must be kept between the upper and lower level lines. Check the electrolyte level in each cell in accordance with the Periodic Maintenance Chart.

- 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. Upper Level
B. Lower Level

C. Filler Caps

- 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.

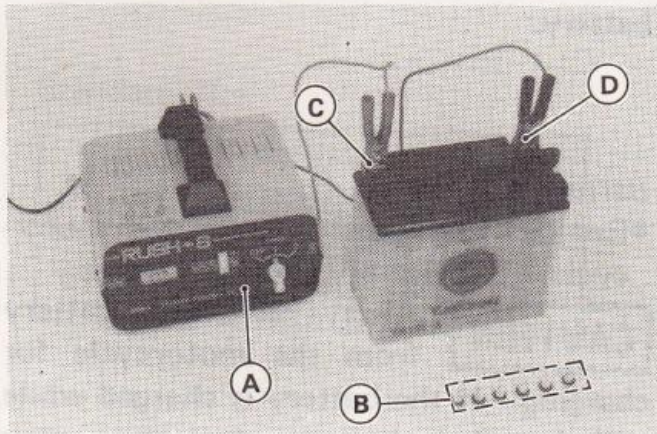
CAUTION Add only distilled water to the battery. Ordinary tap water is not a substitute for distilled water and will shorten the life of the battery.

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 over 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 -).



A. Battery Charger
B. Filler Caps

C. (+) Terminal
D. (-) Terminal

WARNING

Because the battery gives off an explosive 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.

- 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

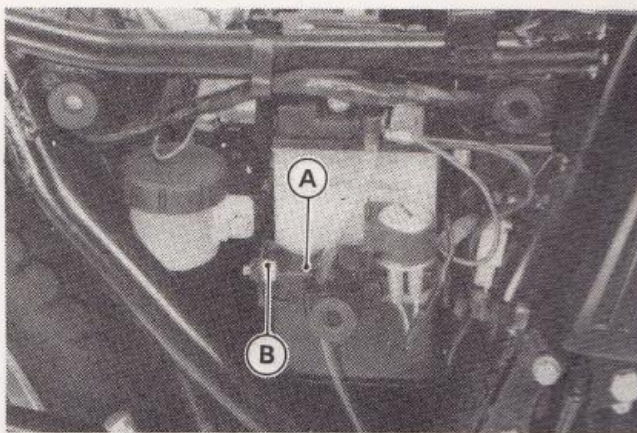
excess heat which can warp the plates and cause internal shorting. Higher-than-normal charging rates also cause the plates to shed active material. Deposits will accumulate, and can cause internal shorting. If the temperature of the electrolyte rises above 45°C (115°F) during charging, reduce the charging 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

- Unlock the seat and remove it.
- Remove the right side cover.

- Remove the bolt, and take off the battery holder so that it does not hinder battery removal.

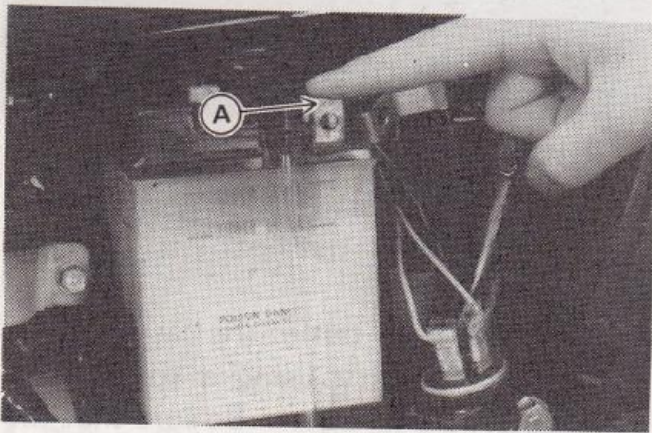


A. Battery Holder B. Bolt

- Disconnect the leads from the battery, first from the - terminal and then the + 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, and route the battery vent hose as shown on the caution label.
- Put a light coat of grease on the terminals to prevent corrosion.



A. Grease

- Connect the capped lead to the + terminal, and then connect the black lead to the - terminal.
- Cover the + terminal with its protective cap.

CAUTION Make sure the battery vent hose is kept away from the drive chain and exhaust system. Battery electrolyte can corrode and dangerously weaken the chain. Do not let the vent hose become folded, pinched, or melted by the exhaust system. An unvented battery will not keep a charge and it may crack from built-up gas pressure.

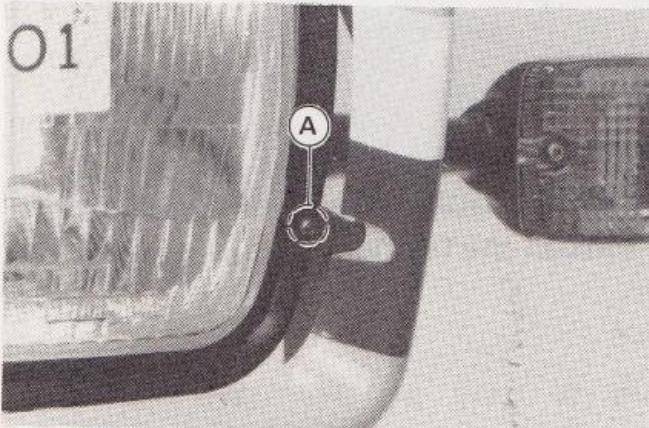
- Install the battery holder.
- Put the right side cover.
- Lock the seat.

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.

- Turn the adjusting screw on the headlight rim in or out until the beam points straight ahead. Turning the adjusting screw clockwise makes the headlight beam point to the left.

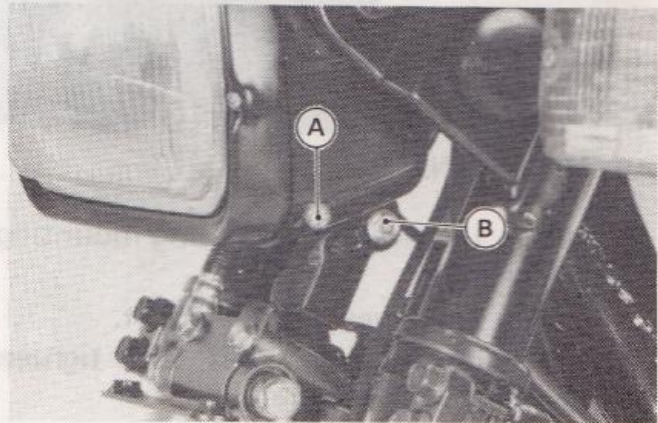


A. Adjusting Screw

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 dazzle oncoming drivers.

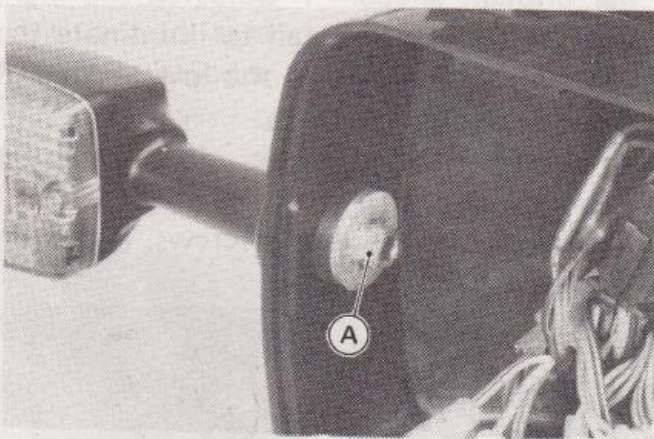
- Remove the fairing (See Fairing Removal).
- Remove the mounting screws, and drop out the headlight unit.



A. Mounting Screw

B. Headlight Bolt

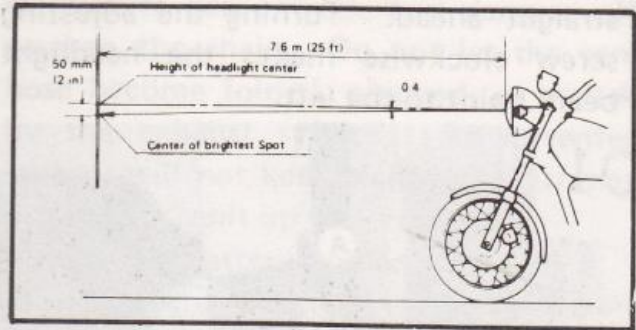
- Loosen the lower headlight bolt.
- Loosen the headlight housing mounting nuts, and adjust the headlight vertically.



A. Mounting Nut

- Tighten the headlight housing mounting nuts.
- Tighten the lower headlight bolt.
- Install the headlight unit, and tighten the mounting screws.

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.

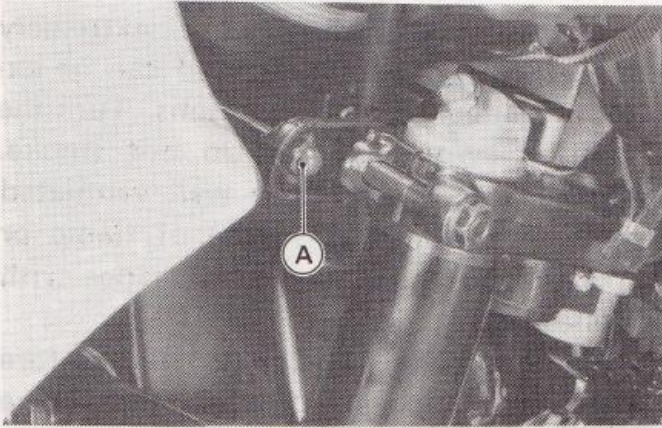


- Install the fairing.

Fairing Removal

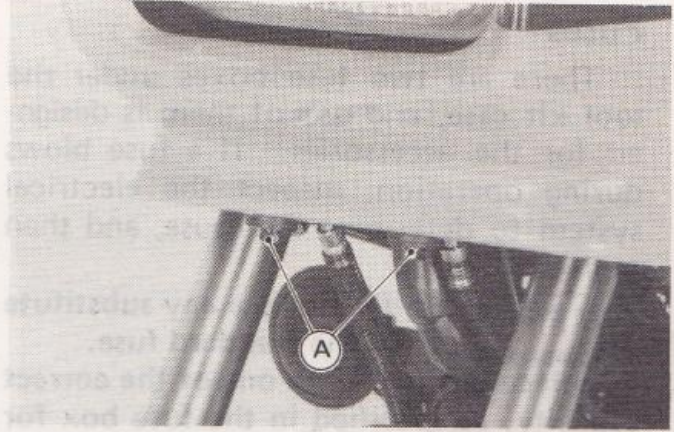
To adjust the headlight beam, remove the fairing as follows

- Remove the mounting nuts.



A. Mounting Nut

- Unscrew the mounting bolts at the bottom of the fairing.



A. Mounting Bolts



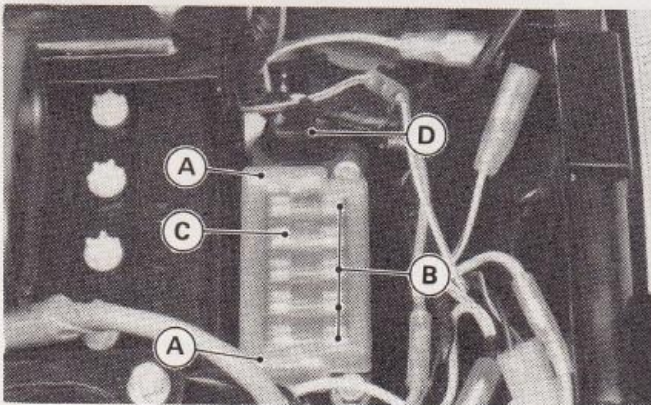
Fuses

There are two fuse boxes under the tool kit case, and one of them is designed for the accessories. If a fuse blows during operation, inspect the electrical system to determine the cause, and then replace the fuse.

WARNING

○Do not use any substitute for the standard fuse.

○Replace the fuse with one of the correct capacity, as specified in the fuse box for each circuit.



A. Spare Fuse C. 30A Fuse
B. 10A Fuses D. 10A Fuses for Accessory

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.

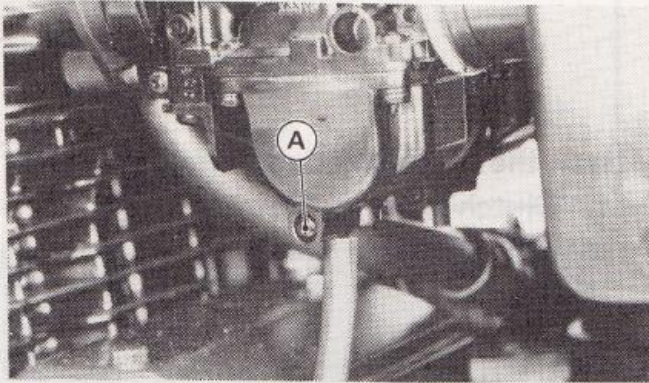
○Make sure the engine is cold before working. Wipe any fuel off the engine before starting it.

Inspection

- Turn the fuel tap to PRI position.
- Connect a suitable hose to the fitting at the bottom of each carburetor float bowl.

General Lubrication

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



A. Drain Screw

- Tighten the drain screws.
- If any water or dirt appeared 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, and especially after using a high-pressure spray washer.

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
- Clutch Lever
- Front Brake Lever
- Rear Brake Pedal
- Rear Brake Rod Joint

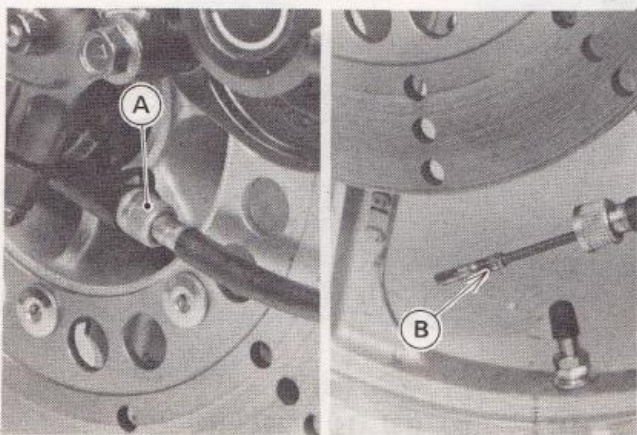
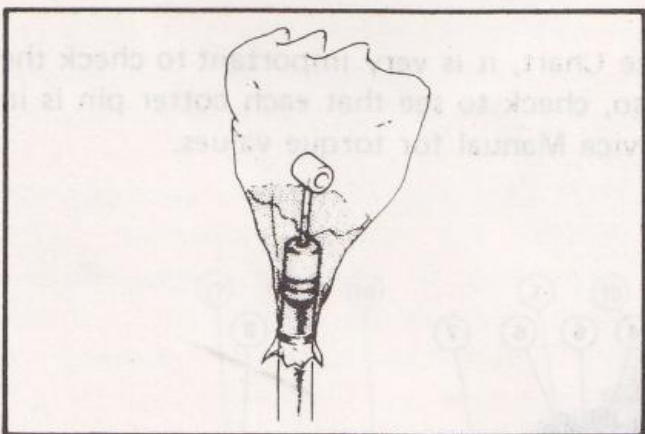
Soak the following Cables in Motor Oil:

- Clutch Inner Cable
- Throttle Inner Cable

Apply Grease to the following Points:

- Clutch Inner Cable Upper End
- Throttle Inner Cable Upper End
- *○ Speedometer Cable
- * Grease the lower part of the inner cable sparingly.

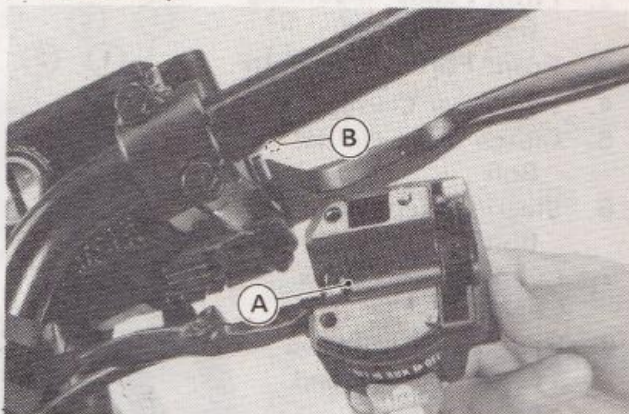
General Lubrication



A. Cable Nut B. Grease

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.



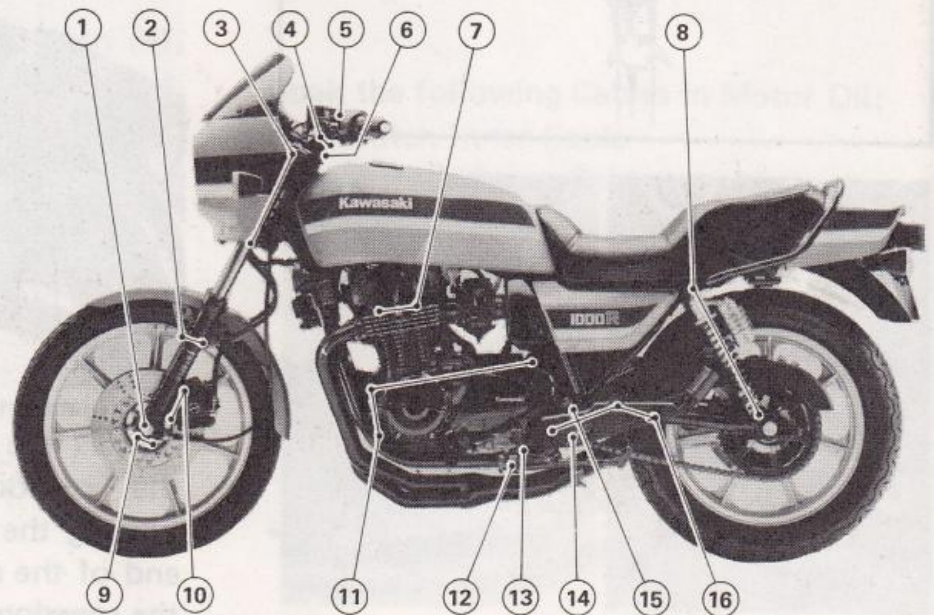
A. Projection B. Hole

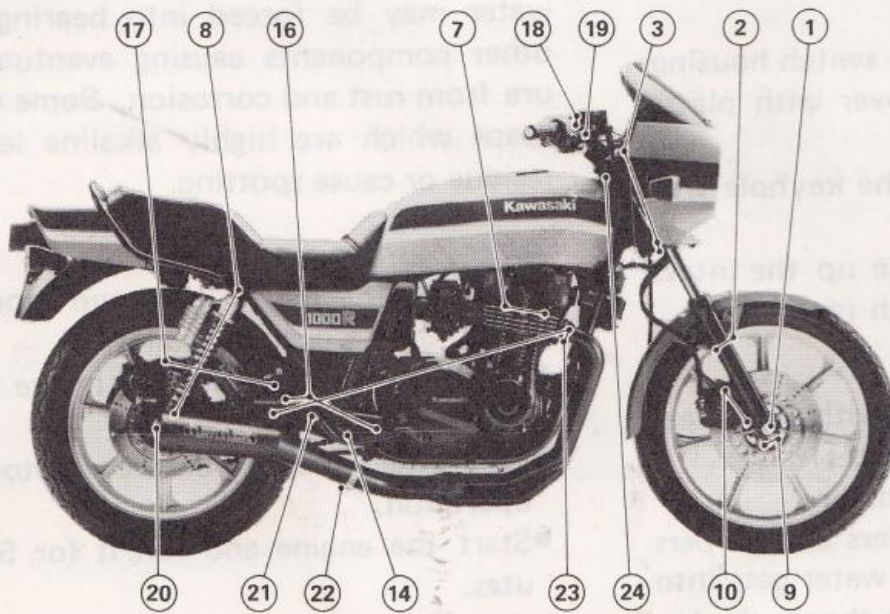
○Insert the speedometer inner cable into the speedometer gear housing while turning the wheel so that the slot in the end of the cable will seat in the tongue of the speedometer pinion.

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. Refer to the Service Manual for torque values.

1. Front Axle Nut
2. Front Fender Mounting Bolts
3. Front Fork Clamp Bolts
4. Handlebar Clamp Bolts
5. Clutch Lever Holder Bolt
6. Steering Stem Head Bolt
7. Cylinder Head Bolts and Nuts
8. Rear Shock Absorber Mounting Bolt and Nut
9. Front Axle Clamp Nuts
10. Caliper Mounting Bolts
11. Engine Mounting Bolts





1. Steering Stem Head Clamp Bolt
2. Side Stand Bolt
3. Shift Pedal Bolt
4. Footpeg Mounting Nut
5. Swing Arm Pivot Shaft Nut
6. Footpeg Mounting Bracket Bolts
7. Torque Link Nuts
8. Master Cylinder Clamp Bolts
9. Brake Lever Pivot Bolt
10. Rear Axle Nut
11. Brake Pedal Bolt
12. Muffler Connecting Pipe Clamp
13. Muffler Mounting Nuts
14. Steering Stem Head Clamp Bolt
15. Side Stand Bolt
16. Shift Pedal Bolt
17. Footpeg Mounting Nut
18. Swing Arm Pivot Shaft Nut
19. Footpeg Mounting Bracket Bolts
20. Torque Link Nuts
21. Master Cylinder Clamp Bolts
22. Brake Lever Pivot Bolt
23. Rear Axle Nut
24. Brake Pedal Bolt

Cleaning

Preparation for Washing

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

- Rear opening of the muffler; Cover with a plastic bag secured with a rubber band.
- 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.

Where to be Careful

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

- Speedometer and tachometer
- Disc brake master cylinders and calipers
- Under the fuel tank; If water gets into the ignition coils or into the 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 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 discs with an oil-less solvent such as trichloroethylene or acetone. Observe the solvent manufacturer's warnings.

STORAGE

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 (½ 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 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 the drive chain and all the cables.
- Remove the battery, and store it where it will not be exposed to direct sunlight, moisture, or freezing temperatures. During storage it should be given a slow charge (one ampere or less) about once a month. Keep the battery well charged 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 a plastic bag over the exhaust pipes to prevent moisture from entering.
- Put a cover over the motorcycle to keep dust and dirt from collecting on it.

Preparation for 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 routed away from the chain.
- 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 Lubrication section.

////////////////// TROUBLESHOOTING GUIDE ////////////////////

Engine Does Not Start:

Starter Motor Not Rotating

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

Engine Cranked Over But Does Not 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

- Incorrect valve clearance

- Battery discharged

Engine Stalls:

Just When Shifting Into 1st Gear

- 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

MAINTENANCE RECORD

Vehicle Identification No. JKAKZCR13DA002198

Owner Name _____

Warranty Start Date _____

Engine Displacement K2T00JE041379

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

Date	Odometer Reading	Maintenance Performed	Dealer Name	Dealer Address

00-R2

KAWASAKI
HEAVY INDUSTRIES, LTD.
MOTORCYCLE GROUP
Part No. 99920-1220-01

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