Kawasaki

KZ 305 LTD

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 crankcase emission (1) and exhaust emission (2) control systems in compliance with applicable regulations of the United States Environmental Protection Agency and California Air Resources Board. Additionally, Kawasaki has incorporated an evaporative emission control system (3) in compliance with applicable regulations of the California Air Resources Board on vehicle sold in California only.

1. Crankcase Emission Control System

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

2. Exhaust Emission Control System

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

3. Evaporative Emission Control System

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

High Altitude Performance Adjustment Information

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

NOTE

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

Installation Instructions:

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

MAINTENANCE AND WARRANTY

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

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

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

You should keep a maintenance record for your motorcycle. To assist you in keeping this record, we have provided space on pages 99 through 102 of this manual where an authorized Kawasaki Dealer, or someone equally competent, can record the maintenance. You should also retain copies of maintenance work orders, bills, etc., as verification of this maintenance.

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED:

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

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

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

FOREWORD

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

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

To ensure a long, trouble-free life for your motorcycle, give it the proper care and maintenance described in this manual. For those who would like more detailed information on their Kawasaki motorcycle, a Service Manual is available for purchase from any Kawasaki Dealer. The Service Manual contains detailed disassembly and maintenance information.

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

KAWASAKI HEAVY INDUSTRIES, LTD.
MOTORCYCLE GROUP

Aug. 1986. ① . Ⓜ

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SPECIFICATIONS

PERFORMANCE	
Minimum Turning Radius	2.3 m (90.6 in)
Braking Distance	12.5 m from 50 km/h (41 ft from 31 mph)
DIMENSIONS	
Overall Length	2,030 mm (79.9 in)
Overall Width	820 mm (32.3 in)
Overall Height	1,150 mm (45.3 in)
Wheelbase	1,365 mm (53.7 in)
Road Clearance	150 mm (5.9 in)
Dry Weight	153 kg (337 lbs) (Cal) 153.5 kg (338.5 lbs)
ENGINE	
Type	SOHC 2-cylinder, 4-stroke, air-cooled
Displacement	306 mL (18.67 cu in)
Bore x Stroke	61.0 x 52.4 mm (2.40 x 2.06 in)
Compression Ratio	9.5 : 1
Starting System	Electric starter
Carburetors	Keihin CV32 x 2
Ignition System	CDI
Ignition Timing (Electronically advanced)	12° BTDC @1,250 r/min (rpm) – 42° BTDC @3,100 r/min (rpm)
Spark Plugs	NGK D9EA or ND X27ES-U
Lubrication System	Forced lubrication (Wet sump)
Engine Oil	SE or SF class SAE 10W40, 10W50, 20W40, or 20W50
Engine Oil Capacity	1.8 L (1.9 US qt)

TRANSMISSION	
Transmission Type	6-speed, constant mesh, return shift
Clutch Type	Wet, multi disc
Driving System	Belt drive
Primary Reduction Ratio	3.736 (71/19)
Final Reduction Ratio	2.173 (50/23)
Overall Drive Ratio	7.253 (Top gear)
Gear Ratio: 1st	2.600 (39/15)
2nd	1.789 (34/19)
3rd	1.409 (31/22)
4th	1.160 (29/25)
5th	1.000 (27/27)
6th	0.892 (25/28)
FRAME	
Castor	28.5°
Trail	106 mm (4.2 in)
Tire Size: Front	3.00S-18 4PR
Rear	120/90-16 63S
Fuel Tank Capacity	10.5 L (2.8 US gal)
ELECTRICAL EQUIPMENT	
Battery	12V 10AH
Headlight	12V 50/35W
Tail/Brake Light	12V 8/27W
Turn Signal Lights	12V 23W

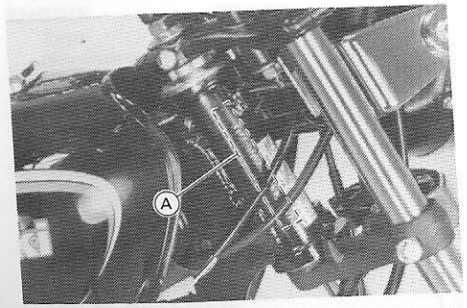
(Cal): Californian model

Specifications subject to change without notice.

SERIAL NUMBER LOCATIONS

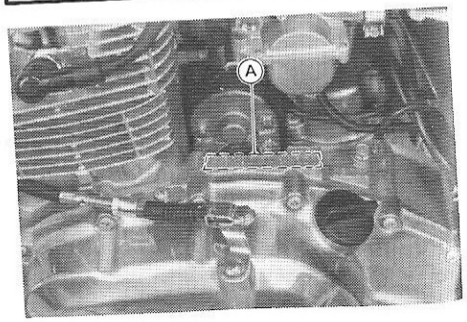
The engine and frame serial numbers are used to register the motorcycle. They are the only means of identifying your particular machine from others of the same model type. These serial numbers may be needed by your dealer when ordering parts. In the event of theft, the investigating authorities will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

Frame No.



A. Frame Number

Engine No.



A. Engine Number

CONSUMER INFORMATION

Vehicle Minimum Stopping Distance on Dry Pavement

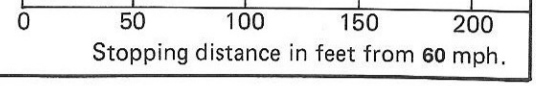
These figures indicate braking performance that can be met or exceeded by the vehicle to which they apply, without locking the wheels, under different conditions of loading. The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the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

Description of vehicle to which this table applies: Model KZ305-B2

A. Fully Operational Service Brake

Load: Light — 153 feet

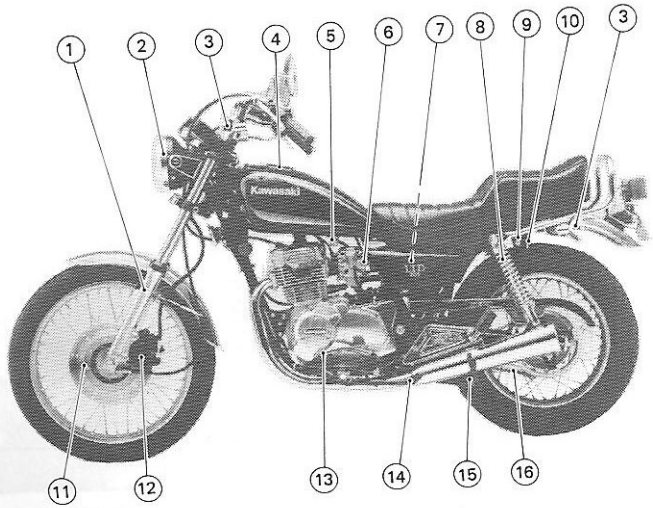
Maximum — 160 feet



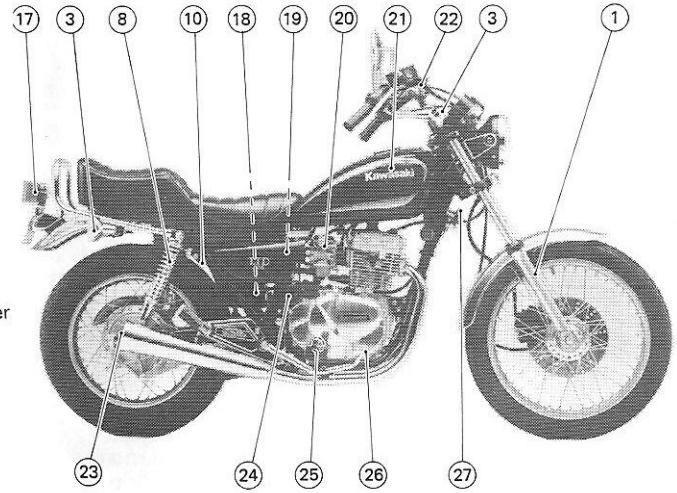
Stopping distance in feet from **60** mph.

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

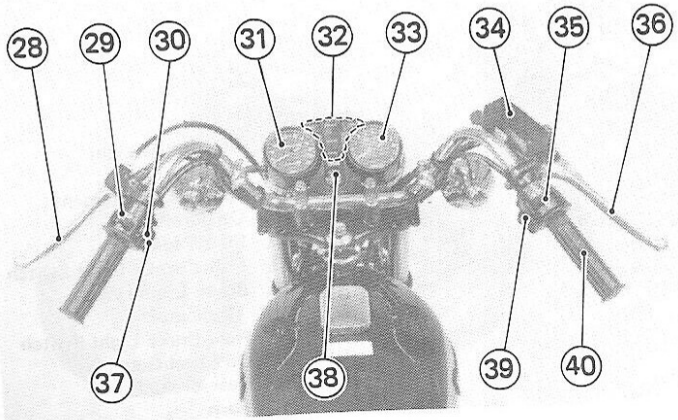
LOCATION OF PARTS



1. Front Fork
2. Headlight
3. Turn Signal Light
4. Fuel Tank Cap
5. Fuel Tap
6. Choke Lever
7. Fuses
8. Rear Shock Absorber
9. Seat Lock
10. Helmet Hook
11. Brake Disc
12. Brake Caliper
13. Shift Pedal
14. Side Stand
15. Center Stand
16. Drive Belt

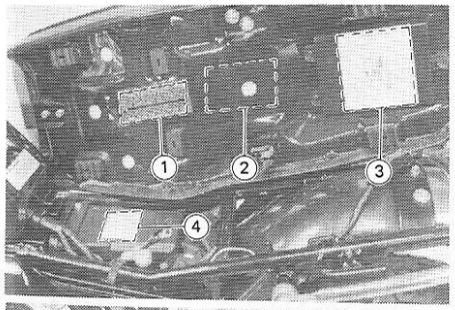


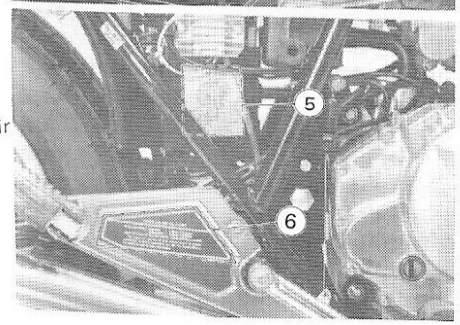
17. Tail/Brake Light
18. Battery
19. Air Cleaner Element
20. Carburetors
21. Fuel Tank
22. Front Brake Light Switch
23. Brake Lining Wear Indicator
24. Rear Brake Light Switch
25. Oil Level Gauge
26. Rear Brake Pedal
27. Horn

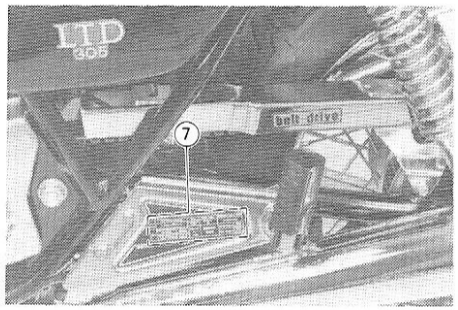


28. Clutch Lever
29. Dimmer Switch
30. Turn Signal Switch
31. Speedometer
32. Indicator Lights
33. Tachometer
34. Brake Fluid Reservoir
35. Engine Stop Switch
36. Front Brake Lever
37. Horn Button
38. Ignition Switch/ Steering Lock
39. Starter Button
40. Throttle Grip

LOCATION OF LABELS

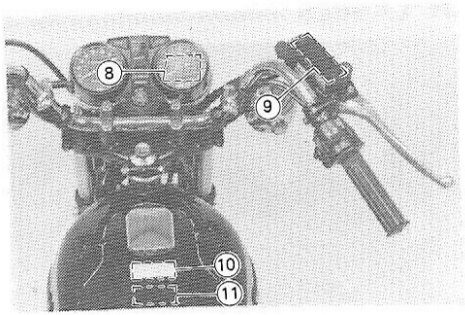


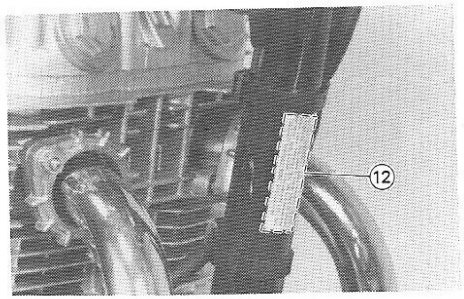


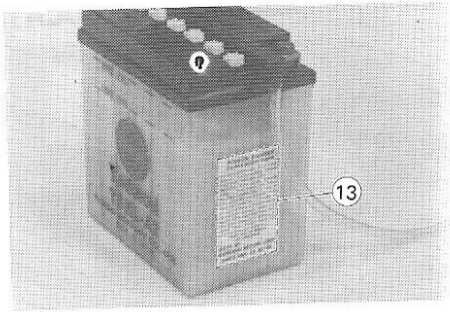


1. Drive Belt Warning
**2. Vacuum Hose Routing Diagram
3. Daily Safety Checks
*4. Vehicle Emission Control Information
5. Battery Vent Hose Routing
6. Engine Oil and Oil Filter
7. Tire and Load Data

*only on US model
**only on California model







*8. Break-In Caution
9. Brake Fluid
10. Important Break-In Instructions
**11. Fuel Level
*12. Noise Emission Control Information
13. Battery Poison/Danger

*only on US model
**only on California model

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 77 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.

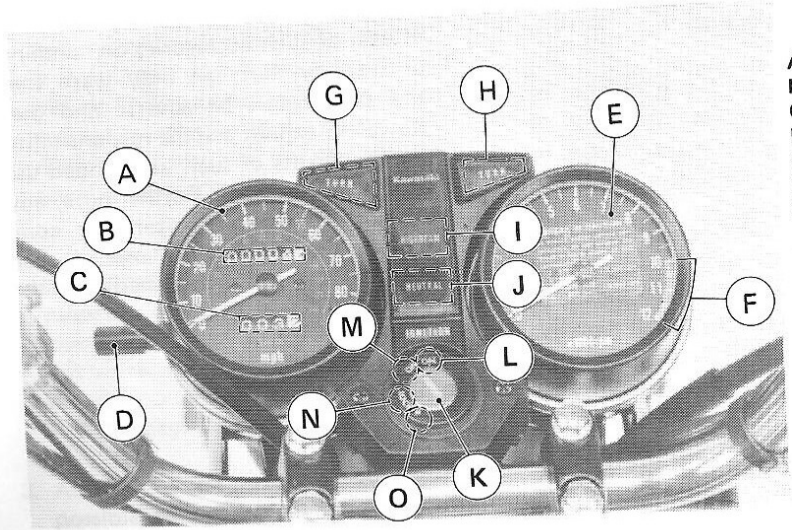
6. Do not install accessories or carry baggage that impairs the performance of the motorcycle. Make sure that you have not adversely affected any lighting component, road clearance, banking capability (i.e., lean angle), control operation, wheel travel, front fork movement, or any other aspect of the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

Meter Instruments



A. Speedometer
B. Odometer
C. Trip Meter
D. Reset Knob
E. Tachometer
F. Red Zone
G. Left Turn Signal Indicator Light
H. Right Turn Signal Indicator Light
I. High Beam Indicator Light
J. Neutral Indicator Light
K. Ignition Switch
L. ON position
M. OFF position
N. LOCK position
O. P(Park) position

Speedometer and Tachometer

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

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.**

Indicator Lights

NEUTRAL: When the transmission is 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, the corresponding turn signal indicator light flashes on and off.

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 and tail 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.

CAUTION **Turn off the ignition switch whenever the engine is not running. Leaving the switch on can ruin the ignition coil, because continuous current flow through the coil causes overheating and breakdown of insulation. If it is necessary to have the igntion switch on for any length of time while the engine is stopped, flip the engine stop switch to the OFF position to disconnect the ignition coil.**

To lock the steering:

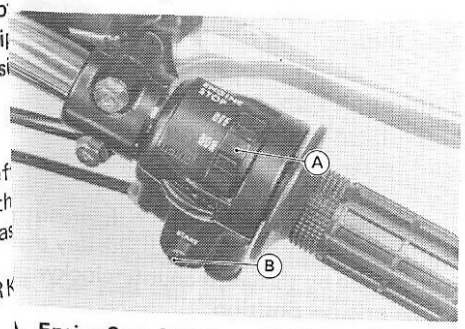
1. Turn the handlebar fully to the left
2. With the ignition switch key in the OFF position, push down and release the key.
3. Turn the key to LOCK or P (PARK) position.
4. Pull the key out.

Right Handlebar Switches

Starter Button

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

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



A. Engine Stop Switch B. Starter Button

Engine Stop Switch

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

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

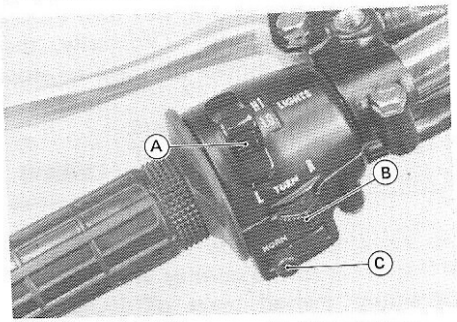
Note: Although the engine stop switch stops the engine, it does not turn off all the electrical circuits. Ordinarily, the ignition switch should be used to stop the engine.

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.

HI.....High beam
LO.....Low beam



A. Dimmer Switch
B. Turn Signal Switch
C. Horn Button

Turn Signal Switch

When the turn signal switch is turned to left or right, the corresponding turn signals flash on and off.

L.....Left
R.....Right

Horn Button

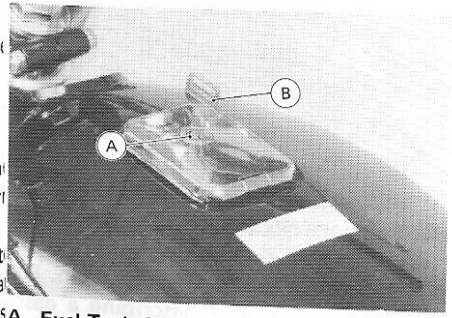
When the horn button is pushed, the horn sounds.

Fuel Tank Cap

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

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

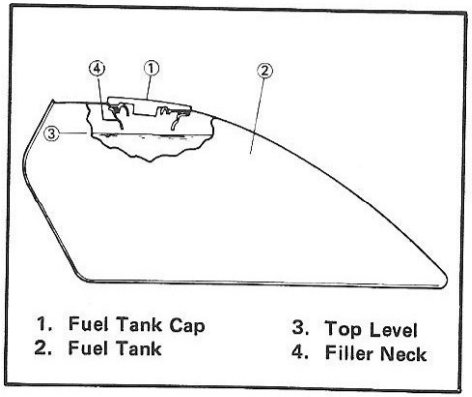
Note: ○The tank cap cannot be closed without the key inserted, and the key cannot be removed unless the cap is locked properly.
○Do not push the cap down with the key or the cap cannot be locked.



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.



1. Fuel Tank Cap
2. Fuel Tank
3. Top Level
4. Filler Neck

WARNING ○Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch off. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.
○Never fill the tank so the fuel level rises into the filler neck. If the tank is overfilled, heat may cause the fuel to expand and overflow through the vents in the tank cap.
○After refueling, make sure the tank cap is closed securely.
○If gasoline is spilled on the fuel tank, wipe it off immediately.

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

Fuel Requirement:

Octane Rating

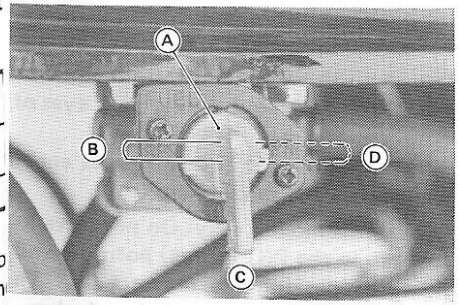
The octane rating of a gasoline is a measure of its resistance to detonation or "knocking." Use a gasoline with an octane rating equal to or higher than that shown in the table below.

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

The Antiknock Index is an average o the Research Octane No. (RON) and th Motor Octane No. (MON). The Antiknoc Index is posted on service station pump in the U.S.A. Research Octane No. is commonly used term describing a gas line's octane rating.

Fuel Tap

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

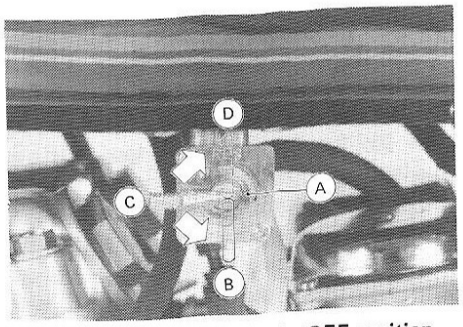


A. Fuel Tap
B. RES position
C. ON position
D. PRI position

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 1.5 L (0.4 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.

Except for California models: The fuel tap has three positions: OFF, ON and RES (reserve). If the fuel runs out with the tap in the ON position, the last 1.5 L (0.4 US gal) of fuel can be used by turning the tap to RES.



A. Fuel Tap
B. ON position
C. OFF position
D. RES position

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.

○California models only: 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

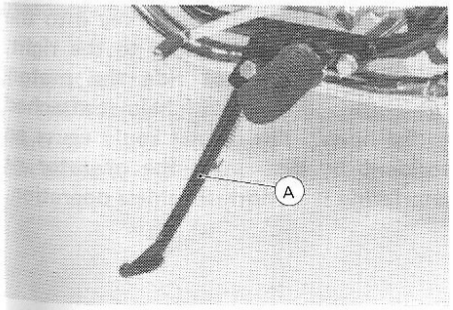
○Practice operating the fuel tap with the motorcycle stopped. To prevent an accident you should be able to operate the fuel tap while riding without taking your eyes off the road.

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

○California models only: Do not leave the fuel tap in the PRI (prime) position while riding or parking the motorcycle. The engine may become flooded or fuel may spill onto the ground and create a fire hazard, if the vehicle falls over.

Stands

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



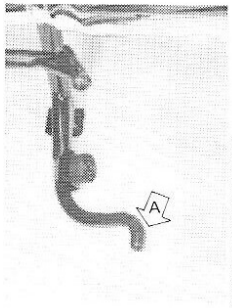
A. Side Stand

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

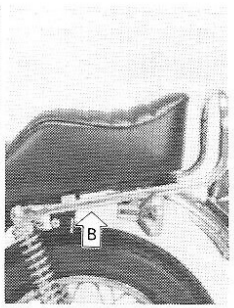
Whenever the side or center stand is used, make it a practice to kick the stand fully up before sitting on the motorcycle.

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

To set the motorcycle up on the center stand, step down firmly on the stand, and then lift the motorcycle up and to the rear using the grab rail as a handhold. Don't pull up on the seat to lift it as this will damage the seat.



A. Step down.

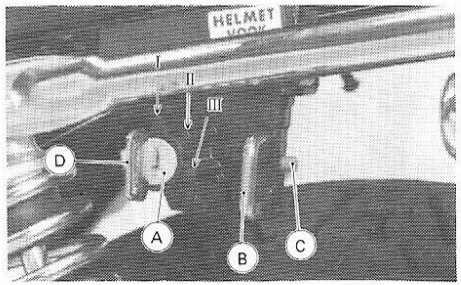


B. Lift here.

Seat Lock/Helmet Hook

This is a three-position, key-operated seat lock. The key can be removed from the seat lock when it is in the I position.

I	Seat and helmet hook locked.
II	Helmet hook can be opened by pushing the release button with the seat lock in the II position.
III	Seat can be removed.



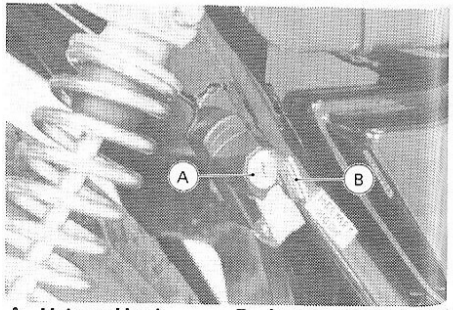
A. Seat Lock
B. Helmet Hook
C. Release Button
D. Ignition Switch Key

Helmet Hook

The helmet can be secured to the motorcycle using the helmet hook.

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

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



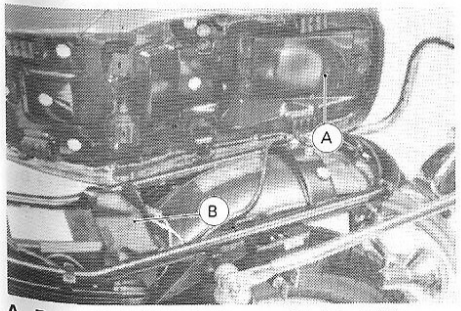
A. Helmet Hook
B. Ignition Switch Key

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.



A. Document Container
B. 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.

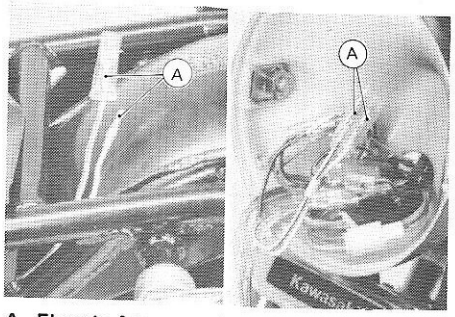
Electric Accessory Leads

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

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)

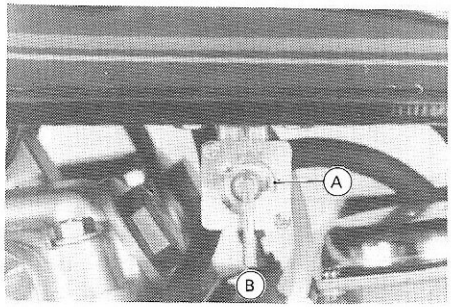
•Do not start moving or race the engine immediately after starting it, even if the engine is already warm. Run the engine for two or three minutes at idle speed to give the oil a chance to work up into all the engine parts.

•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.

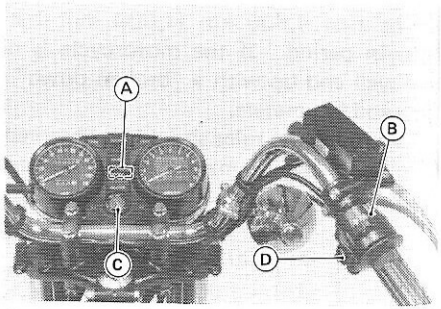
Starting the Engine

●Turn the fuel tap on.



A. Fuel Tap B. ON position

●Check that the engine stop switch is in the RUN position.

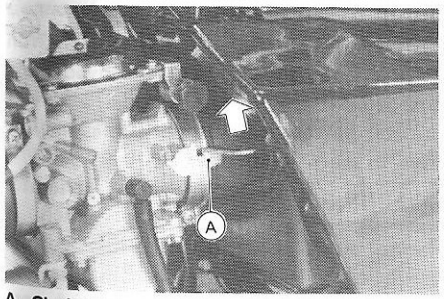


A. Neutral Indicator Light C. Ignition Switc
B. Engine Stop Switch D. Starter Butto

●Turn the ignition switch on.

●Make certain the transmission is i neutral or the clutch is disengaged.

●If the engine is cold, pull up the chok lever all the way.



A. Choke Lever

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

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

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

Note: If the engine is flooded, crank the engine over with the throttle fully open until the engine starts.

●Gradually return the choke toward the off position a little at a time as necessary to keep the engine speed below 2,500 r/min (rpm) during warm-up.

●When the engine is warmed up enough to idle without using the choke, return the choke to the off position.

Note: If you drive the motorcycle before the engine is warmed up, return the choke to the off position after you have driven the motorcycle for the length of time shown in the table.

Ambient temperature	Choke off after running for
20°C (68°F) – 35°C (95°F)	15 seconds
Below 20°C (68°F)	1.5 minutes
Below 5°C (40°F)	2 minutes

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

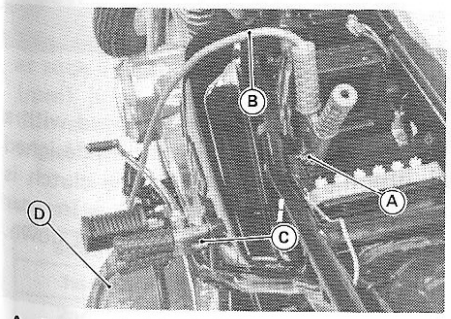
Jump Starting

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

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

Connecting Jumper Cables

- Make sure the ignition switch is turned "OFF."
- Connect a jumper cable from the positive (+) terminal of the booster battery to the positive (+) terminal of the battery in the motorcycle.



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

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

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

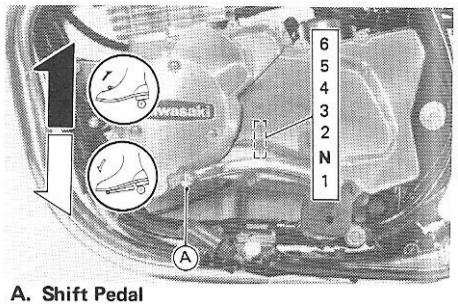
- Follow the standard engine starting procedure.

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

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

Moving Off

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



A. Shift Pedal

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

Shifting Gears

- Close the throttle while pulling in the clutch lever.
- Shift into the next higher or lower gear. For smooth riding, shift up or down when the motorcycle is operated at the speeds shown in the table below.

WARNING **When shifting down to a lower gear, do not shift at such a high speed that the engine r/min (rpm) jumps excessively. Not only can this cause engine damage, but the rear wheel may skid and cause an accident.**

Downshifting should be done below 5,000 rpm (r/min) for each gear.

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

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

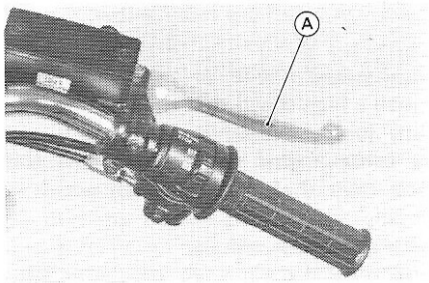
Vehicle speed when shifting

Shifting up	km/h (mph)	Shifting down	km/h (mph)
1st → 2nd	15 (9)	6th → 5th	30 (19)
2nd → 3rd	25 (15)	5th → 4th	25 (15)
3rd → 4th	35 (21)	4th → 3rd	20 (12)
4th → 5th	45 (27)	3rd → 2nd	15 (9)
5th → 6th	55 (34)	2nd → 1st	15 (9)

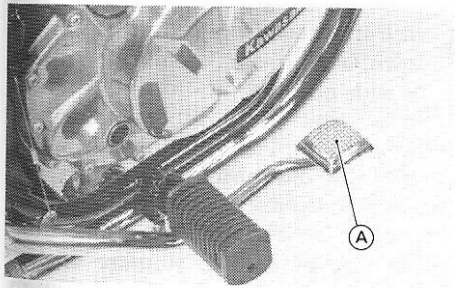
Braking

- Close the throttle completely, leaving the clutch engaged (except when shifting gears) so that the engine will help slow down the motorcycle.
- Shift down one gear at a time so that you are in 1st gear when you come to a complete stop.
- When stopping, always apply both brakes at the same time. Normally the front brake should be applied a little more than the rear. Shift down or fully disengage the clutch as necessary to keep the engine from stalling.
- Never lock the brakes, or it will cause the tires to skid. When turning a corner, it is better not to brake at all; but if this is unavoidable, use only the rear brake.
- For emergency braking, disregard downshifting, and concentrate on applying the brakes as hard as possible without skidding.

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



A. Brake Lever



A. Brake Pedal

Stopping the Engine

- Close the throttle completely.
- Shift the transmission into neutral.
- Turn the ignition switch off.
- Support the motorcycle on a firm, level surface with the side or center stand.
- Lock the steering.
- Turn the fuel tap to the OFF position (except for California models).

Stopping the Motorcycle in an Emergency

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

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

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

Parking

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

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

- If parking inside a garage or other structure, be sure it is well ventilated and the motorcycle is not close to any source of flame or sparks; this includes any appliance with a pilot light.

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

- Lock the steering to help prevent theft.

Note: ○When stopping near traffic at night, you can leave the taillight on for greater visibility by turning the ignition switch to the P (Park) position.

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

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 .....

Trie	Load	Air Pressure (when cold)
Front	———	175 kPa (1.75 kg/cm^2, 25 psi)
Rear	Up to 97.5 kg (215 lbs)	150 kPa (1.5 kg/cm^2, 21 psi)
	97.5 – 155 kg (215 – 342 lbs)	200 kPa (2.0 kg/cm^2, 28 psi)

Nuts, bolts, fasteners..... Check that steering and suspension components, axles, and all controls are properly tightened or fastened.

Steering ..... Action smooth but not loose from lock to lock. No binding of control cables.

Brakes ..... No brake fluid leakage.
Brake pedal travel 20 – 30 mm (0.8 – 1.2 in).
Brake pad wear: Lining thickness more than 1 mm (0.04 in) left.
Brake lining wear: Indicator within "USABLE RANGE".

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 and center stands..... Return to their fully up positions by spring tension.
Return springs not weak or not damaged.

Refer to "Daily Safety Checks" caution label attached to the bottom of the seat.

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 line.

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 any adjustment or vehicle operation, please ask your authorized Kawasaki Dealer to check the motorcycle.

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

Periodic Maintenance Chart

	Operation	Frequency: Every	Whichever comes first: 800 (500)	5,000 (3,000)	10,000 (6,000)	15,000 (9,000)	20,000 (12,000)	25,000 (15,000)	30,000 (18,000)	See Page
Emission Related	Carburetor synchronization--check †		•	•	•	•	•	•	•	62
	Idle speed--check †		•	•	•	•	•	•	•	62
	Throttle grip play--check †		•	•	•	•	•	•	•	61
	Spark plug--clean and gap †		•	•	•	•	•	•	•	56
	Valve clearance--check †		•	•	•	•	•	•	•	58
	Air cleaner element--clean			•		•		•		58
	Air cleaner element--replace	5 cleanings			•		•		•	58
	Fuel system clean				•		•		•	86
	Cylinder head bolts--check †		•		•		•		•	94
	Evaporative emission control system (c)--check †		•	•	•	•	•	•	•	57
Non-Emission	Battery electrolyte level--check †	month	•	•	•	•	•	•	•	79
	Brake plya--check †		•	•	•	•	•	•	•	71
	Brake light switch--check †		•	•	•	•	•	•	•	74

	Operation	Frequency: Every	Whichever comes first: 800 (500)	5,000 (3,000)	10,000 (6,000)	15,000 (9,000)	20,000 (12,000)	25,000 (15,000)	30,000 (18,000)	See Page
Non-Emissions Related	Brake lining wear--check †			•	•	•	•	•	•	69
	Brake fluid level--check †	month	•	•	•	•	•	•	•	70
K	Brake fluid--change	2 years					•			70
	Clutch--adjust		•	•	•	•	•	•	•	63
K	Steering play--check †		•	•	•	•	•	•	•	–
K	Spoke tightness and rim runout--check †		•	•	•	•	•	•	•	–
	Drive belt tension--check †		•	•	•	•	•	•	•	65
	Drive belt wear--check †		•	•	•	•	•	•	•	65
	Nuts, bolts, fasteners--check †		•		•		•		•	94
	Tire wear--check †			•	•	•	•	•	•	78
	Engine oil--change	year	•		•		•		•	53
	Oil filter--replace		•		•		•		•	53
	General lubrication--perform			•	•	•	•	•	•	87

	Operation \ Frequency	Whichever comes first ➡ Every	*Odometer Reading km (mi) 800 (500)	5,000 (3,000)	10,000 (6,000)	15,000 (9,000)	20,000 (12,000)	25,000 (15,000)	30,000 (18,000)	See Page
Non-Emissions Related	K Front fork oil--change								•	—
	K Swing arm pivot--lubricate				•		•		•	—
	K Brake camshaft--lubricate	2 years					•			70
	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								—

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

Engine Oil

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

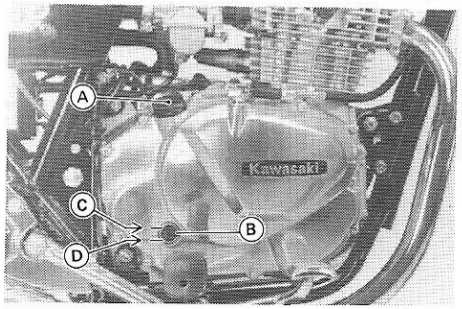
WARNING **Motorcycle operation with insufficient, deteriorated, or contaminated engine oil will cause accelerated wear and may result in engine or transmission seizure, accident, and injury.**

Oil Level Inspection

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

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

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

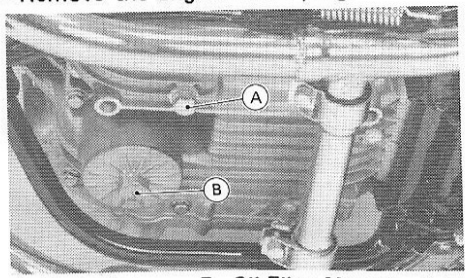


A. Oil Filler Opening
B. Oil Level Gauge
C. Upper Level
D. Lower Level

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

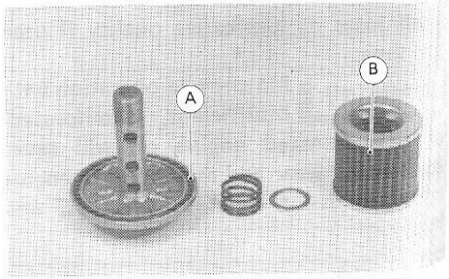
Oil and/or Oil Filter Change

- Warm up the engine thoroughly, and then stop the engine.
- Place an oil pan beneath the engine.
- Remove the engine drain plug.



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. O-Ring **B. Oil Filter Element**

Note: ○Check for O-ring damage. If necessary, replace it with a new one.
○When installing the oil filter, make sure the O-ring is in place.

- 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 spring and flat washer to the filter mounting bolt.
- 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 oil filter, tightening its mounting bolt to the specified torque.
- Fill the engine up to the upper level with a good quality motor oil specified in the table.
- Check the oil level.

Tightening Torque

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

Engine Oil

Grade:	SE or SF class
Viscosity:	SAE 10W40, 10W50, 20W40, or 20W50
Capacity:	1.5 L (1.6 US qt) [when filter is not removed]
	1.8 L (1.9 US qt) [when filter is removed]

Spark Plugs

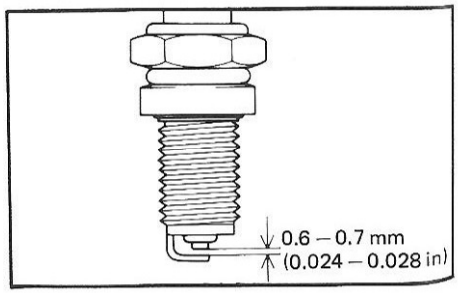
The standard spark plug is shown in the table. The spark plugs should be taken out periodically in accordance with the Periodic Maintenance Chart for cleaning, inspection, and resetting of the plug gap.

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.

Spark Plug

Standard Plug	NGK D9EA or ND X27ES-U
Plug Gap	0.6 – 0.7 mm (0.024 – 0.028 in)
Tightening Torque	14 N-m (1.4 kg-m, 10 ft-lbs)



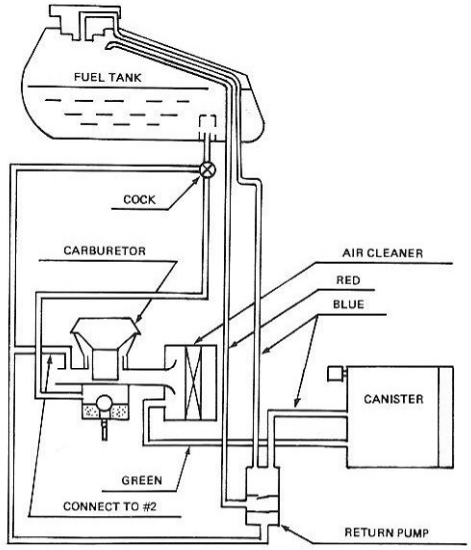
Evaporative Emission Control System (Californian model only)

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

Inspection

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

VACUUM HOSE ROUTING DIAGRAM



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.

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

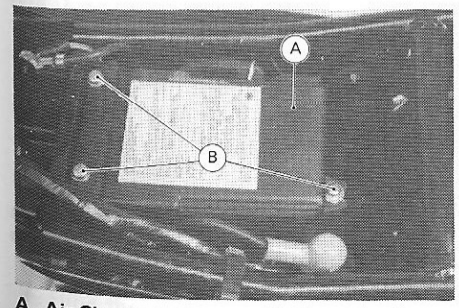
Air Cleaner

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.

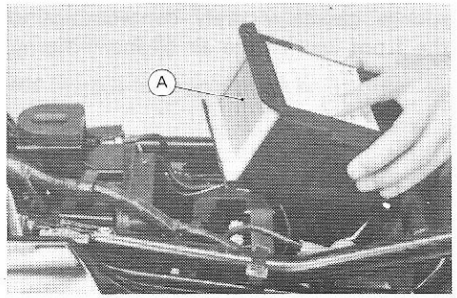
Element Removal

- Unlock and remove the seat.
- Remove the air cleaner body mounting screws, and take off the air cleaner body.
- Push a clean, lint-free towel into the air cleaner housing to keep dirt or other foreign material from entering.



A. Air Cleaner Body **B. Mounting Screws**

- Pull out the air cleaner element.
- Inspect the element material and sponge gasket for damage. If any part of the element is damaged, the element must be replaced.



A. Element

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.**

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

○Install the air cleaner body so that the sponge gasket securely contacts against the front wall of the air cleaner housing.

Element Cleaning

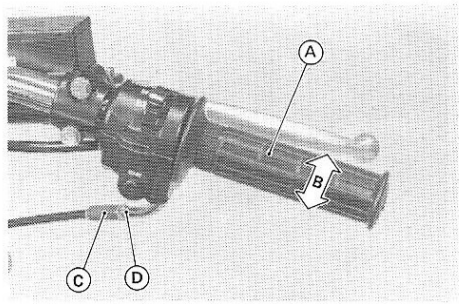
●Clean the element by directing a stream of compressed air from the outside to the inside (from the clean side to the dirty side).

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.

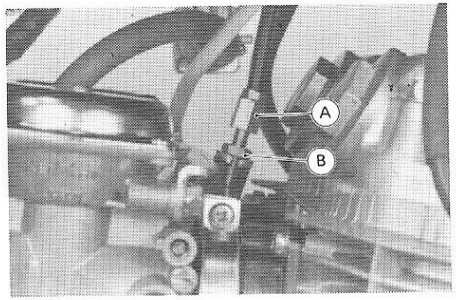


A. Throttle Grip
B. 2 – 3 mm (0.08 – 0.12 in)
C. Adjusting Nut
D. Locknut

●If there is improper play, adjust it.

Adjustment

●Loosen the locknut at the throttle grip, and turn the adjusting nut until the proper amount of throttle grip play is obtained. Tighten the locknut.



A. Adjuster **B. Locknut**

Note: If the throttle cable cannot be adjusted by using the cable adjusting nut at the upper end of the throttle cable, use the cable adjuster at the lower end of the throttle cable. Do not forget to securely tighten the adjuster locknut.

Carburetors

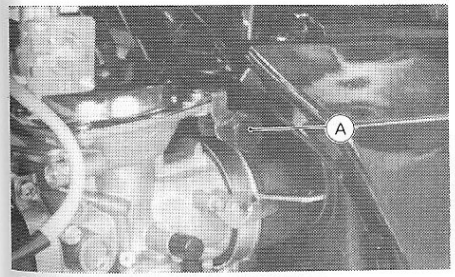
The carburetor adjustments, idle speed and synchronization, should be performed in accordance with the Periodic Maintenance Chart or whenever the idle speed is disturbed.

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.

Idle Speed Inspection and Adjustment

- Start the engine, and warm it up thoroughly.
- Adjust the idle speed to 1,150 – 1,350 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.**

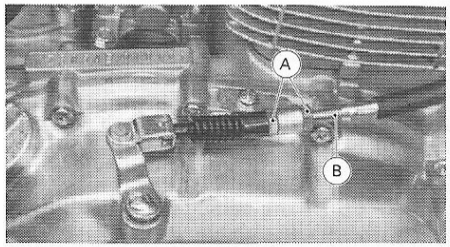
Clutch

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.**

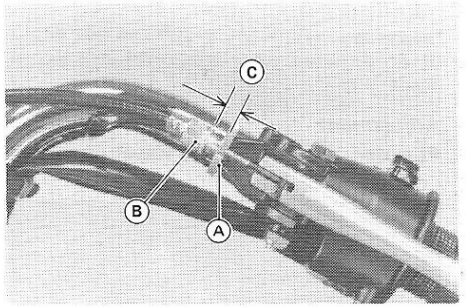
Adjustment

- Loosen the nuts at the lower end of the clutch cable.



A. Nuts **B. Adjuster**

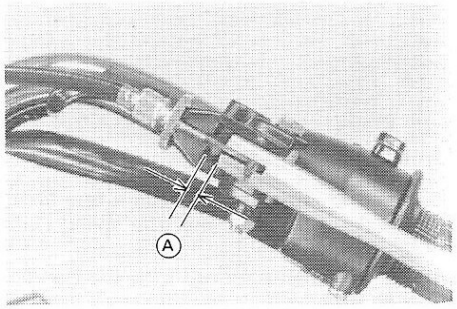
●Loosen the knurled locknut at the clutch lever just enough so that the adjuster will turn freely, and then turn the adjuster to make a 5 – 6 mm (0.2 – 0.24 in) gap between the adjuster and the knurled locknut.



A. Locknut
B. Adjuster
C. 5 – 6 mm (0.2 – 0.24 in)

●Take up all the cable play by sliding the adjuster at the lower end of the cable, and then tighten the nuts.

●Turn the adjuster at the clutch lever so that the clutch lever will have 2 – 3 mm (0.08 – 0.12 in) of play and tighten the knurled locknut.



A. 2 – 3 mm (0.08 – 0.12 in)

Note: ○After the adjustment is made, start the engine and check that the clutch does not slip and that it releases properly.
○For minor corrections, use the adjuster at the clutch lever.

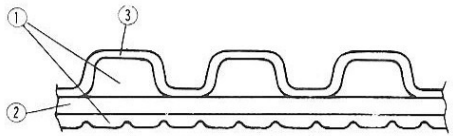
Drive Belt

At all times the tension of the belt should be maintened in order to run safely and prolong the life of the belt. A belt that has been maladjusted will result in shorter belt life. A belt that has been adjusted too loosely may slip over the pulley teeth. If the belt teeth slip over the pulley teeth, adjust the tension immediately.

Drive Belt Wear Inspection

Visually inspect the belt for wear. If the nylon fabric facing of any portion is worn off, and the polyurethane compound is exposed, replace the drive belt immediately with a new one. Whenever the belt is replaced, inspect the engine and rear pulleys, and replace them if necessary.

Drive Belt Construction



1. **Polyurethane Compound (Black)**
2. **Kevlar Tensile Cord (Yellow)**
3. **Nylon Fabric Facing (White)**

WARNING **A belt worn past the nylon fabric facing must be replaced. Such a worn belt may cause a serious accident.**

Note: Drive belt, engine and rear pulleys replacement should be performed by an authorized Kawasaki Dealer.

Belt Tension Inspection

Note: ○Belt tension must be checked when the **engine is cold** (room or atmospheric temperature) and the belt is in dry condition.

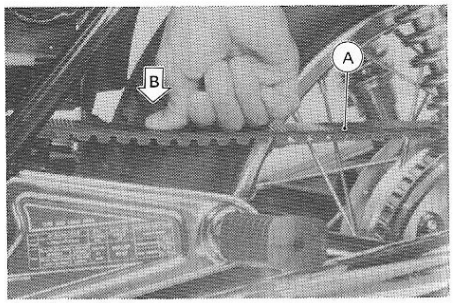
○Belt tension also should be checked at first 800 km (500 mi) ride after belt replacement.

- Set the motorcycle up on its center stand.
- Apply 4.5 kg (10 lbs) of force on the belt midway between the pulleys and measure the deflection.

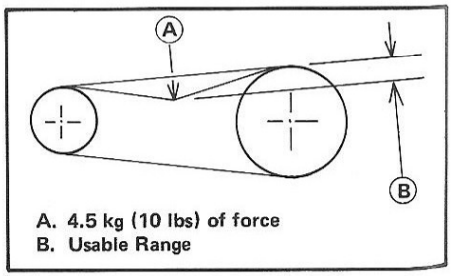
Drive Belt Tension

Usable Range	7.5 – 16.5 mm (0.30 – 0.65 in)

- If the deflection is out of the usable range, adjust it.



A. Drive Belt
B. 4.5 kg (10 lbs) of force

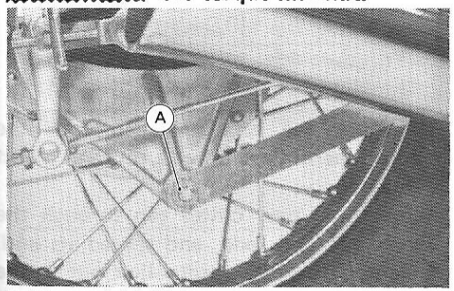


A. 4.5 kg (10 lbs) of force
B. Usable Range

Belt Tension Adjustment

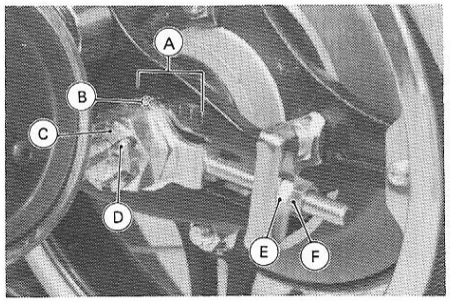
- Remove the safety clip and loosen the rear torque link nut.

CAUTION **Do not forget to loosen the torque link nut.**



A. Torque Link Nut

- Loosen the left and right belt adjuster locknuts.
- Remove the axle cotter pin, and loosen the axle nut.
- When the belt is too tight, back out both the belt adjusting nuts evenly, and push the wheel forward until the belt is too loose.
- When the belt is too loose, turn in both the belt adjusting nuts evenly. To keep the belt and wheel aligned, the notch on the left belt adjuster should align with the same swing arm mark that the right belt adjuster notch aligns with.



A. Marks
B. Notch
C. Axle Nut
D. Cotter Pin
E. Adjusting Nut
F. Locknut

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.**

- Apply 4.5 kg (10 lbs) of force on the belt midway between the pulleys and measure the deflection.
- Repeat the above three steps until the proper tension is obtained.
- Tighten both belt adjuster locknuts, and make sure the axle stays aligned.
- Center the brake panel assembly in the brake drum. This is done by tightening the axle lightly, spinning the wheel, and depressing the brake panel forcefully. The partially tightened axle allows the brake panel assembly to center itself within the brake drum.

Note: This procedure can prevent a soft or "spongy feeling" brake.

- Tighten the axle nut to the specified torque.

Tightening Torque

Axle Nut	88 N-m (9.0 kg-m, 65 ft-lb)
Torque Link Nut	29 N-m (3.0 kg-m, 22 ft-lb)

- Measure the tension again with the above-mentioned procedures, and adjust if necessary.
- Insert the new cotter pin through the axle nut and axle, and spread its end.
- Tighten the rear torque link nut to the specified torque.

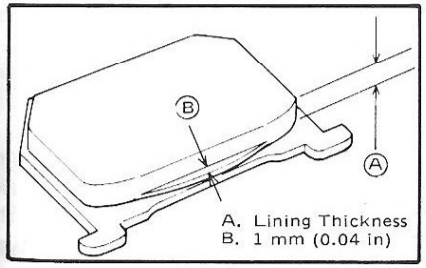
WARNING **If the axle or torque link nut is not securely tightened, or the cotter pin or clip is not installed, an unsafe riding condition may result.**

- Check the rear brake (See the Brakes section).

Brakes

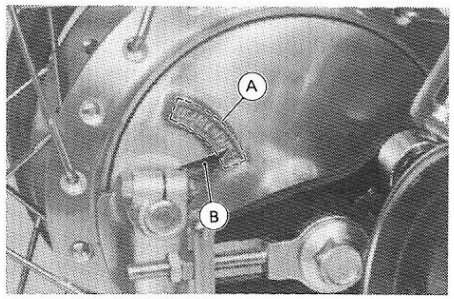
Brake Wear Inspection

In accordance with the Periodic Maintenance Chart, inspect the brakes for wear. For the front 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.



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

On the rear brake panel is a brake lining wear indicator. If the brake lining wear indicator does not point within the USABLE RANGE when the brake is fully applied, the brake shoe linings have worn past the service limit. In this case, the brake shoes must be replaced and the drum and other brake parts examined by an authorized Kawasaki Dealer.



A. USABLE RANGE
B. Brake Lining Wear Indicator

Lubrication

In accordance with the Periodic Maintenance Chart, the brake camshaft should be lubricated by an authorized Kawasaki Dealer.

Disc Brake Fluid:

In accordance with the Periodic Maintenance Chart, inspect the brake fluid level in the reservoir 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. 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-Universal
Castrol GT (LMA)
Castrol Disc Brake Fluid

CAUTION

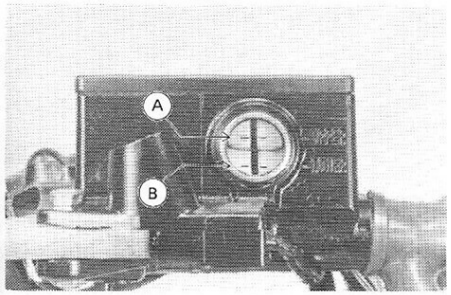
○Do not spill brake fluid onto any painted surface.
○Do not use fluid from a container that has been left open or that has been unsealed for a long time.
○Check for fluid leakage around the fittings.
○Check for brake hose damage.

WARNING

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

Fluid Level Inspection

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



A. Upper Level **B. Lower Level**

●Fill the reservoir to the upper level line.

Fluid Change

Have the brake fluid changed by an authorized Kawasaki Dealer.

Front Brake:

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

WARNING

If the brake lever 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.

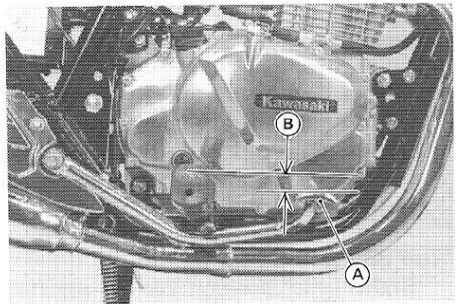
Rear Brake:

Brake pedal position can be adjusted to suit you. In accordance with the

Periodic Maintenance Chart, inspect the brake pedal play.

Pedal Position Inspection

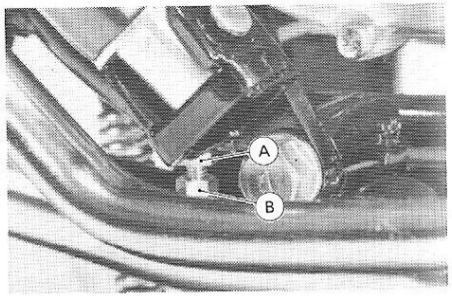
- When the brake pedal is in its rest position, it should be 0 – 30 mm (0 – 1.2 in) lower than the top of the footpeg.
- If it is not, adjust the pedal position.



A. Brake Pedal **B. 0 – 30 mm (0 – 1.2 in)**

Pedal Position Adjustment

- Loosen the locknut, and turn the adjusting bolt to adjust the pedal position.
- Tighten the locknut.

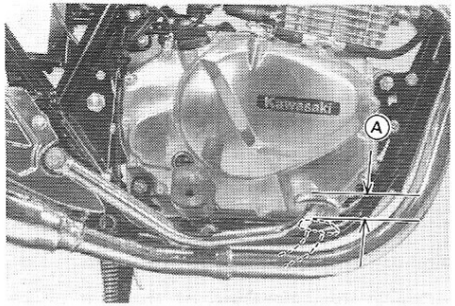


A. Adjusting Bolt **B. Locknut**

- Check the brake pedal play and operation of the rear brake light switch.

Pedal Play Inspection

- The brake pedal should have 20 – 30 mm (0.8 – 1.2 in) of play when the pedal is pushed down lightly by hand.

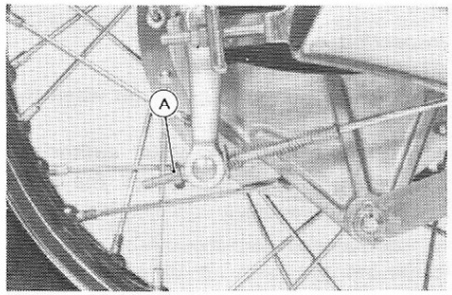


A. 20 – 30 mm (0.8 – 1.2 in)

- Rotate the wheel to check for brake drag.
- Operate the pedal a few times to see that it returns to its rest position immediately upon release.
- Check braking effectiveness.
- If the pedal has improper play, adjust it.

Pedal Play Adjustment

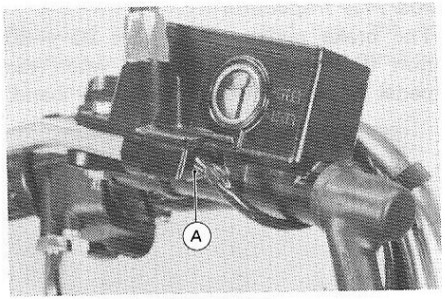
- Turn the adjusting nut at the brake cam lever so that the pedal has 20 – 30 mm (0.8 – 1.2 in) of play.



A. Adjusting Nut

Brake Light Switches

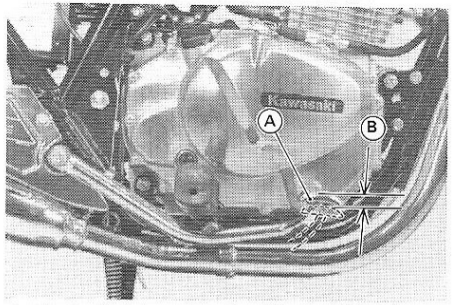
When either the front or rear brake is applied, the brake light goes on. The front brake light switch requires no adjustment, but the rear brake light switch should be adjusted in accordance with the Periodic Maintenance Chart.



A. Front Brake Light Switch

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.

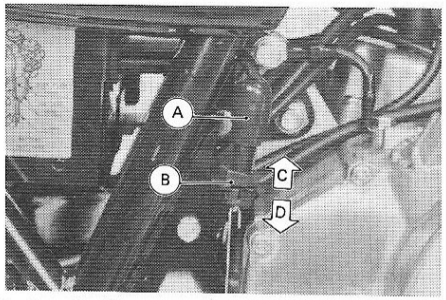


A. Brake Pedal **B. 15 mm (0.6 in)**

- 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.



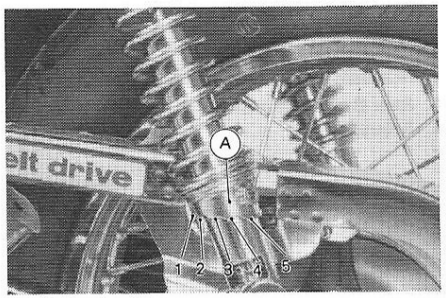
A. Rear Brake Light Switch
B. Adjusting Nut
C. Lights sooner
D. Lights later

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

Rear Shock Absorbers

Spring Adjustment

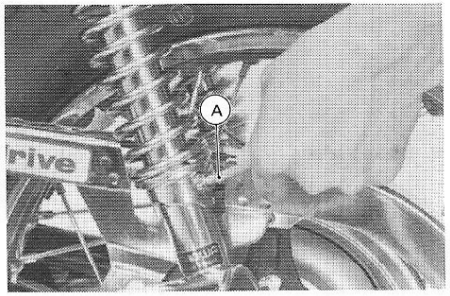
The spring adjusting sleeve on each rear shock absorber has 5 positions so that the spring can be adjusted for different road and loading conditions.



A. Adjusting Sleeve

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

Position	1	2	3	4	5
Spring Action	Stronger ⟶				



A. Screwdriver Bit

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

Wheels

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 155 kg (342 lbs), including rider, passenger, baggage, and accessories.

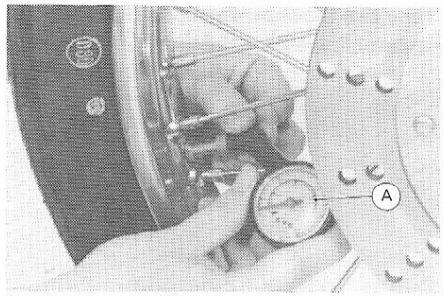
- Check the tire pressure often, using an accurate gauge.

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.

Tire Air Pressure

Front	175 kPa (1.75 kg/cm^2, 25 psi)	
Rear	Up to 97.5 kg (215 lbs) load	150 kPa (1.5 kg/cm^2, 21 psi)
	97.5 – 155 kg (215 – 342 lbs) load	200 kPa (2.0 kg/cm^2, 28 psi)



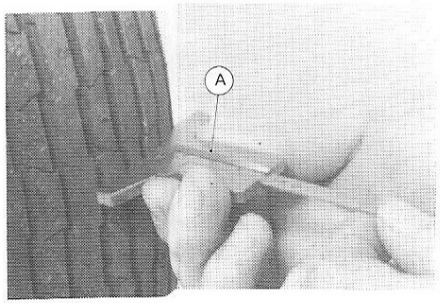
A. Tire Pressure Gauge

Tire Wear, Damage

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

and failure. An accepted estimate is that 90% of all tire failures occur during the last 10% of tread life (90% worn). So it is false economy and unsafe to use the tires until they are bald.

- In accordance with the Periodic Maintenance Chart, measure the depth of the tread with a depth gauge, and replace any tire that has worn down to the minimum allowable tread depth.



A. Depth Gauge

Minimum Tread Depth

Front	———	1 mm (0.04 in)
Rear	Under 110 kph (70 mph)	2 mm (0.08 in)
	Over 110 kph (70 mph)	3 mm (0.12 in)

- Visually inspect the tire for cracks and cuts, replacing the tire in case of bad damage. Swelling or high spots indicate internal damage, requiring tire replacement.
- Remove any imbedded stones or other foreign particles from the tread.

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

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

Standard Tire

Front	3.00S-18 4PR DUNLOP F8
Rear	120/90-16 63S DUNLOP K327

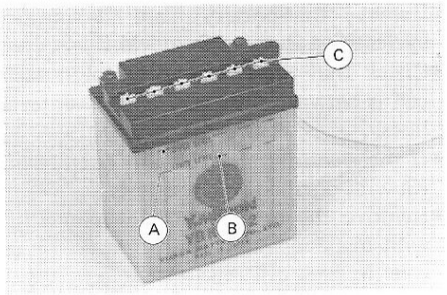
Battery

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.
- 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.**



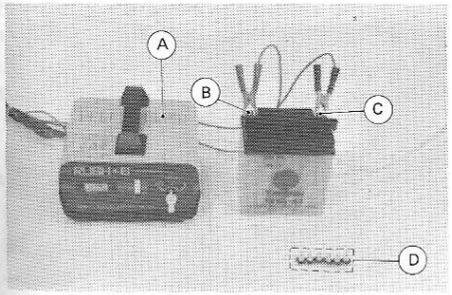
A. Upper Level
B. Lower Level
C. Filler Caps

Battery Charging

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

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

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



A. Battery Charger
B. (+) Terminal
C. (–) Terminal
D. Filler Caps

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

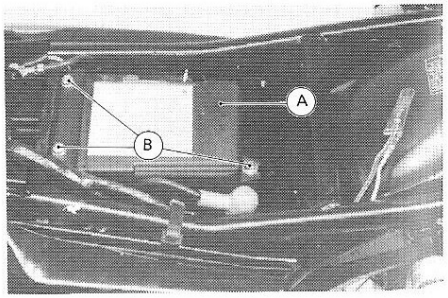
- Charge the battery at a rate that is 1/10th of the battery capacity. For example, the charging rate for a 10AH battery would be 1.0 ampere.

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 tool kit.
- Remove the air cleaner body mounting screws and air cleaner body.

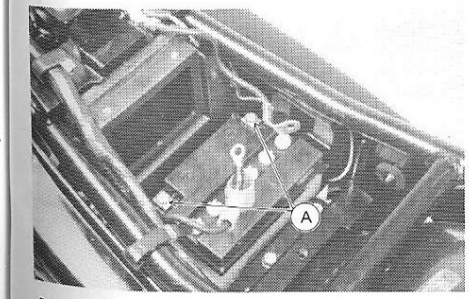


A. Air Cleaner Body **B. Mounting Screws**

- Remove the battery band.
- 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 belt and exhaust system. Battery electrolyte can corrode and dangerously weaken the belt. 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.**

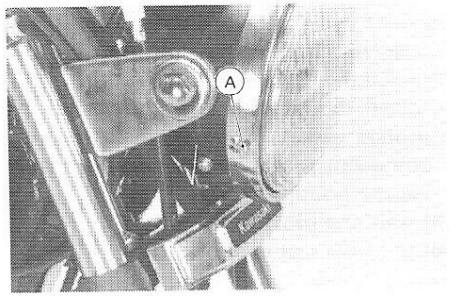
- Install the battery band.
- Install the air cleaner body so that the sponge gasket of the element securely contacts against the front wall of the air cleaner housing.
- Install the tool kit.
- Install the seat and lock it.

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.

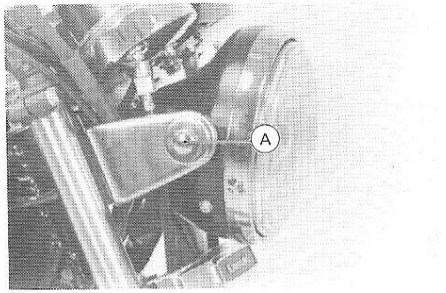


A. Adjusting Screw

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 blind oncoming drivers.

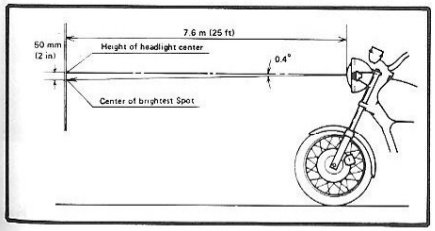
- Loosen the headlight housing mounting bolts, and adjust the headlight vertically.



A. Mounting Bolt

- Tighten the headlight housing mounting bolts.

Note: On high beam, the brightest point should be slightly below horizontal. The proper angle is 0.4 degrees below horizontal. This is a 50 mm (2 in) drop at 7.6 m (25 ft) measured from the center of the headlight, with the motorcycle on its wheels and the rider seated.



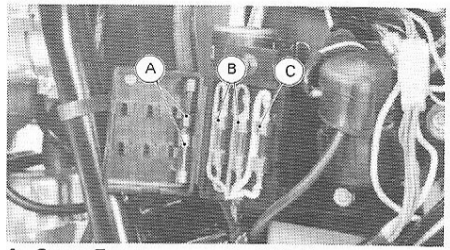
Fuses

There are two fuse boxes inside the left side cover, and one of them is designed for the accessories. If a fuse fails 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 Fuses
B. 10A Fuses
C. 20A Fuse

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.

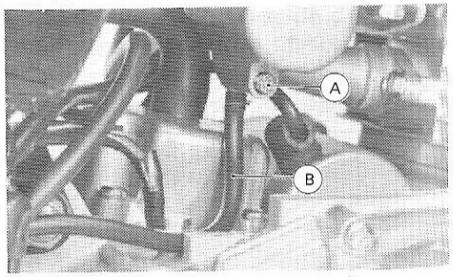
○Make sure the engine is cold before working. Wipe any fuel off the engine before starting it.

Inspection

●Turn the fuel tap lever to the PRI position for California models, and the ON position for other models.

●Run the lower ends of each carburetor overflow tubes into a suitable container.

●Turn out each drain screw a few turns to drain the tank and carburetor float bowls through the overflow tubes until only fuel comes out.



A. Drain Screw B. Overflow Tube

●Tighten the drain screws.

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

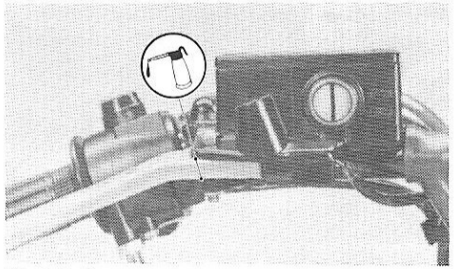
General Lubrication

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

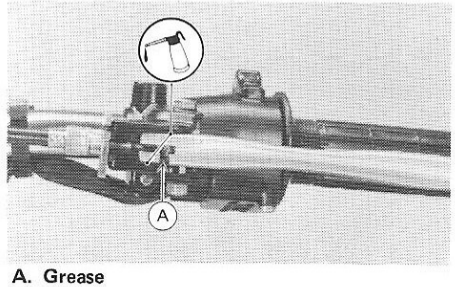
Before lubricating each part, clean off any rusty spots with rust remover and wipe off any grease, oil, dirt, or grime. **Note:** A few drops of oil are effective to keep bolts and nuts from rusting and sticking. This makes removal easier. Badly rusted nuts, bolts, etc., should be replaced with new ones.

Lubrication

Brake Lever:

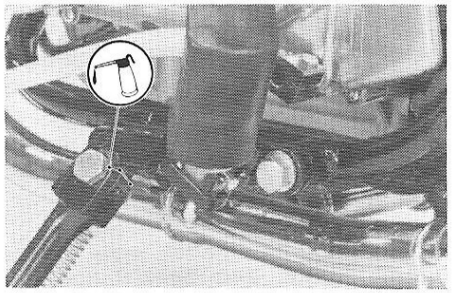


Clutch Lever:

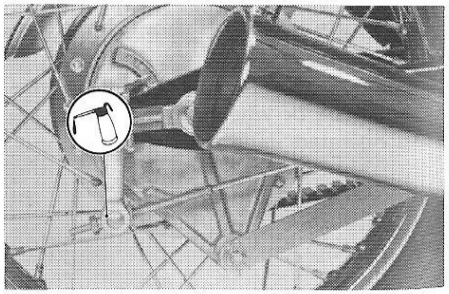


A. Grease

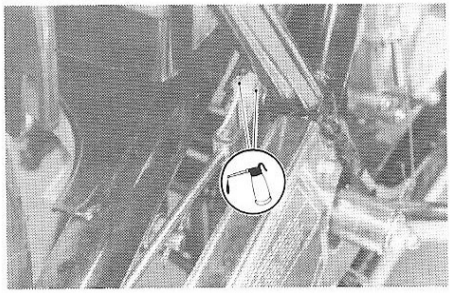
Side Stand:



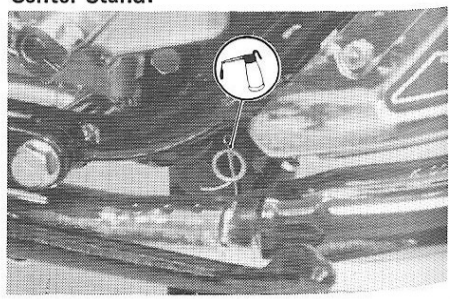
Brake Rod Joint:



Brake Rod Joint:

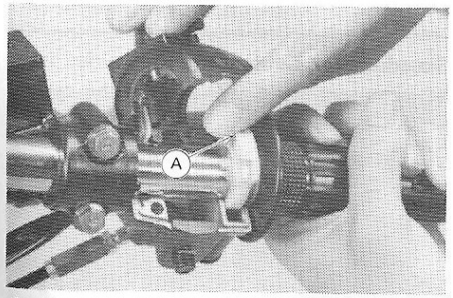


Center Stand:



Throttle Grip and Cable:

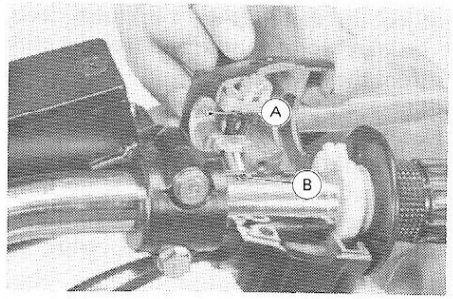
- Remove the right switch housing screws and open up the housing.
- Slip the cable tip from its catch in the throttle grip, and take off the grip.
- Wipe the old grease from the grip position on the handlebar, and apply a light coat of grease in its place.



A. Grease

- Apply a light coat of grease to the exposed portion of the inner cable and the catch in the throttle grip.
- Fit the cable tip into the catch in the throttle grip. Fill the compartment in the half of the housing with oil, and wait until the oil has seeped in between the inner and outer cables.

Note: ○Making sure that the projection in the switch housing fits into the hole in the handlebar, assemble the switch housing. The front housing screw is longer than the rear screw.

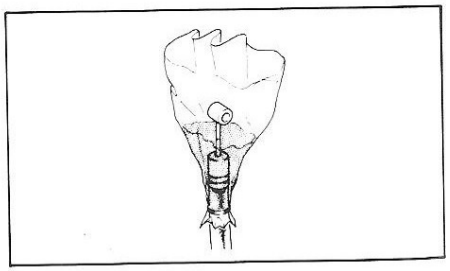


A. Projection B. Hole

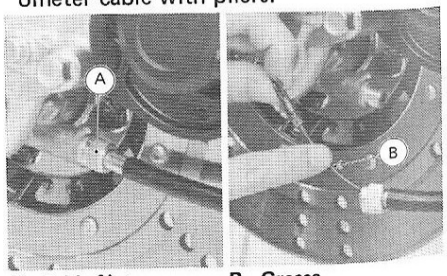
○After the switch housing assembly, check the throttle grip play and adjust it if necessary.
○Check that the throttle grip turns properly and that the inner cable slides smoothly.

Clutch Cable:
- ●Loosen the nuts at the lower end of the cluth cable, and slide the adjuster to give the cable plenty of play.
- ●Line up the slots in the clutch lever, locknut, and adjuster, and free the cable from the lever.
- ●Lubricate the cable.

Note: ○The most satisfactory way is to allow the oil to seep in between the inner cable and the outer cable by forming some sort of reservoir to hold the oil. After lubricating the cable, wipe off spilled oil.
○After connecting the upper end of the clutch cable, adjust the clutch.



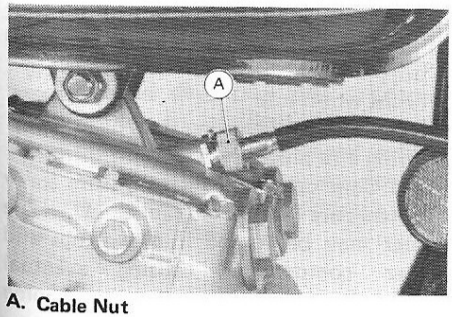
Speedometer Cable:
- ●Disconnect the lower end of the speedometer cable with pliers.



A. Cable Nut **B. Grease**

- ●Apply grease sparingly to the inner cable.
- ●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.
- ●Tighten the cable nut with pliers.

Tachometer Cable:
- ●Disconnect the lower end of the tachometer cable with pliers.



A. Cable Nut

- ●Apply grease sparingly to the inner cable.
- ●Fit the bottom end of the cable into its place. Turn it if necessary so that it fits all the way into place, and tighten its nut with pliers. There is a gasket at the bottom end of the outer cable.

Cleaning

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

Preparation for Washing

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

- Rear openings of each muffler; Cover with plastic bags secured with rubber bands.
- Clutch and brake levers, switch housings on the handlebar; Cover with plastic bags.
- Ignition switch; Cover the keyhole with tape.
- Air cleaner intake; Close up the intake with tape, or stuff with rags.

Where to be Careful

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

- Speedometer and tachometer
- Disc brake master cylinder and caliper
- Rear hub; If water gets inside the rear hub, the rear brake will not function until it dries out.
- 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.
- Front wheel hub
- Steering pivot (steering stem head pipe)
- Swing arm pivot

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

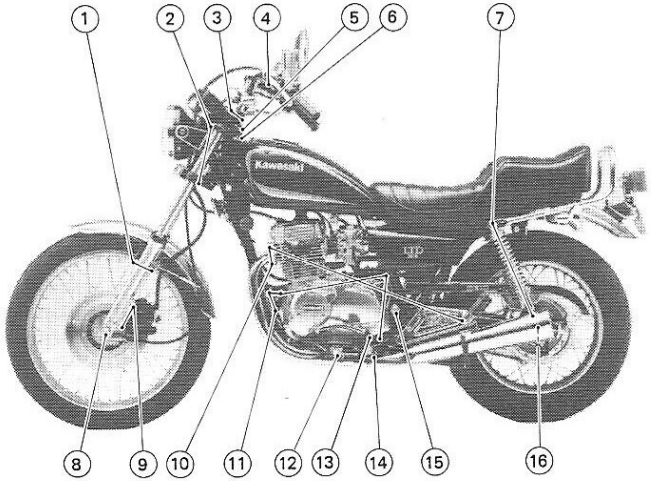
After Washing

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

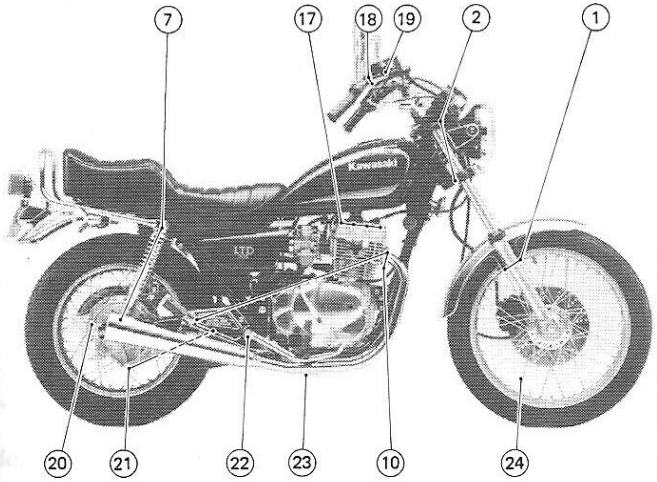
WARNING **Never wax or lubricate the brake disc. Loss of braking and an accident could result. Clean the disc with an oilless solvent such as trichloroethylene or acetone. Observe the solvent manufacturer's warnings.**

Bolt and Nut Tightening

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



1. Front Fender Mounting Bolts
2. Front Fork Clamp Bolts
3. Handlebar Clamp Bolts
4. Clutch Lever Holder Bolt
5. Stem Head Bolt
6. Stem Head Clamp Bolt
7. Rear Shock Absorber Bolts and Nuts
8. Front Axle Nut
9. Caliper Mounting Bolts
10. Muffler Mounting Nuts
11. Engine Mounting Bolts and Nuts
12. Side Stand Bolt
13. Shift Pedal Bolt
14. Footpeg Mounting Bolt
15. Pivot Shaft Nut
16. Rear Axle Nut



17. Cylinder Head Bolt
18. Master Cylinder Clamp Bolts
19. Brake Lever Pivot Bolt
20. Brake Cam Lever Bolt
21. Torque Link Nuts
22. Brake Pedal Nut
23. Muffler Connecting Pipe Clamp Bolts
24. Spokes

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 all the cables.
- Remove the battery, and store it where it will not be exposed to direct sunlight, moisture, or freezing temperatures. During storage it should be given a slow charge (one ampere or less) about once a month. Keep the battery well charged during cold weather so that the electrolyte does not freeze and crack open the battery. The more discharged the battery becomes, the more easily it freezes.
- Tie plastic bags over the exhaust pipes to prevent moisture from entering.
- Put a cover over the motorcycle to keep dust and dirt from collecting on it.

Preparation after Storage:

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

Engine Does Not Start:

Starter Motor Not Rotating

- Engine stop switch off
- Clutch lever not pulled in and transmission not in neutral
- 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

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

While Riding

- Choke is used too long after moving off
- Fuel tap is shut off (except for California models)
- No fuel in tank
- Fuel tank air vent is obstructed
- Overheating
- Battery discharged

KZ305-B2

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