Kawasaki

Includes:
- Important Safety Information
- Operating Instructions
- Maintenance and Storage

MULE™ 610 4×4/600
Utility Vehicle

Read this manual carefully. It contains safety information.

OWNER'S MANUAL

Quick Reference Guide

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

A Table of Contents is included after the Foreword.

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

⚠ DANGER

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

⚠ WARNING

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

NOTICE

NOTICE is used to address practices not related to personal injury.

NOTE

○ *NOTE indicates information that may help or guide you in the operation or service of the vehicle.*

⚠ WARNING

Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

EMISSION CONTROL INFORMATION

To protect the environment in which we all live, Kawasaki has incorporated crankcase emission (1) and exhaust emission (2) and evaporative emission (3) control systems in compliance with applicable regulations of the United States Environmental Protections Agency and California Air Resources Board.

1. Crankcase Emission Control System

A sealed-type crankcase emission control system is used to eliminate blow-by gases. The blow-by gases are led to the breather chamber through the crankcase. Then, it is led to the intake manifold.

Oil is separated from the gases while passing through the inside of the breather chamber from the crankcase, and then returned back to the bottom of the crankcase.

2. Exhaust Emission Control System

The exhaust emission control system applied to this engine family is engine modifications that consist of a catalytic converter in the muffler, a modified carburetor and ignition system having optimum ignition timing characteristics.

The carburetor has been calibrated to provide lean air/fuel mixture characteristics and optimum fuel economy with a suitable air cleaner and exhaust system.

A maintenance free ignition system provides the most favorable ignition timing and helps maintain a thorough combustion process within the engine which contributes to a reduction of exhaust pollutants entering the atmosphere.

3. Evaporative Emission Control System

The evaporative emission control system for this vehicle consists of low permeation fuel hoses and fuel tank.

Also, vapors caused by fuel evaporation in the fuel system are not vented into the atmosphere. Instead, fuel vapors are routed into the running engine to be burned, or stored in a canister when the engine is stopped.

High Altitude Performance Adjustment Information

The original carburetor settings for this vehicle are best for sea level use. When the vehicle is used at high altitude, the thinner atmosphere makes the air/fuel mixture richer reducing performance and increasing fuel usage. To improve the performance of vehicles operated at high altitude, optional replacement of certain carburetor components are available. Have the carburetor adjusted by your authorized Kawasaki dealer if you intend to use this vehicle above 500 m (1 600 feet).

However the carburetor must be returned to original settings before using at lower altitudes. Otherwise lean high-altitude carburetor setting may cause rough engine idling, stalling, or engine damage.

Maintenance and Warranty

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

As the owner of this vehicle, 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.

You should keep a maintenance record for your vehicle. To assist you in keeping this record, we have provided space at the end 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.

If there is a problem with the emission control system within the warranty period, you will need to take it and any maintenance records to an authorized Kawasaki dealer for inspection and diagnosis. Kawasaki will work closely with your dealer to resolve any warranty issues. If you are unable to resolve any problem after consulting with the dealership management and need further assistance, contact Kawasaki Motors Corp., U.S.A. at the following address:

Consumer Services .
Kawasaki Motors Corp., U.S.A
P.O. Box 25252
Santa Ana, CA 92799-5252
(866) 802-9381
consumer.services@kawasaki-usa.com

Tampering with Emission 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 purposes of emission 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:

Do not tamper with the original emission related parts:

- Carburetor and internal parts
- Spark plug
- Magneto or electronic battery ignition system
- Fuel filter
- Air cleaner element
- Fuel hoses
- Fuel tank
- Muffler and carbon canister

PLEASE DO NOT TAMPER WITH NOISE CONTROL SYSTEM

To minimize the noise emissions from this product, Kawasaki has equipped it with effective intake and exhaust silencing systems. They are designed to give optimum performance while maintaining a low noise level. Please do not remove these systems, or alter them in any way which results in an increase in noise level.

FOREWORD

Congratulations on your purchase of a new Kawasaki Mule. It is the result of Kawasaki's engineering expertise and a tradition of manufacturing high-quality consumer products.

Please read this Owner's Manual carefully before starting your new Mule so that you will be thoroughly familiar with the proper operation of your vehicle's controls, its features, capabilities, and limitations.

To ensure a long, trouble–free life for your Mule, give it the proper care and maintenance described in this manual.

For those who would like more detailed information on their Mule, a Service Manual is available for purchase from any authorized Kawasaki Mule dealer. The Service Manual contains detailed disassembly and maintenance information. Those who plan to do their own work should, of course, be competent mechanics and possess the special tools described in the Service Manual.

Keep this Owner's Manual aboard your Mule at all times so that you can refer to it whenever you need information.
This manual should be considered a permanent part of the Mule and should remain with the Mule when it is sold.

This publication includes the latest information available at the time of printing. However, there may be minor differences between the actual product and illustrations and text in this manual.
All products are subject to change without prior notice or obligation.

KAWASAKI HEAVY INDUSTRIES, LTD.
Motorcycle & Engine Company

 Dec. 3, 2012. (1)

TABLE OF CONTENTS

BASIC SAFE DRIVING

Knowing and following these rules for safe operation will increase your satisfaction with your new Kawasaki vehicle.

Perform the Daily Checks

Refer to the Daily Checks section for a list of items to check each day before use. Habitual performance of these checks will help to insure safer, more reliable usage. Be sure that any irregularities found during these checks are corrected before operating the vehicle.

Drive Carefully and with Good Judgement

We want you to be satisfied with your new Kawasaki vehicle, so drive carefully, safely, and exercise good judgement. Practice basic maneuvers so you can drive confidently and safely.

Read the Owner's Manual

Read and understand this Owner's Manual. This is especially important for inexperienced drivers. Refer to this Owner's Manual if you have any questions.

Off-Highway Use Only

This vehicle is not an all-terrain vehicle; it is designed and equipped to be a multiuse utility vehicle for off-highway use only. Operation on public roads is not recommended.

Occupant Capacity

Make sure operators are 16 years or older with a valid driver's license.

Each occupant must be able to sit with back against seat, feet flat on floor, and hands on steering wheel, handgrip or handhold.

The operator should be tall enough to wear the seat belt properly and reach all controls.

Passenger(s) should also be tall enough for the seat belt to fit properly and to be able to brace themselves, as necessary, by placing both feet firmly on the floor while gripping the handhold. Stay completely inside the vehicle.

Never Drink and Drive

Alcohol and drugs impair your judgement and slow your reactions. Even drugs prescribed by a physician can be dangerous. Check with your doctor.

Protect Yourself, Use Proper Riding Gear

As appropriate to your operating conditions, wear approved helmet, eye protection, and protective clothing. Operating in a recreational setting, like trail driving or any aggressive riding, could increase the risk of head injury, and thus require head protection.

In these conditions, Kawasaki recommends that operators and passengers wear a properly fitting D.O.T. approved helmet. Wearing proper protective gear can make driving more comfortable and could reduce the severity of injury in the event of an accident.

Wearing Seat Belt

Both the operator and passenger(s) should always wear their seat belts properly. Seat belts cannot completely protect you in every accident, but in many cases a seat belt can reduce the risk of serious injury. Also, to avoid injury, do not put any part of your body outside of the vehicle for any reason.

Before Starting the Engine

Three “musts” before starting the engine are:

1. Apply the parking brake,
2. Put the gear shift lever in the “N” (neutral) position,
3. Check the throttle pedal for proper operation. It should return to its rest position when released.

Use the Parking Brake

Always apply the parking brake before getting out of your vehicle.

Obey Local Laws

Know and obey all laws and regulations governing the use of off-highway vehicles in your area. Respect private property. Always try to preserve nature and the environment.

Refueling

Before refueling the vehicle, shut the engine off and make sure the area is well ventilated and free of any source of flame or sparks. Gasoline is very flammable.

Tire Air Pressure

Tire inflation and type can affect the vehicle’s handling characteristics. Check the tire pressure frequently. Use only the recommended tires for replacement.

SPECIFICATIONS

PERFORMANCE	
Maximum Torque	(A) 29.7 N·m (3.0 kgf·m, 22.0 ft·lb) @2 400 r/min (rpm)
	(B) 27.9 N·m (2.8 kgf·m, 21.0 ft·lb) @2 200 r/min (rpm)
Minimum Turning Radius	
Differential Mode:	3.3 m (10.8 ft)
DIMENSIONS	
Overall Length	2 764 mm (108.82 in.)
Overall Width	1 335 mm (52.56 in.)
Overall Height	(A) 1 802 mm (70.94 in.)
	(B) 1 781 mm (70.12 in.)
Wheelbase	1 779 mm (70.04 in.)
Tread:	
Front	1 051 mm (41.38 in.)
Rear	999 mm (39.33 in.)
Ground Clearance	(A) 170 mm (6.69 in.)
	(B) 155 mm (6.10 in.)
Curb Mass	(A) 463 kg (1 021 lb) (B) 434 kg (957 lb)
Cargo Bed (L × W × H)	1 044 × 900 × 245 mm
	(41.10 × 35.43 × 9.65 in.)

12 SPECIFICATIONS

ENGINE

Type	OHV, 1-cylinder, 4-stroke, positive air-cooled
Displacement	401 cm³ (24.47 cu in.)
Bore × Stroke	82 × 76 mm (3.23 × 2.99 in.)
Compression Ratio	(A) 8.6 : 1 (B) 8.3 : 1
Starting System	Electric starter
Carburetor	NIKKI 6C1026
Ignition System	Magneto and transistor
Ignition Timing	20° constant.
Spark Plug	NGK BPR5ES
Lubrication System	Forced lubrication (wet sump)
Engine Oil:	
Type	API SG, SH, SJ, SL or SM with JASO MA, MA1 or MA2
Viscosity	SAE 10W-40
Capacity	1.4 L (1.5 US qt)

DRIVE TRAIN

Driving Type	(A) Gear (2WD/4WD) (B) Gear (2WD)
Transmission Type	(A) 2-speed & reverse, automatic
	(B) 1-speed & reverse, automatic
Primary Reduction Ratio	3.653 ~ 0.794 (Belt drive torque converter)
Final Reduction Ratio:	
Front	(A) 3.852
Rear	4.000

Overall Drive Ratio:	
Forward	9.263 (High)
	(A) 13.706 (Low)
Reverse	11.910
Transmission Gear Ratio:	
Forward	2.916 (High)
	(A) 4.315 (Low)
Reverse	3.750
Front Final Gear Case Oil	(A) API GL-5 SAE 140 or API GL-6 SAE 90 Hypoid gear oil for Limited Slip Differentials.
Front Final Gear Case Oil Capacity	(A) 0.35 L (0.37 US qt)
Transmission Case Oil	API GL-5 Hypoid gear oil SAE 90 [above 5°C (41°F)]
	SAE 80 [below 5°C (41°F)]
Transmission Case Oil Capacity	(A) 2.4 L (2.5 US qt) (B) 2.2 L (2.3 US qt)

FRAME

Type	Steel tube, ladder type
Castor	8.0°
Trail	(A) 40 mm (1.6 in.) (B) 33 mm (1.3 in.)
Tire Size:	
Front	(A) 24 × 9.00-10 Tubeless
	(B) 22 × 9.00-10 Tubeless
Rear	(A) 24 × 11.00-10 Tubeless
	(B) 22 × 11.00-10 Tubeless

Rim Size:	
Front	10 × 7.0 AT
Rear	10 × 8.5 AT
Fuel Tank Capacity	15.5 L (4.1 US gal)

ELECTRICAL EQUIPMENT

Battery	12 V 14 Ah
Headlight	12 V 35 W × 2
Tail/Brake Light	12 V 5/21 W × 2

LOAD CAPACITY

Maximum Vehicle Load (Including occupants and cargo)	420 kg (924 lb)
Maximum Cargo Bed Load	181 kg (400 lb)

(A): KAF400A (B): KAF400B

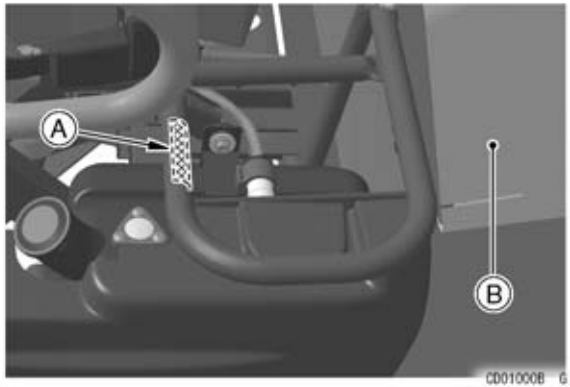
MODEL INFORMATION
MULE610 4 × 4.....KAF400A
MULE600.....KAF400B

Specifications are subject to change without notice.

SERIAL NUMBER LOCATIONS

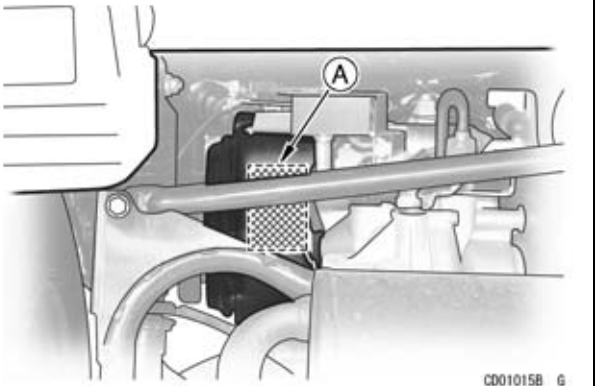
The engine and frame serial numbers are used to register the vehicle. They are the only means of identifying your particular machine from others of the same model type. These serial numbers may be needed by your dealer when ordering parts. In the event of theft, the investigating authorities will require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

Frame No.



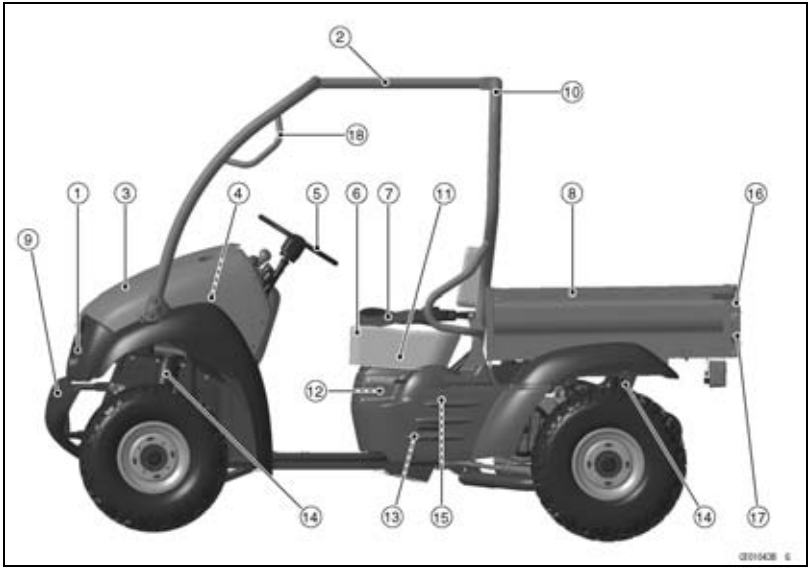
A. Frame Number
B. Seat (Raised Position)

Engine No.



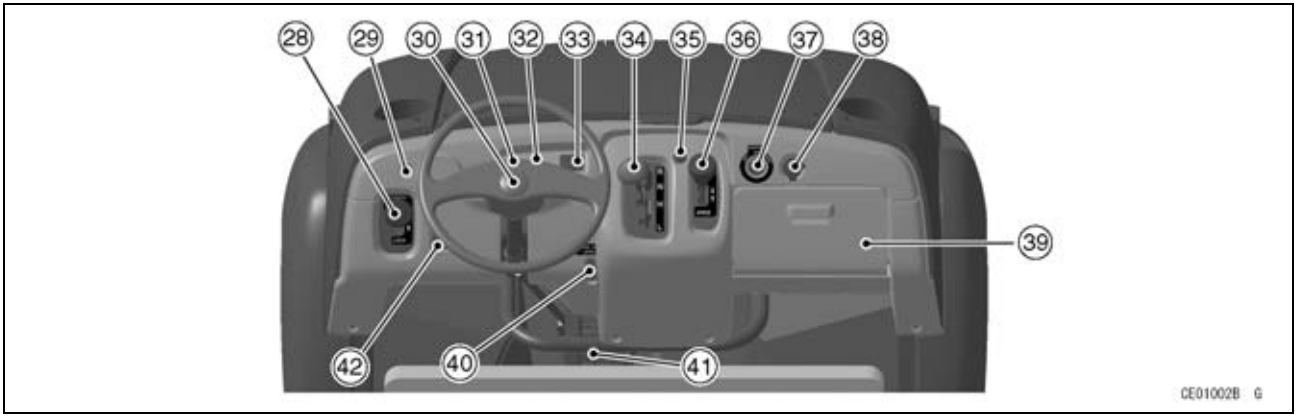
A. Engine Number

LOCATION OF PARTS



1. Headlights
2. ROPS
3. Front Cargo Hood
4. Front Cargo Compartment
5. Steering Wheel
6. Seat
7. Seat Belts
8. Cargo Bed
9. Grille (Front Bumper)
10. Air Cleaner Intake
11. Parking Brake
12. Air Cleaner (Carburetor)
13. Battery
14. Suspensions
15. Carburetor
16. Latch
17. Tail Gate
18. Handgrip

18. Handgrip
19. Air Cleaner (Belt Drive Torque Converter)
20. Belt Drive Torque Converter
21. Latch
22. Dashboard
23. Tail/Brake Light
24. Muffler
25. Fuel Tank
26. Fuel Tank Cap
27. Fuel Gauge



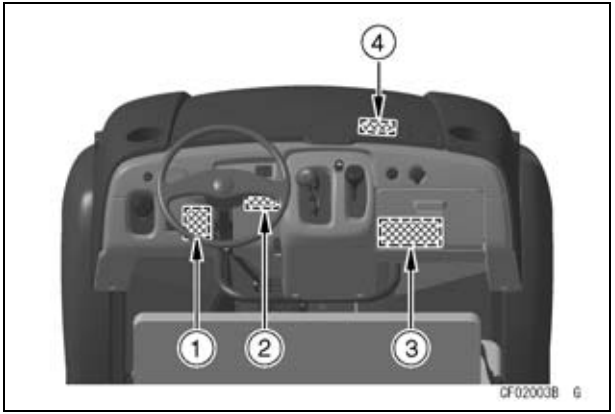
28. Differential Shift Lever
29. Choke Knob
30. Horn Button
31. Engine Oil Temperature Warning Light
32. Parking Brake Warning Light
33. Hour Meter
34. Gear Shift Lever
35. Front Cargo Latch
36. 2WD-4WD Shift Lever (KAF400A)
37. Ignition Switch
38. Accessory Connector
39. Glove Compartment
40. Brake Fluid Level
41. Brake Light Switch
42. Light Switch

LOCATION OF LABELS

All warning labels which are on your vehicle are repeated here. Read labels on your vehicle and understand them thoroughly. They contain information which is important for your safety and the safety of anyone else who may operate your vehicle. Therefore, it is very important that all warning labels be on your vehicle in the locations shown. If any label is missing, damaged, or worn, get a replacement from your Kawasaki dealer and install it in the correct position.

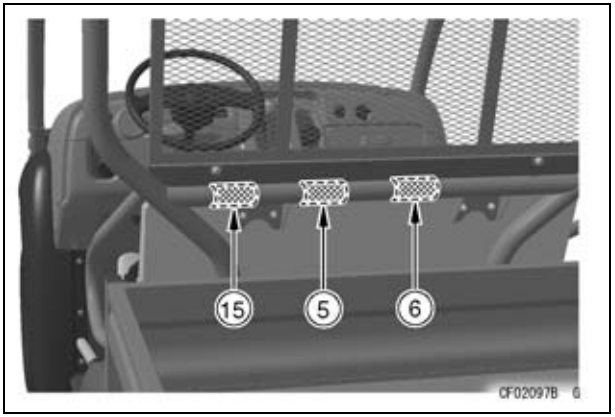
NOTE

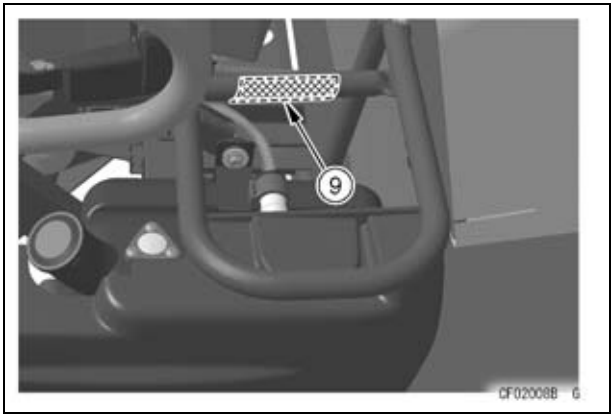
- *The sample warning labels in this section have part numbers to help you and your dealer obtain the correct replacement.*
- *Refer to the actual vehicle label for model specific data grayed out in the illustration.*

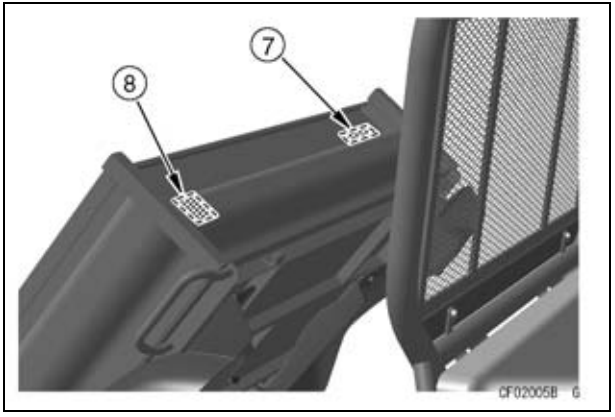


1. Warning (Off-Highway Utility Vehicle)
2. Notice (Shifting)
3. Warning (General)
4. Warning (Front Cargo Hood)

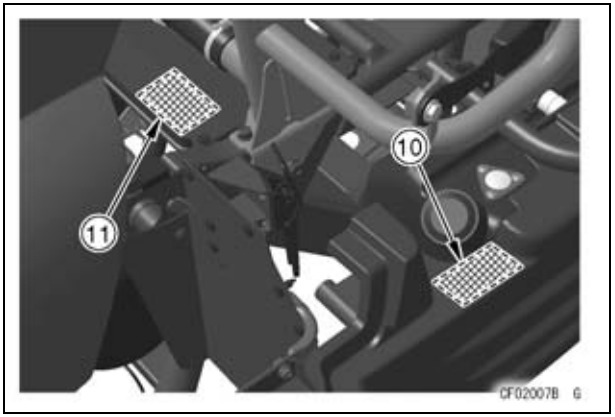
20 LOCATION OF LABELS

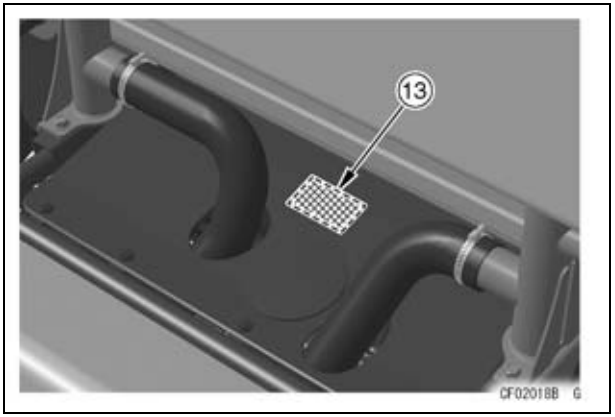


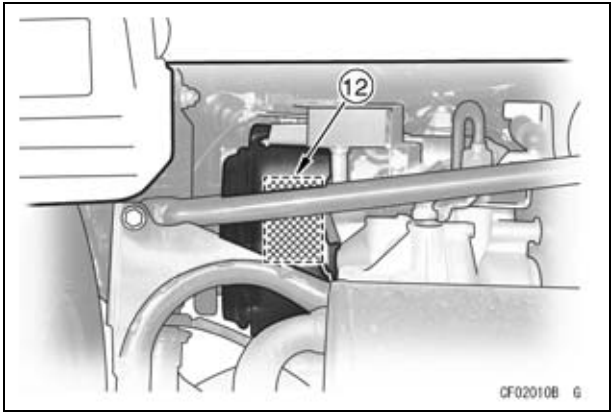




5. Warning (Passengers in Cargo Bed)
6. Warning (Cargo Bed)
7. Important Information (Tires/Max. Load)
8. Carrier Hook Operation
9. Specification
15. Specification

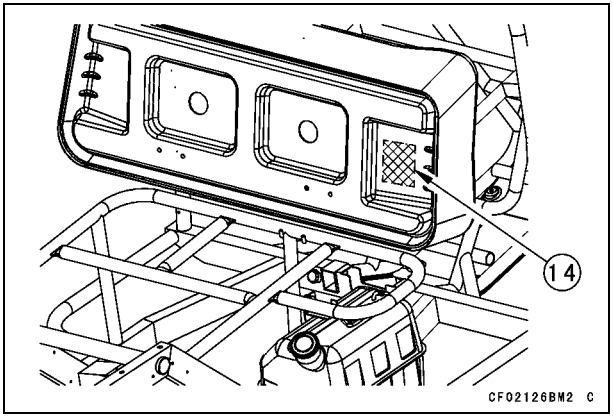


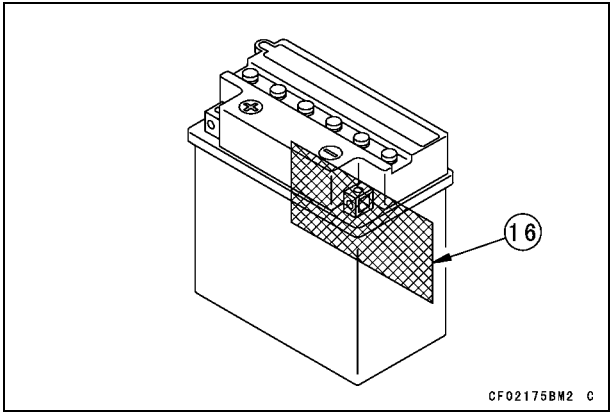


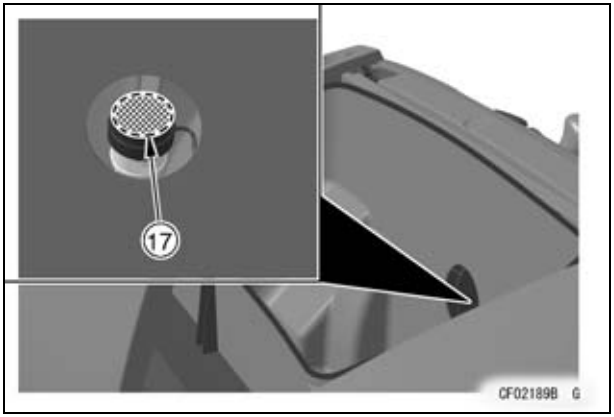


10. Warning (Refueling)
11. Warning (Hot Surface)
12. Important Emission Control Information
13. Engine Oil Information

22 LOCATION OF LABELS

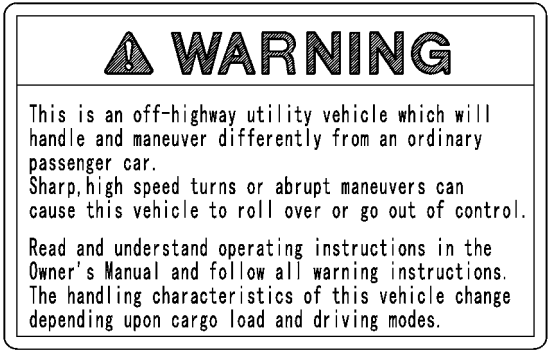






14. Important Emission Information
16. Battery Danger/Poison (On the backside)
17. Brake Fluid

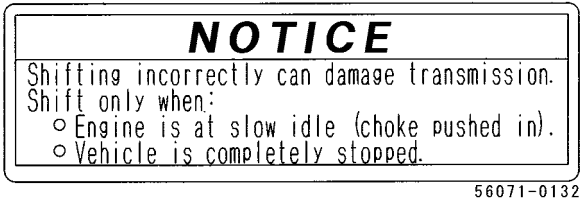
(1)



56070-0050

CF03052BM2 C

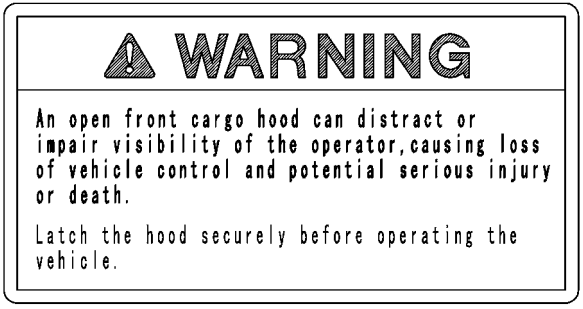
(2)



56071-0132

CF03963B S

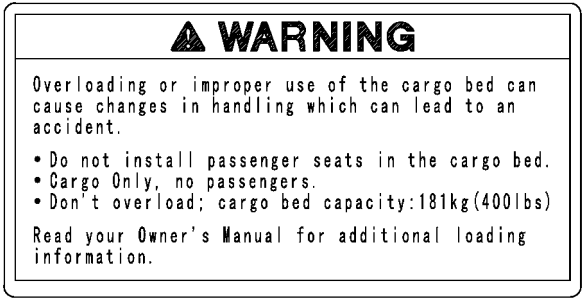
(4)



56070-0053

CF03051BM2 C

(5)

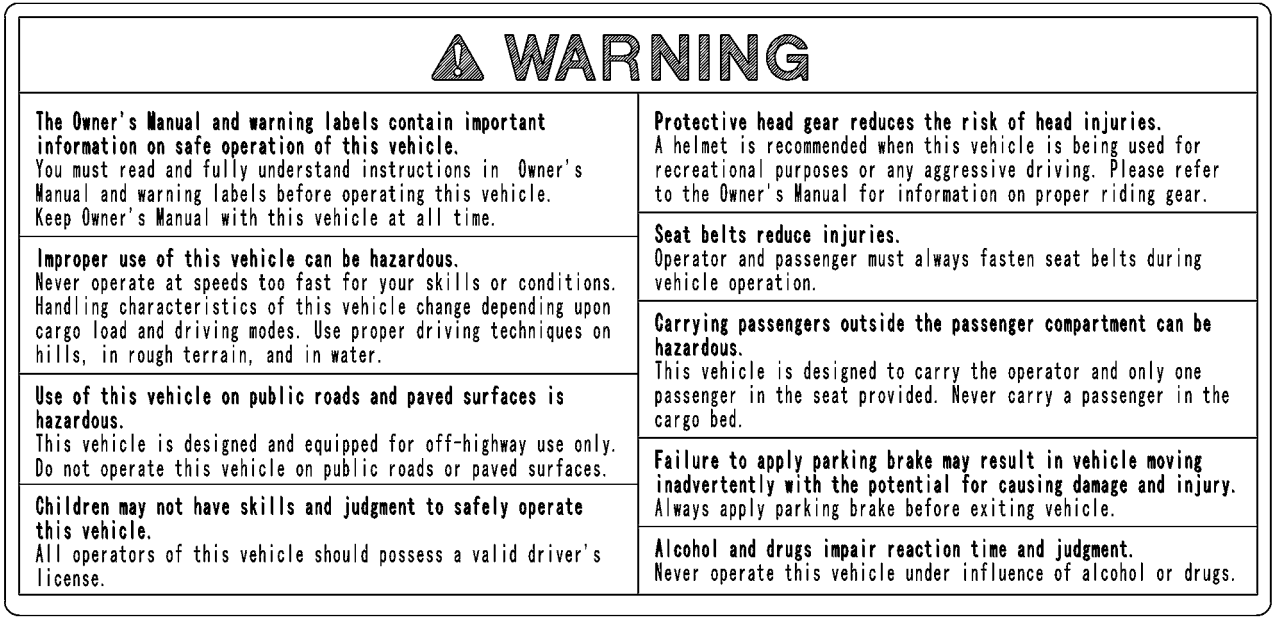


56071-0134

CF03370BM2 C

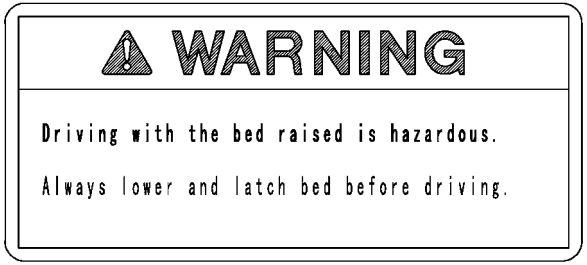
24 LOCATION OF LABELS

(3)



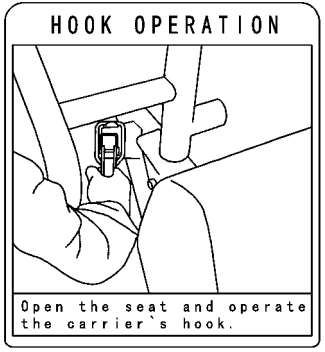
56071-0101

(6)



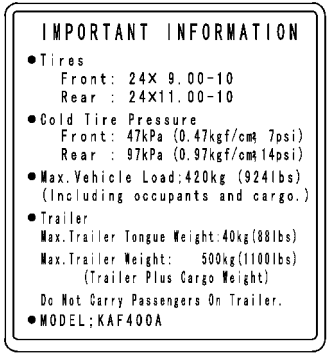
CF03124BM2 C

(8)



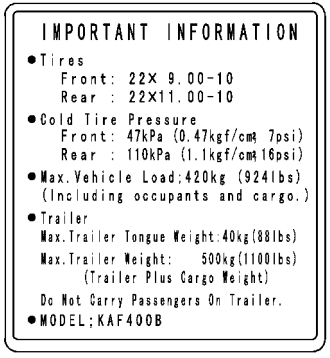
CF03060BM2 C

(7) (KAF400A)



CF03586BM2 C

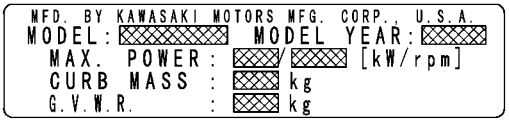
(7) (KAF400B)



CF03588BM2 C

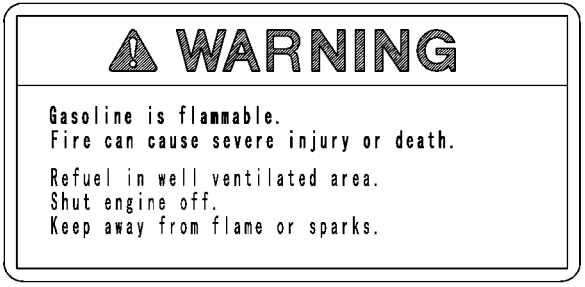
26 LOCATION OF LABELS

(9)



CFO3823BN6 C

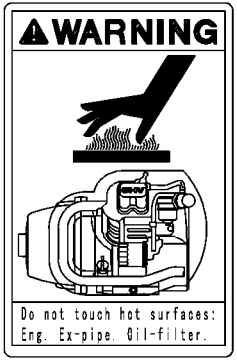
(10)



56071-7501

CFO3150BM2 C

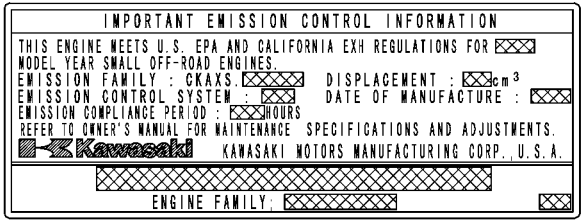
(11)



56070-1125

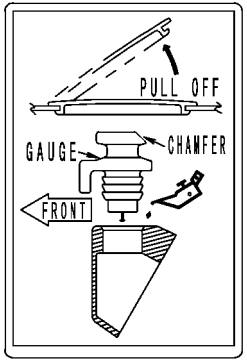
CFO3062BM2 C

(12)



CFO3857BM2 C

(13)



56030-0096

CF03403BM2 C

(14)

EMISSION CONTROL INFORMATION

THIS EQUIPMENT MEETS U.S. EPA EVP STANDARDS AND ☒ CALIFORNIA EVP EMISSION REGULATIONS FOR SMALL OFF-ROAD ENGINES.

EPA:EQUIPMENT FAMILY --- ☒

CARB:EVP FAMILY I.D. --- ☒

DATE OF MFG. ------- ☒

Kawasaki

KAWASAKI MOTORS MANUFACTURING CORP., U.S.A.

CF03856BM2 C

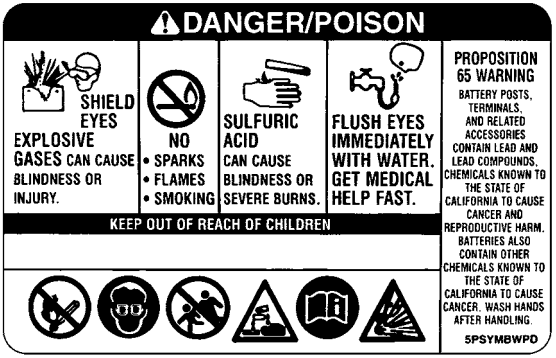
(15)

MFD. BY KAWASAKI MOTORS MFG. CORP., U.S.A., LINCOLN, NE

This structure meets ROPS requirements for wheeled tractors under SAE J1194, 7.1.1, 7.2 and 7.4. This structure also meets FMVSS 216 Roof Crush resistance requirement.

CF03959B S

(16)



BD03107C S

28 LOCATION OF LABELS

(17)

CF03962B S

LOADING INFORMATION

⚠ WARNING

Incorrect loading, improper installation or use of accessories, or modification of your vehicle may result in an unsafe operating condition. Before you operate it, make sure that the vehicle is not overloaded 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 vehicle modifications, will void the utility vehicle warranty. In selecting and using accessories, and in loading the vehicle, you are personally responsible for your own safety and the safety of others.

NOTE

○ *Kawasaki Parts and Accessories have been specially designed for use on Kawasaki utility vehicles. We strongly recommend that all parts and accessories you add to your vehicle be genuine Kawasaki components.*

Because any vehicle is sensitive to increases in weight and changes in weight distribution, you must take care in carrying cargo. The following general guidelines have been prepared to help you make your determinations.

- Reduce speed when carrying cargo. Braking distance is increased. Use extreme caution when climbing and descending hills, and traversing slopes. Carrying cargo and pulling a trailer can make the vehicle difficult to steer and may affect vehicle handling in an unpredictable manner.
- Do not operate this vehicle faster than 16 km/h (10 mph) when pulling a trailer.
- All cargo should be carried as low as possible to reduce the effect on the vehicle's center of gravity. Cargo weight should be equally distributed from side to side. This helps maintain stability by centralizing weight. Avoid carrying cargo that extends beyond the rear of the vehicle. Do not carry cargo on top of the ROPS.
- Do not carry more than 181 kg (400 lb) in the cargo bed.
- Cargo should be securely anchored. Make sure the cargo will not move around while the vehicle is moving. Recheck cargo security as often as possible (while the vehicle is stopped) and adjust as necessary.

NOTICE

The front body work and fenders are not designed to carry cargo or to support your weight. They may break.

- Always subtract trailer tongue weight from the Maximum Load capacity. Refer to the “Trailer Hitch Bracket” section in the “General Information” chapter.

Maximum Vehicle Load

Weight of operator, passenger, and cargo must not exceed 420 kg (924 lb).

- This vehicle is not designed to carry passengers in the cargo bed. Installing additional passenger seating or carrying passengers in the cargo bed can cause changes in vehicle handling.

⚠ WARNING

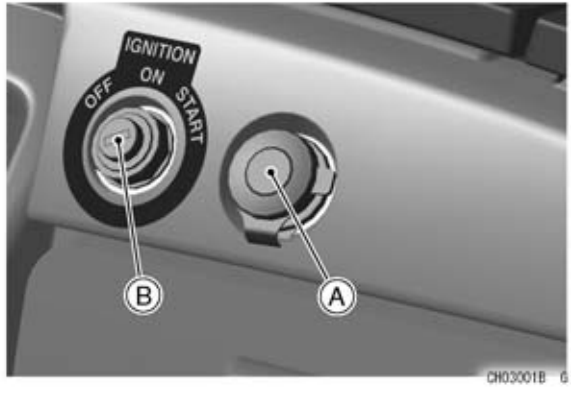
Passengers riding in the cargo bed can be tossed about or even thrown out causing serious injury or death. Do not install seating or carry passengers in the cargo bed.

GENERAL INFORMATION

Lighting/Electrical Accessory Connector

The lighting/electrical accessory 12 volt connector is located on the dashboard.

An auxiliary light or an accessory may be connected to this connector.



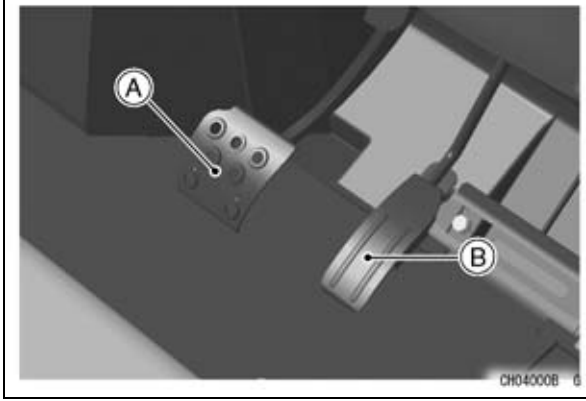
A. Accessory Connector
B. Ignition Switch

NOTICE

Do not connect a light or load of more than 120 watts to these connectors, or the battery may become discharged very rapidly.

Brake Pedal

The brake pedal is the left pedal on the foot board. Depress the pedal to slow or stop the vehicle.



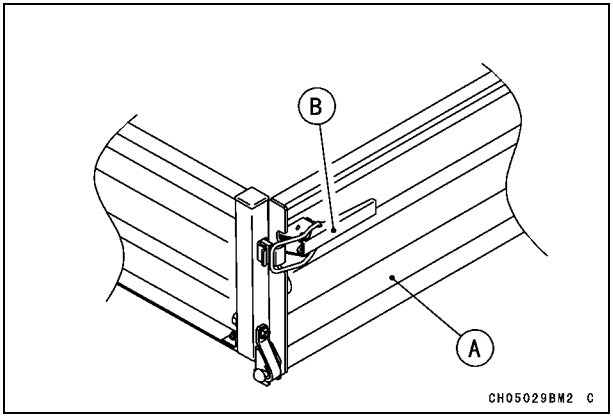
A. Brake Pedal
B. Throttle Pedal

Cargo Bed

Tailgate

Before lowering the tailgate, select a firm level surface and set the parking brake. Replace the latches at each end of the tailgate. The tailgate can now be lowered. The gate is held level to the cargo bed floor with wire loops.

To close the tailgate, lift into upright position and secure firmly with the latches. Do not drive the vehicle with the tailgate lowered.



A. Tailgate
B. Latch

A. Wire Loop

Cargo Bed

The cargo bed can be tilted by releasing the latches on each side, and then lifting the bed with the handgrips. Before tilting the cargo bed, select a firm level surface and set the parking brake.

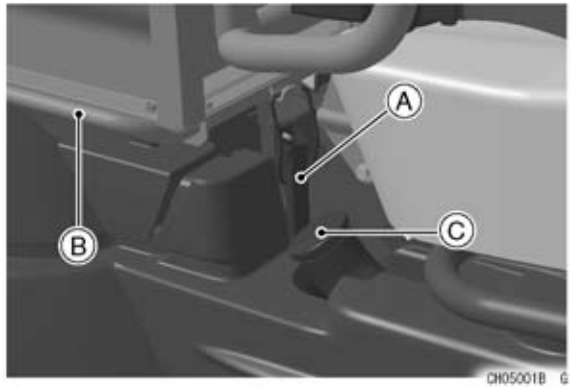
NOTE

○ *Raise the seat first before releasing the latch.*

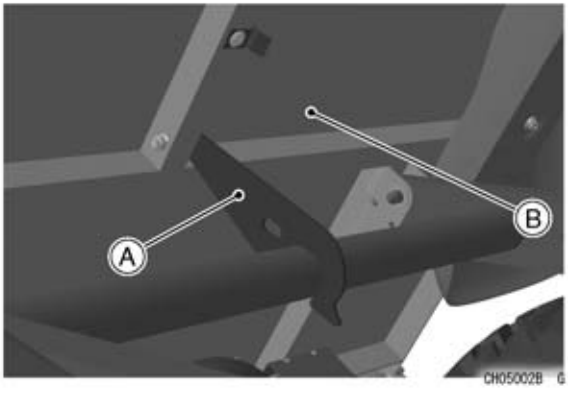
Support the bed in the tilted position with the supporting rod provided on the bottom of the cargo bed. Do not drive the vehicle with the front end of the cargo bed raised or unlatched.

To lower the bed, check to be sure the area under the front of the cargo bed is clear, then carefully lower the bed into position.

Check that the both latches have locked the bed into place. Do not leave the cargo bed unlatched.



A. Latch
B. Handgrip
C. Fuel Tank Cap



A. Supporting Rod
B. Cargo Bed Bottom (Tilted Condition)

NOTICE
Do not carry more than 181 kg (400 lb) in the cargo bed.

Maximum Cargo Bed Load:

181 kg (400 lb)

⚠ WARNING

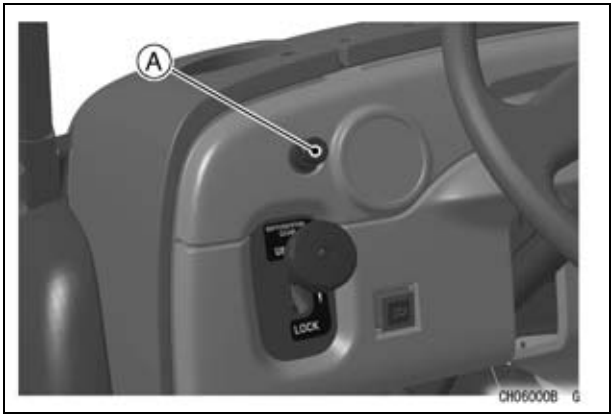
- **Overloading or improper use of the cargo bed can cause changes in handling which can lead to an accident. Follow guidelines provided in the "LOADING INFORMATION" chapter.**
- **Passengers riding in the cargo bed can be tossed about or even thrown out causing serious injury or death. Do not install seating or carry passengers in the cargo bed.**
- **Driving with the cargo bed tilted may be hazardous. Failure to lower and lock the bed into place may cause serious injury or death. Always lower and latch the bed after tilting.**
- **Lifting and lowering the bed could be dangerous. Be careful not to catch any part of your body, such as hands or arms, between the bed and ROPS or vehicle frame when lifting and lowering the bed.**

Choke Knob

The choke knob located on the dashboard, to the left of the steering wheel, provides a rich mixture for cold starting.

Pull the choke knob all the way to start the engine. Warm the engine up using the choke and throttle until the idle speed is stable, and then push the choke knob back.

Refer to the "Starting the Engine" section in the "How to Operate" chapter for detailed information.



A. Choke Knob

NOTE

○ *If the choke is left on (pulled out) after the engine has warmed up, spark plug fouling and poor fuel economy may result.*

Engine Oil Temperature Warning Light (KAF400A)

The oil temperature warning light comes on whenever the engine oil temperature rises too high while the vehicle is in operation. If it stays on, stop the engine and check the engine oil level after the engine cools down.

Refer to the “Engine Oil” section in the “Maintenance and Adjustment” chapter.

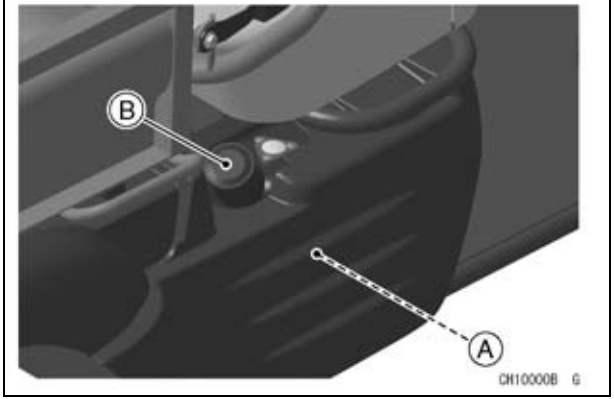
A. Engine Oil Temperature Warning Light

NOTICE

Do not let the engine continue running with a warning light on. Prolonged engine operation can result in engine damage from overheating.

Fuel Tank

The fuel tank is mounted under the right end of the seat. The gasoline octane rating listed is recommended. Avoid filling the tank in the rain or where heavy dust is blowing, so that the fuel does not get contaminated.



A. Fuel Tank
B. Filling Cap

⚠ WARNING

Gasoline is extremely flammable and can be explosive under certain conditions, creating the potential for serious burns. Turn the ignition switch to "OFF". Do not smoke. Make sure the area is well-ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light. Never fill the tank completely to the top. If the tank is filled completely to the top, heat may cause the fuel to expand and overflow through the vents in the tank cap. After refueling, make sure the tank cap is closed securely. If gasoline is spilled on the fuel tank, wipe it off immediately.

Fuel Requirements:

Fuel Type

This vehicle is certified to operate on unleaded regular grade gasoline only.

Use clean, fresh unleaded gasoline with a minimum Antiknock Index of 87. The Antiknock Index is posted on service station pumps in the U.S.A. The octane rating of a gasoline is a measure of its resistance to detonation or "knocking." The Antiknock Index is an average of the Research Octane Number (RON) and the Motor Octane Number (MON) as shown in the table below.

Octane Rating Method		Minimum Rating
Antiknock Index	(RON + MON) / 2	87

NOTICE

If engine "knocking" or "pinging" occurs, use a different brand of gasoline of a higher octane rating. If this condition is allowed to continue it can lead to severe engine damage.

Gasoline quality is important. Fuels of low quality or not meeting standard industry specifications may result in unsatisfactory performance. Operating problems that result from the use of poor quality or nonrecommended fuel may not be covered under warranty.

Fuels Containing Oxygenates

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

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

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

NOTICE

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

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

NOTE

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

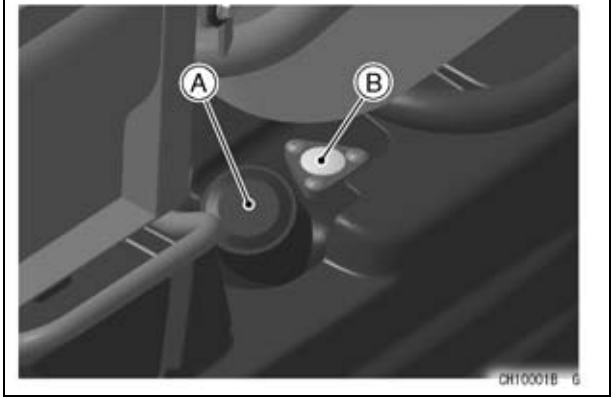
NOTICE

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

Fuel Gauge

The fuel gauge on the fuel tank shows the amount of fuel in the fuel tank.

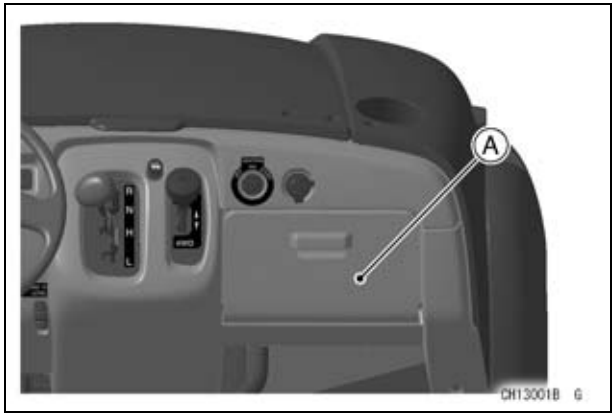
When the red indicator needle comes near the "E" (Empty) mark, refuel at the earliest opportunity.



A. Filling Cap
B. Fuel Gauge

Glove Compartment

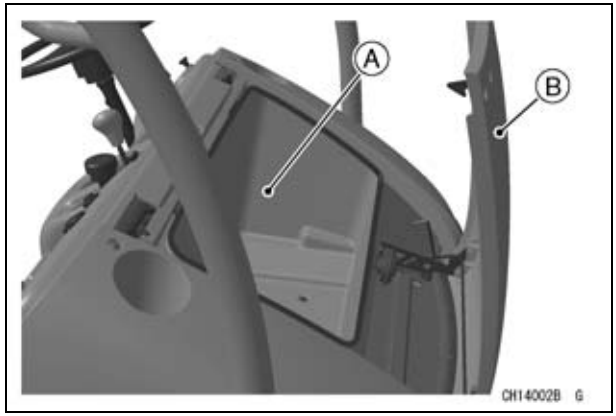
A glove compartment is provided at the right end of the dashboard. Store only light items to avoid damage to the inside of the compartment. Release the plug in the bottom of the glove compartment to remove any water that may have entered. Do not put items which must not get wet or dirty in it.



A. Glove Compartment

Front Cargo Compartment

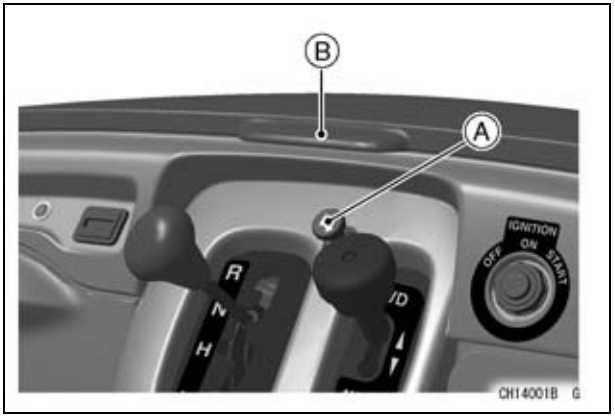
The front cargo compartment is located under the front cargo hood. Store only light-weight items in it to avoid damage to the inside of the compartment. Do not put items which must not get wet or dirty in it.



A. Front Cargo Compartment
B. Hood

Hood Opening

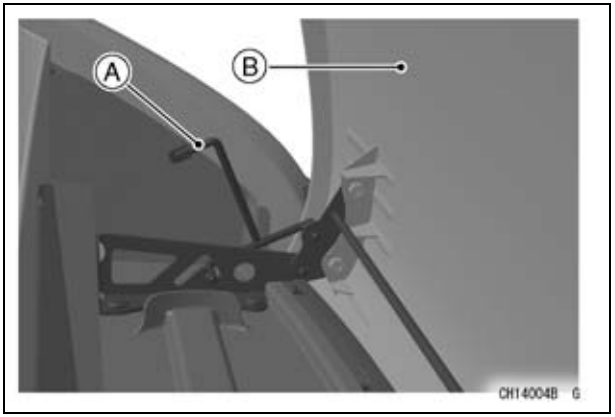
Pull the hood latch release button and raise the hood until it locks.



A. Latch Release Button
B. Hood

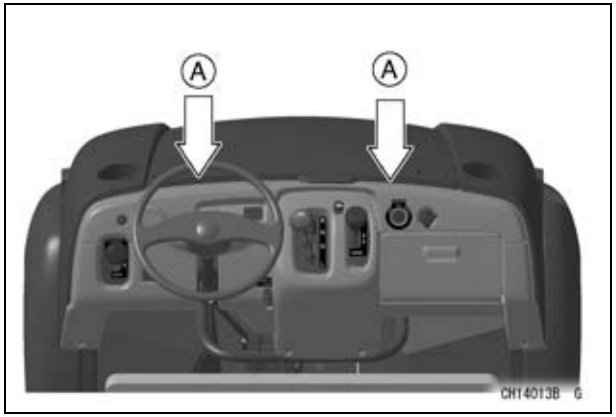
Hood Closing

While lifting the latch lever at the front of the cargo hood, push and close the cargo hood.



A. Latch Lever
B. Hood

- After the hood is closed, push the two parts of the hood to ensure the hood is latched.



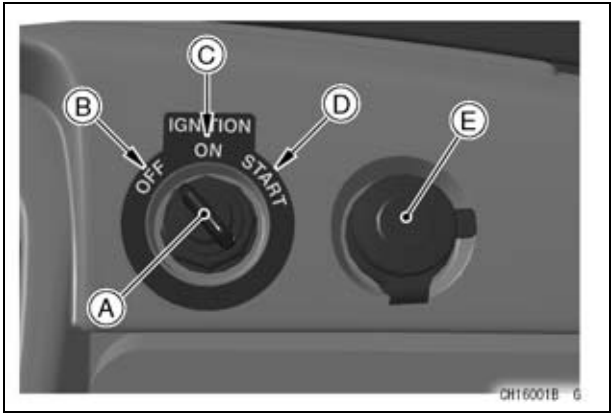
A. Push here.

⚠ WARNING

An open front cargo hood can distract or impair visibility of the operator, causing loss of vehicle control and potential serious injury or death.
Latch the hood securely before operating the vehicle.

Ignition Switch

This is a three-position, key-operated switch. The key can be removed from the switch only when it is in the “OFF” position.



A. Ignition Switch
B. “OFF” position
C. “ON” position
D. “START” position
E. Accessory Connector

OFF	Engine off. All electrical circuits off.
ON	All electrical equipment can be used. Hour meter works.
START	Electric starter is engaged by holding ignition switch key in this position, only when gear shift lever is in “N” (neutral) position. Upon release, key will return to “ON” position.

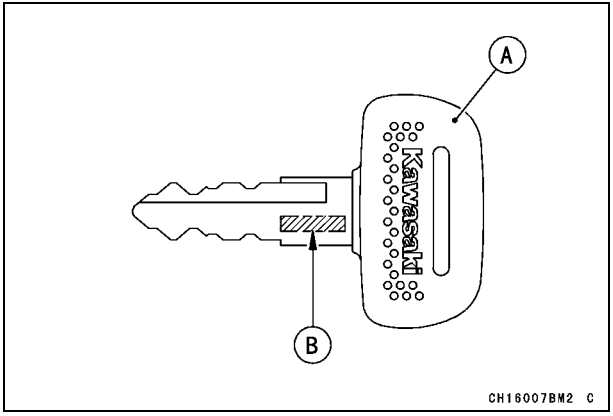
NOTICE
Do not operate the starter continuously for more than 5 seconds, or the starter will overheat and the battery power will drop temporarily. Wait 15 seconds between each operation of the starter to let it cool and for the battery to recover power. **Do not turn the ignition switch key to the “START” position with the engine running, or damage to the starter can result.**

NOTE

○ *The vehicle is equipped with a starter lockout switch. This switch prevents the electric starter from operating when the gear shift lever is in the “H” (High) and “L” (Low) for KAF400A or “F” (Forward) for KAF400B or “R” (Reverse) position.*

Keys

This UV has a key, which is used for the ignition switch, and one spare key. Included with the key is a key number, which is stamped on the key itself. Record the key number in the space provided and store the number in a safe place.



A. Key
B. Key Number

Write your key number here.

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

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

Hour Meter

The hour meter shows the total hours that the vehicle has been operated. This meter cannot be reset.

NOTE

- *The data is maintained even if the battery is disconnected.*
- *The hour meter shows the operating hours to a maximum of 5 digits. The value is shown to the nearest 0.1 hr until the total reaches 10 000 hrs after which the meter counts in complete hours only.*
- *When the figures come to 99999, they turn back to 0.0 and start counting upward again when the vehicle is operated.*

A. Hour Meter

Light Switch

Turn on the headlights and taillights by pushing the light switch in, with the ignition switch key in the “ON” position.

The lights go off when the switch is pushed again.

A. Light Switch

Shift Levers

This vehicle is equipped with three different shift levers: the gear shift lever, the 2WD-4WD shift lever (KAF400A only) and the differential shift lever.

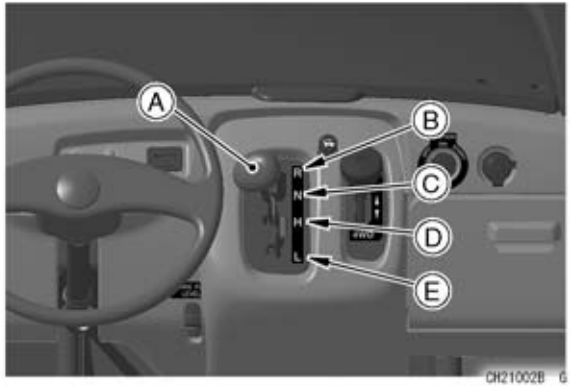
Gear Shift Lever

The gear shift lever is located on the dashboard, to the right of the steering shaft. The gear shift lever has four (KAF400A) or three (KAF400B) positions: “H” (High) and “L” (Low) for KAF400A or “F” (Forward) for KAF400B, “N” (Neutral), and “R” (Reverse).

Model	Gear Position
KAF400A	“H” (High), “L” (Low), “N” (Neutral), “R” (Reverse)
KAF400B	“F” (Forward), “N” (Neutral), “R” (Reverse)

Make certain that the vehicle is completely stopped and the engine is idling before shifting from “H” (High) or “L” (Low) for KAF400A or “F” (Forward) for KAF400B to “R” (Reverse) or vice versa. Move the gear shift lever up or down as indicated on the label next to the shift lever.

Refer to the “Reversing Gears” section in the “How to Operate” chapter.



A. Gear Shift Lever
B. "R" (Reverse) Position
C. "N" (Neutral) Position
D. "H" (High) Position (KAF400A only)
E. "L" (Low) Position (KAF400A only) or "F" (Forward) Position (KAF400B only)

NOTICE

Do not shift from "H" (High) or "L" (Low) to "R" (Reverse) and vice versa for KAF400A or "F" (Forward) to "R" (Reverse) and vice versa for KAF400B when the vehicle is moving or with the engine running above idling speed, or the transmission could be damaged.

The KAF400A is equipped with a sub-transmission to allow maximum transmission efficiency. Use the low gearing for maximum torque at low speeds, for climbing hills, pulling a trailer, or keeping constant low speeds. The high gearing raises the speed range for ordinary off-highway use. Stop the vehicle before moving the Hi-Lo shift lever.

NOTICE

Use of the high range for heavy loads, climbing hills, pulling a trailer, and sustained low speed riding can lead to premature wear of the torque converter belt and pulleys. Use low range for these conditions.

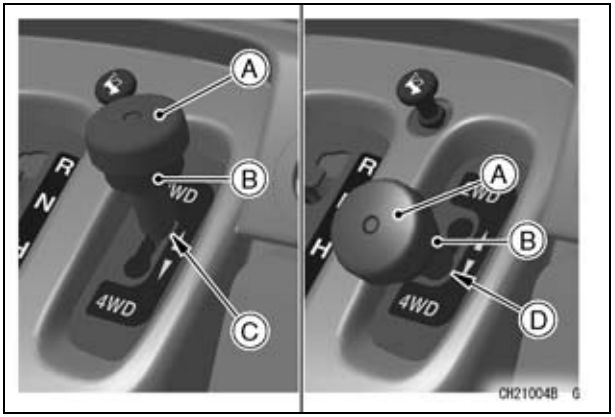
Refer to the "Hi-Lo Shifting" section in the "How to Operate" chapter.

2WD-4WD Shift Lever (KAF400A)

This vehicle can be operated either in "2WD" or "4WD".

The 2WD-4WD shift lever is located on the dashboard, to the right of the steering shaft. Move the 2WD-4WD shift lever up or down as necessary.

Refer to the "2WD-4WD Shifting" section in the "How to Operate" chapter.

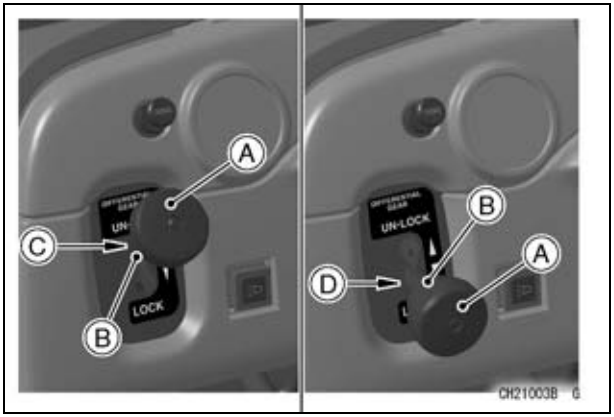


A. 2WD-4WD Shift Lever
B. Stopper
C. “2WD” Position
D. “4WD” Position

Differential Shift Lever

This vehicle is equipped with a dual-mode rear differential. The differential shift lever is located on the dashboard, to the left of the steering shaft. Move the shift lever up or down as indicated on the label next to the shift lever.

Refer to the “Shifting the Differential” section in the “How to Operate” chapter.



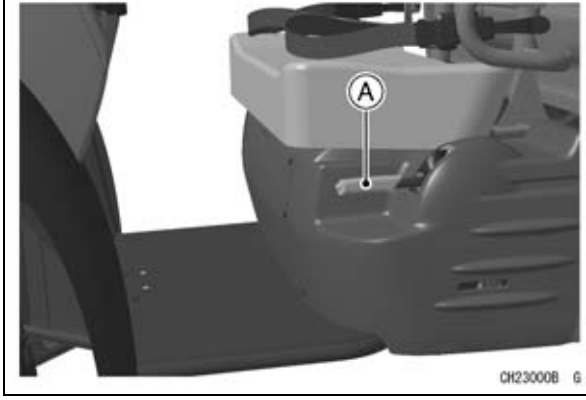
A. Differential Shift Lever
B. Stopper
C. Differential (Unlocked–Axle) Mode Position (UN–LOCK)
D. Locked-Axle Mode Position (LOCK)

Parking Brake Lever

The parking brake lever is located at the left side of the seat. Pull the lever up and to the rear to apply the parking brake.

To release, push in and hold the knob on the end of the lever and push the lever all the way down. Spring pressure helps return the lever to the released position.

Be sure to release the parking brake before driving off. Failure to do so may result in poor performance and premature wearing of the rear brakes and belt converter system.



A. Parking Brake Lever

⚠ WARNING

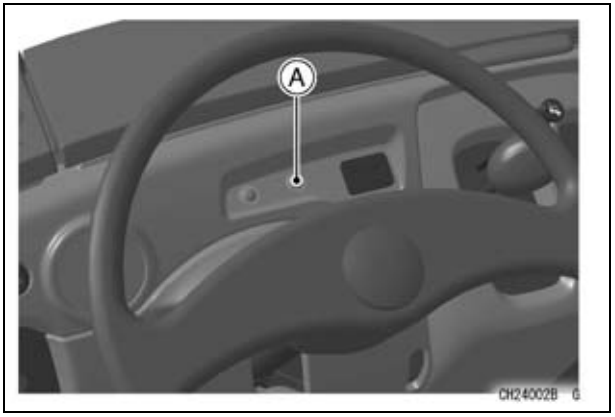
If the vehicle should move after it is parked, it might be damaged or cause injury. Be sure to apply the parking brake before leaving the vehicle.

Parking Brake Warning Light

The parking brake warning light goes on when the parking brake is applied with the ignition switch in the “ON” position.

NOTE

○ *This light shows only that the parking brake is on. It does not show the degree of parking brake application.*

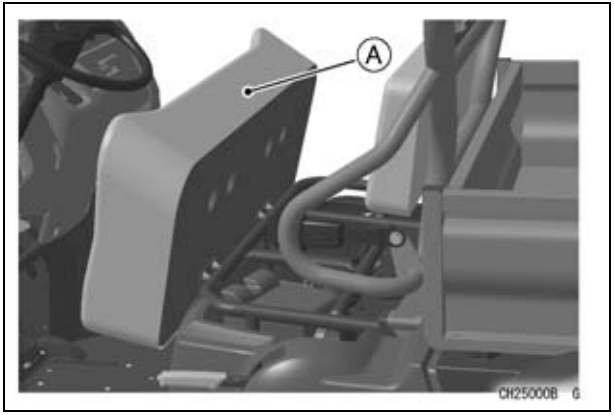


A. Parking Brake Warning Light

Seat

The seat can be raised for vehicle maintenance and adjustment.

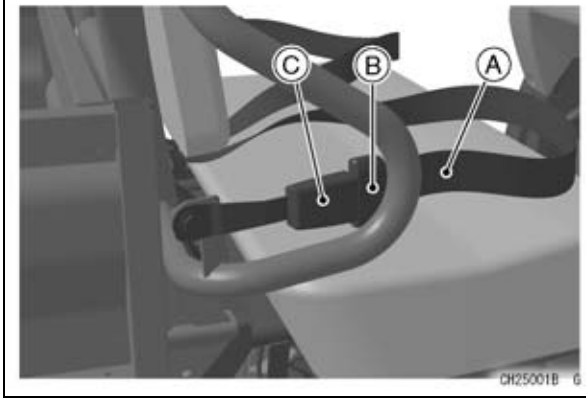
● Pull up on the rear edge of the seat.



A. Seat (Raised Position)

Seat Belts

The vehicle is equipped with lap-style seat belts for operator and passenger. Always wear the seat belts when operating and riding in the vehicle.



A. Seat Belt
B. Latch Plate
C. Buckle

⚠ WARNING

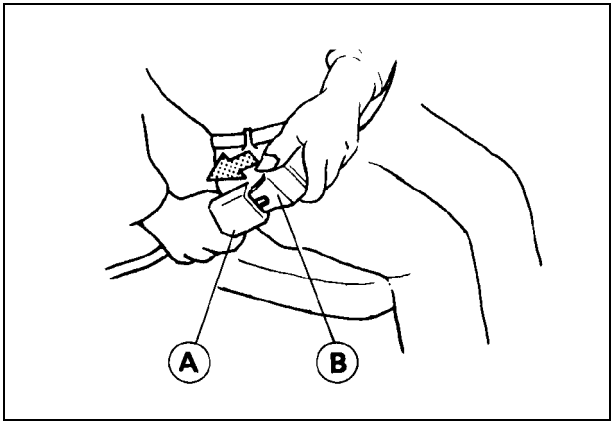
Not wearing a seat belt, or wearing one improperly can result in serious injury or death in the event of an accident. Make certain the driver and passenger always wear their seat belts properly.

⚠ WARNING

Operator and passenger must be able to place both feet flat on the floorboards while seated upright with their backs against the seatbacks.

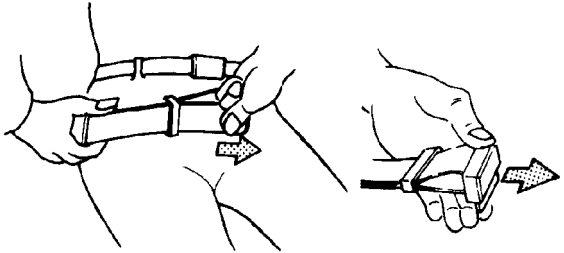
To wear the seat belt properly, follow this procedure:

1. Place the belt across your lap as low on your hips as possible taking care that the belt is not twisted.
2. Push the latch plate into the buckle until it clicks.
3. Adjust the seat belt for a SNUG FIT.



A. Buckle
B. Latch Plate

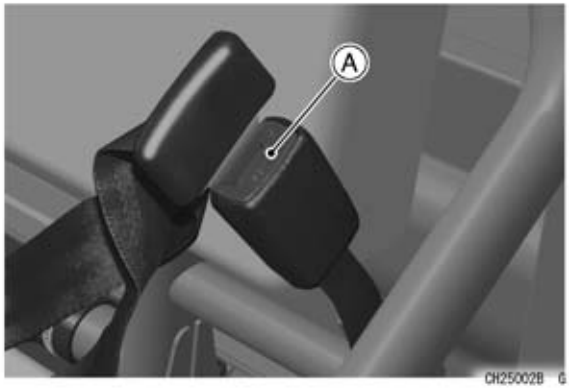
To tighten the belt, pull on the end of the belt coming from the latch plate. To loosen the belt, pull the latch plate at a right angle to the belt.



⚠ WARNING

Too much belt slack could reduce its protection effectiveness in an accident. Always adjust the belt to a SNUG FIT.

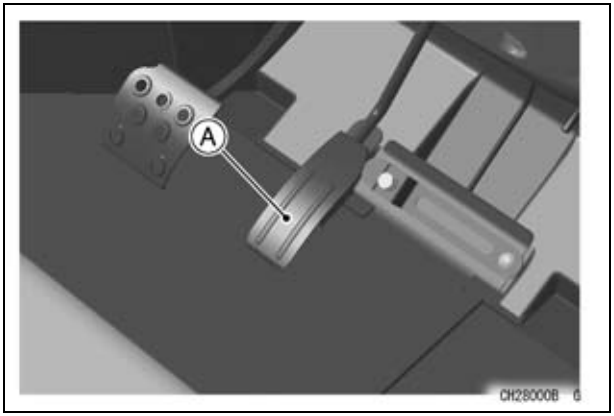
To unfasten the belt, press the red button in the buckle.



A. Red Button

Throttle Pedal

The throttle pedal is the right pedal on the floor board. Push the pedal down to increase engine speed. Spring pressure returns the pedal to the rest position when released. Always check that the throttle pedal returns normally before starting the engine. In addition, there must be adequate throttle pedal play and correct throttle stop position adjustment. Refer to the “Maintenance and Adjustment” chapter for the throttle pedal adjustment procedure.



A. Throttle Pedal

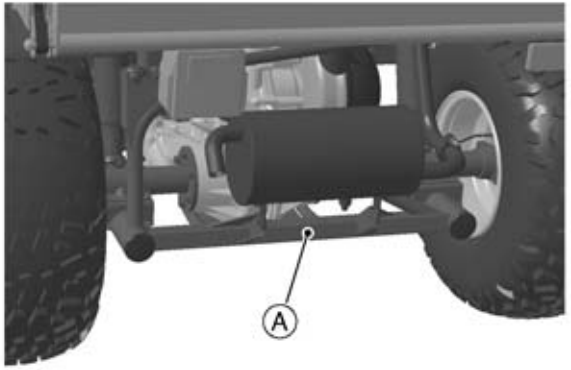
Trailer Hitch Bracket (Accessory)

This vehicle can be equipped with an optional bracket for a trailer hitch. Trailer towing equipment is not supplied with this vehicle.

To avoid injury and property damage, observe the following precautions:

⚠ WARNING

Improper towing of a loaded trailer could cause an accident resulting in serious injury or death. Never carry a passenger in a trailer. Never load more than 40 kg (88 lbs) tongue weight on the towing bracket. Do not operate the vehicle faster than 16 km/h (10 mph) when towing. Remember that towing a trailer increases braking distance. Do not tow more than 500 kg (1 100 lbs) trailer weight (trailer plus cargo weight). Attach a trailer to the trailer hitch bracket only. Do not attach a trailer to any other location or you may lose control of the vehicle and have an accident.



A. Trailer Hitch Bracket Installation Position

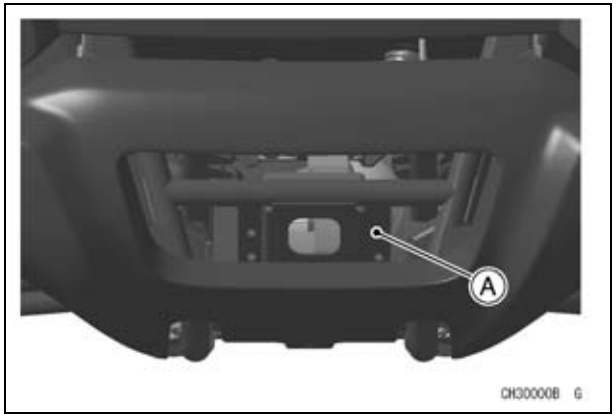
Winch Installation

There is a location on the frame of this vehicle behind the front bumper designed for winch installation. Kawasaki offers winches and installation brackets as optional equipment. Contact an authorized Kawasaki dealer for more information.

To avoid injury and property damage, observe the following precautions:

⚠ WARNING

Improper installation or operation of a winch could cause an accident resulting in serious injury or death. Do not operate or install winch without reading and understanding the operators manual supplied with the winch.



A. Winch-installing position

HOW TO OPERATE

Daily Checks

Check the following items each day before operation. The time required is minimal, and habitual performance of these checks will help ensure safe, reliable operation.

If any irregularities are found during these checks, refer to the MAINTENANCE AND ADJUSTMENT chapter, see your dealer, or refer to the Service Manual for the action required to return the vehicle to a safe operating condition.

⚠ WARNING

Failure to perform these checks before operation may result in serious damage or an accident. Always perform daily checks before operation.

⚠ DANGER

Exhaust gas contains carbon monoxide, a colorless, odorless poisonous gas.
Inhaling carbon monoxide can cause serious brain injury or death.
DO NOT run the engine in enclosed areas. Operate only in a well-ventilated area.

Fuel ..... Enough fuel in tank, no leaks.
Engine oil ..... Oil level between “H” and “L” lines (when engine is cold), no leaks.
Tires ..... Air pressure (when cold):

	KAF400A	KAF400B
Front	47 kPa (0.47 kgf/cm², 7 psi)	47 kPa (0.47 kgf/cm², 7 psi)
Rear	97 kPa (0.97 kgf/cm², 14 psi)	110 kPa (1.1 kgf/cm², 16 psi)

Check for cuts, cracks, damage, or excessive wear.
Check for any imbedded stones or other foreign particles in tread.
Front Final Gear Case ..... No oil leaks (KAF400A).

Transmission Case Oil	Oil level between H and L lines, no leaks.
Throttle	Throttle pedal free play 2 ~ 5 mm (0.1 ~ 0.2 in.). Throttle pedal operates smoothly and returns to rest position when released.
Steering	Steering wheel free play 0 ~ 20 mm (0 ~ 0.8 in.). Action smooth without excessive play, rough spots, or strange noises.
Brakes	Check for braking effectiveness (while test running). Brake pedal free play 2 ~ 5 mm (0.1 ~ 0.2 in.). Brake fluid level between level lines, no leaks. Parking brake lever travel: 8 ~ 12 clicks.
Electrical Equipment	All lights and horn work. Check for dirt on or damage to lights.
Battery	Electrolyte level between level lines in each cell.
Engine Cooling Fan Screen	Check for mud and other debris.

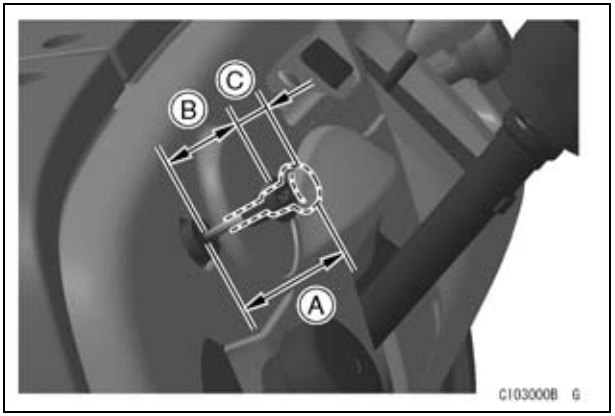
Starting the Engine

Throttle-linked choke system

This vehicle is equipped with the choke that controls the throttle operation without pressing the throttle pedal when starting the engine.

Mechanism of the System

- By pulling the choke knob out, the choke valve in the carburetor starts to close.
- By further pulling the knob over the stepping response, throttle valve linked to the choke starts to open slightly. (You can feel this move by increased resistance of the choke knob.)



A. Full Choke Stroke
B. Ordinary Choke Stroke
C. Throttle-linked Choke Stroke

Using this choke system, start the engine with the following procedure.

⚠ DANGER

Exhaust gas contains carbon monoxide, a colorless, odorless poisonous gas.
Inhaling carbon monoxide can cause serious brain injury or death.
DO NOT run the engine in enclosed areas.
Operate only in a well-ventilated area.

- Wear the seat belts (both operator and passenger).
- Apply the parking brake.
- Put the gear shift lever in the “N” (Neutral) position.
- Put the ignition key in the switch.

NOTE

- *When engine is cold and air temperature is below 20°C (68°F), pull the choke knob all the way out and keep holding the knob so that the throttle-linked choke system functions. Release the choke knob when the engine has started and push in the choke knob after the engine starts to warm up.*
- *When engine is warm or air temperature is 20°C (68°F) or higher, do not use the choke. Push down the throttle pedal slightly. If the engine is hard to start, use the choke for a short time only.*

- Turn the key in the ignition switch to the start position to activate the electric starter. Repeat until engine starts.

NOTICE

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

NOTE

- *If the engine is flooded, make sure the choke knob is all the way in. Then crank the engine over with the throttle fully open (throttle pedal fully depressed) until the engine starts.*
- *The vehicle is equipped with a starter lockout switch. This switch prevents the electric starter from operating when the gear shift lever is in the "H" (High) and "L" (Low) for KAF400A or "F" (Forward) for KAF400B or "R" (Reverse) position.*
- *If the brake pedal is depressed, it is possible to start in any position.*

- Gradually return the choke knob to the "OFF" position a little at a time as necessary to keep the engine running properly during warm-up.

NOTE

- *If you drive the vehicle before the engine is warmed up, return the choke to the "OFF" position as soon as you start moving.*

Jump Starting

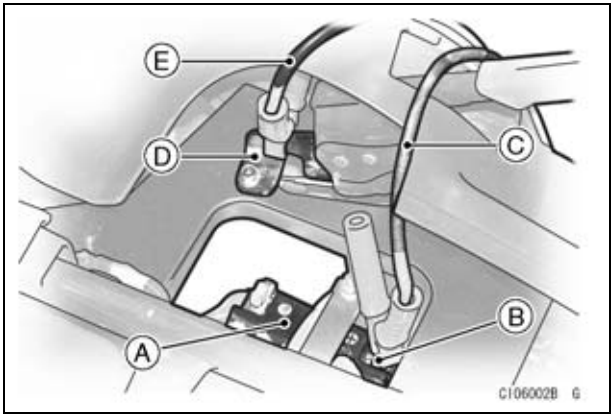
If your vehicle's battery is "run down," it should be removed and charged. If this is not practical, a 12 volt booster battery and jumper cables may be used to start the engine.

⚠ DANGER

Battery acid generates hydrogen gas which is flammable and explosive under certain conditions. It is present within a battery at all times, even in a discharged condition. Keep all flames and sparks (cigarettes) away from the battery. Wear eye protection when working with a battery. In the event of battery acid contact with skin, eyes, or clothing, wash the affected areas immediately with water for at least 5 minutes. Seek medical attention.

Connecting Jumper Cables

- Make sure the ignition switch is turned to "OFF."
- Raise the seat, the battery is located under the left end of the seat.
- Connect a jumper cable from the positive (+) terminal of the booster battery to the positive (+) terminal of the vehicle battery.



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

- Connect another jumper cable from the negative (–) terminal of the booster battery to an unpainted metal surface on your vehicle. Do not use the negative (–) terminal of the battery.

⚠ DANGER

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

- Follow the standard engine starting procedure.

NOTICE

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

- After the engine starts, disconnect the jumper cables. Disconnect the negative (–) cable from the vehicle first.

Moving Off

- Depress the brake pedal.
- Put the gear shift lever into the “H” (High) and “L” (Low) position for KAF400A or “F” (Forward) position for KAF400B.
- Release the parking brake.
- Gradually increase engine speed by pressing on the throttle pedal.

NOTE

○ *Practice starting and stopping (using the brakes) until you are familiar with the controls.*

Braking

NOTE

○ *When the throttle pedal is released completely and the engine speed drops near an idle, the vehicle has no engine braking. This is caused by the vehicle’s automatic transmission which releases the engine at very low speed to prevent it from stalling. Employ the brakes to control the vehicle’s speed.*

- Release the throttle pedal completely.
- Press on the brake pedal evenly and firmly.

⚠ WARNING

Carrying cargo or towing a trailer will increase braking distances. Failure to allow for increased braking distance may result in accident and injury. Always allow more distance to stop when carrying cargo or towing a trailer.

Stopping the Engine

- Release the throttle pedal completely.
- Put the gear shift lever into the “N” (Neutral) position.
- Apply the parking brake to help prevent the vehicle from rolling.
- Turn the ignition switch key to the “OFF” position.

Parking the Mule

⚠ WARNING

Operating or parking the vehicle near flammable materials can cause a fire, and can result in property damage or severe personal injury.
Do not idle or park your vehicle in an area where tall or dry vegetation, or other flammable materials could come into contact with the muffler or exhaust pipe.

⚠ WARNING

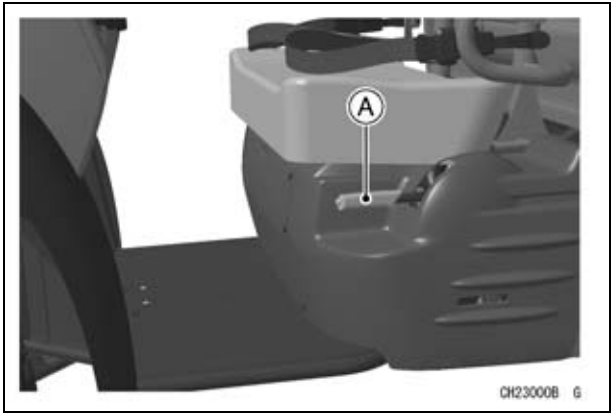
The engine and exhaust system get extremely hot during normal operation and can cause serious burns.
Never touch a hot engine, exhaust pipe, or muffler during operation or after stopping the engine.

- Stop the vehicle on a level surface.

NOTICE

Avoid parking on steeply inclined surfaces.

- When the engine has stopped, apply the parking brake to help prevent the vehicle from rolling.



A. Parking Brake Lever

⚠ WARNING

If the vehicle should move after it is parked, it might be damaged or cause injury. Be sure to apply the parking brake before leaving the vehicle.

- Remove the ignition switch key to prevent unauthorized use.
- When parking inside a garage or other structure, be sure the structure is well ventilated and the vehicle is not close to any source of flame or sparks. This includes any appliance with a pilot light.

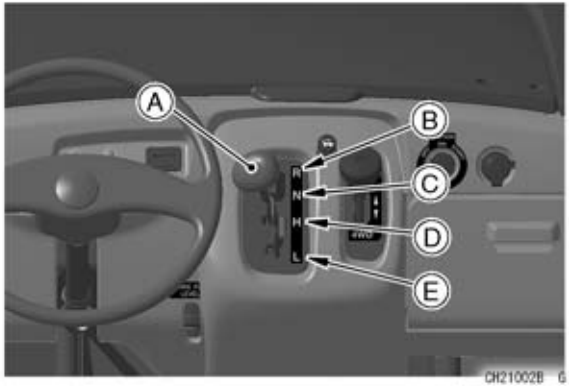
⚠ WARNING

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

Hi-Lo Shifting (KAF400A)

Shifting to High or Low Range

- Stop the vehicle completely.
- Move the shift lever to the “L” (Low) or “H” (High) positions.



A. Gear Shift Lever
B. “R” (Reverse) Position
C. “N” (Neutral) Position
D. “H” (High) Position
E. “L” (Low) Position

NOTE

- *Before shifting make certain that the vehicle is completely stopped. The gear shift lever cannot be shifted when the vehicle is in motion.*
- *When shifting the lever from “L” to “N”, if it is hard to move the shift lever passing “H” position and does not move to “N” position, return the shift lever to “L” once and repeat to move the lever to “N” position slowly.*

Reversing Gears

- Release the throttle pedal, and stop the vehicle.
- When you want to operate the vehicle in reverse, stop the vehicle completely, allowing the engine to slow to idling speed, and move the gear shift lever to the “R” (Reverse) position.

NOTICE

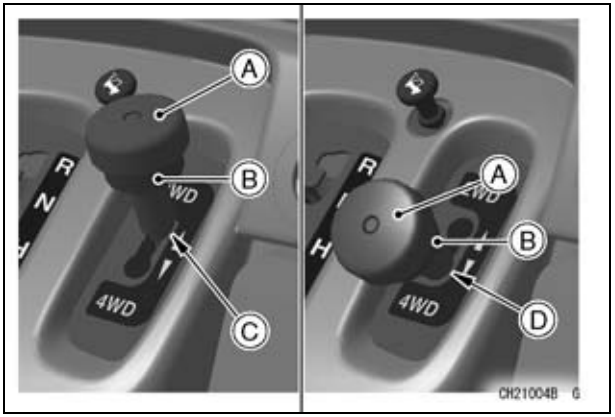
Do not shift from “H” (High) or “L” (Low) to “R” (Reverse) and vice versa for KAF400A or “F” (Forward) to “R” (Reverse) and vice versa for KAF400B when the vehicle is moving or with the engine running above idling speed, or the transmission could be damaged.

2WD-4WD Shifting (KAF400A)

- Pull the stopper under the 2WD-4WD shift lever knob and while holding it against the knob, move the shift lever to the all way down “4WD”.
- To shift back into “2WD” position, pull and hold the stopper, then move the shift lever all the way up “2WD”.

NOTE

○ *When the shift lever is moved from “2WD” to “4WD”, the transmission shifts immediately. When the shift lever is moved from “4WD” to “2WD”, the transmission may not shift all the way into “2WD” until the vehicle has rolled a short distance.*



A. 2WD-4WD Shift Lever
B. Stopper
C. "2WD" position
D. "4WD" position

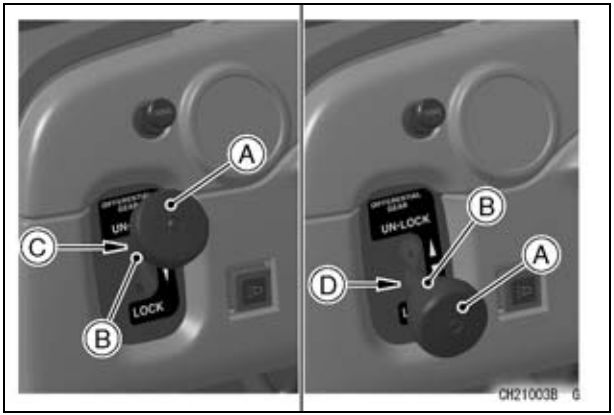
Shifting the Differential

NOTE

○ *Do not operate the differential shift lever if the vehicle is moving faster than 8 km/h (5 mph).*

Shifting to Locked-Axle Mode

- Pull the stopper under the differential shift lever knob and while holding it against the knob, move the shift lever all the way down (LOCK).



A. Differential Shift Lever
B. Stopper
C. Differential (Unlocked-Axle) Mode Position (UN-LOCK)
D. Locked-Axle Mode Position (LOCK)

Shifting to Differential (Unlocked-Axle) Model

- Pull and hold the stopper, then move the shift lever all the way up (UN-LOCK).

NOTE

○ *When the shift lever is moved, the differential may not immediately lock or unlock until the vehicle has rolled a short distance.*

Catalytic Converter

This vehicle is equipped with a catalytic converter in the exhaust system. The converter react with carbon monoxide, hydrocarbons and nitrogen oxides to convert them into carbon dioxide, water, nitrogen and oxygen resulting in much cleaner exhaust gases to be discharged into the atmosphere.

For proper operation of the catalytic converter, the following cautions must be observed.

⚠ WARNING

Operating or parking the vehicle near flammable materials can cause a fire, and can result in property damage or severe personal injury.
Do not idle or park your vehicle in an area where tall or dry vegetation, or other flammable materials could come into contact with the muffler or exhaust pipe.

⚠ WARNING

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

- Use only unleaded gasoline. Never use leaded gasoline. Leaded gasoline significantly reduces the capability of the catalytic converter.
- Do not coast the vehicle with the ignition switch and/or engine stop switch off. Do not attempt to start the engine by rolling the vehicle if the battery is discharged. Do not operate the vehicle with the engine of the cylinder misfiring. Under this conditions unburned air/fuel mixture flowing out of engine excessively accelerates reaction in the converter allowing the converter to overheat and become damaged when the engine is hot, or reduces converter performance when the engine is cold.

NOTICE

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

SAFE OPERATION

Safety is an attitude. Your common sense and good judgement are your best defenses against accident and injury in everything you do. Your safety and the safety of others depends on you and your common sense. Use good judgement in the operation of this or any other motor vehicle.

This vehicle is designed for an operator and one passenger only. Never carry persons in the cargo bed. Refer to the “Loading Information” chapter before operating this vehicle.

Novice operators should practice braking and turning in an open, off-highway area away from other vehicles and persons. The terrain should be flat and free of obstacles, with either a loose or hard dirt surface, but not a mixture of both.

⚠ WARNING

Incorrect loading, improper installation or use of accessories, or modification of your vehicle may result in an unsafe operating condition. Before operation, make sure that the vehicle is not overloaded and that you have followed the instructions in the “Loading Information” chapter.

Unfamiliar Terrain

Before driving in a new area be sure to check for hidden obstacles or hazards. Keep your speed down until you know the area well. You must know the terrain you intend to drive on and be familiar with your machine and its handling characteristics. Use existing trails and stay away from hazardous areas such as steep, rocky slopes or swamps. Be cautious when visibility is limited, as you may not be able to see obstacles in your path.

Driving in Reverse

Start the engine following the procedure in the "Starting the Engine" section. Before shifting into reverse, stop the vehicle completely. Refer to the Gear Shift Lever in the "Shift Levers" section and "Reversing Gears" section.

Turn around and look behind you before backing up to be sure there are no obstacles or people in your way. Gradually open the throttle and begin backing up cautiously.

To stop while driving in reverse, close the throttle and gradually apply the brake. Avoid sudden application of the brake.

NOTICE

Do not operate the gear shift lever to change gears while driving the vehicle in reverse, or the transmission may be damaged.

Remember:
- Look behind you before backing up.
- Open the throttle gradually.
- To stop, gradually apply the brake.

Driving in "4WD" (KAF400A)

"4WD" gives greater traction when you are climbing steep inclines, or driving on bumpy, sandy or snowy surfaces. It also helps break loose, with the differential locked under certain circumstances, for example, when the vehicle is stuck in the mud. If maximum torque is needed in these situations, shift into the low position with the shift lever. Refer to the "Shift Levers" section and "2WD-4WD Shifting (KAF400A)," "Shifting the Differential," and "Hi-Lo Shifting (KAF400A)" sections.

NOTE

○ *Do not drive in "4WD" on paved surfaces, because it increases tire and drive train wear and makes the steering feel tight.*

Remember:
- Use "4WD" on steep inclines or loose surfaces, or when stuck in the mud, with the differential locked if necessary.
- For maximum torque shift into low range.
- Do not drive in "4WD" on paved surfaces.

Turning the Vehicle

The vehicle will turn in a smaller radius with the differential unlocked (in differential mode). In this mode, the rear wheels can turn at different speeds allowing the vehicle to turn tighter and more smoothly. Even in this mode, however, avoid sharp turns to keep the vehicle from tipping. Reduce vehicle speed before entering the turn and use the throttle to maintain an even speed through the turn.

⚠ WARNING

In the differential mode, if either rear wheel leaves the ground it will spin freely, and the wheel on the ground will transmit very little power. When a spinning wheel touches the ground, it may grab abruptly, causing the operator to lose control. Do not make sharp turns, even in the differential mode, in order to avoid loss of control or tipping.

Remember:
- Slow down before entering the turn.
- Maintain an even speed through the turn.

Hills

As with any motor vehicle, loading of the vehicle, and the surface and steepness of the hill are among the critical considerations in climbing, descending or traversing hills. Use extreme caution on hills. Keep in mind that loading changes a vehicle's center of gravity and that the higher the center of gravity, the more likely the vehicle is to tip on uneven surfaces. Slippery, loose, or bumpy surfaces on hills are especially hazardous. Some hills are just too steep to climb. Always use common sense and practice good judgement.

Climbing Hills

Do not attempt to climb hills or steep inclines until you have mastered the controls and basic operating maneuvers of this vehicle. Always go straight uphill and, if the incline is steep and/or the surface is loose, use “4WD” with the differential locked for greater traction, and in low range for maximum torque.

Avoid hills with slippery sides that will cause you to lose traction. Do not climb hills where you cannot see far enough ahead. If you cannot see what is on the other side of the crest of a hill, slow down until you can get a clear view. Don’t apply power suddenly while climbing, or the front wheels might rise off the ground. If the vehicle does not have enough power to reach the top of the hill and stalls, allow the vehicle to roll slowly straight back down the hill controlling its descent with the brakes. Leave the gear shift lever in the “H” (High) and “L” (Low) position for KAF400A or “F” (Forward) position for KAF400B until you stop at the bottom of the hill.

⚠ WARNING

Riding sideways across a hill may cause the vehicle to overturn, causing severe injury or death. Do not turn sideways to the hill.

Remember:

- Some hills are too steep. Use common sense.
- Never drive past your limit of visibility. If you can’t see what is on the other side of the crest of a hill, slow down until you can get a clear view.
- Don’t turn sideways to the hill.
- If you get stuck on a hill, roll slowly straight back down, using the brake, with the gear shift lever left in the “H” (High) and “L” (Low) position for KAF400A or “F” (Forward) position for KAF400B.

NOTE

○ *When the throttle pedal is released completely and the engine speed drops near an idle, the vehicle has no engine braking. This is caused by the vehicle’s automatic transmission which releases the engine at very low speed to prevent it from stalling. Use the brakes to control the vehicle’s speed.*

Descending Hills

Slow down or stop at the top of a hill so you can pick a straight, safe path for descent to avoid any obstacles. Normally you should descend straight down a hill since driving at an angle could cause the vehicle to lean to one side and possibly tip over. Proceed slowly and cautiously. Apply the brake as necessary. Be careful if the surface is loose because the tires are more likely to skid and braking effectiveness will be reduced.

Turning while descending a slope must be done very carefully and gradually to avoid tipping the vehicle over.

⚠ WARNING

Riding sideways across a hill may cause the vehicle to overturn, causing severe injury or death. Do not turn sideways to the hill.

Remember:
- Stop and look for obstacles before descending a hill.
- Go straight downhill.
- Go slowly.
- If you must turn, do so carefully and gradually.

NOTE

○ *When the throttle pedal is released completely and the engine speed drops near an idle, the vehicle has no engine braking. This is caused by the vehicle's automatic transmission which releases the engine at very low speed to prevent it from stalling. Use the brakes to control the vehicle's speed.*

Traversing Hillsides

When driving across the side of a hill, reduce vehicle speed and exercise extreme caution to prevent tipping or loss of control. Avoid hills with slippery sides that will cause you to lose traction. Also avoid traversing hillsides covered with rocks or other obstacles which may cause you to lose your balance or tip over.

When driving on soft terrain, steer slightly uphill to keep the vehicle on a straight line across the hillside.

If the vehicle begins to tip, steer downhill if possible to regain control.

Sliding and Skidding

Obviously, on slippery or loose surfaces, special care is required. Sliding any vehicle may be hazardous because the wheels may suddenly regain traction and cause the vehicle to tip or overturn. Therefore, never drive “over your head” or when you are unsure or unprepared for the surface.

Often you can correct a skid by turning the wheels in the direction of the skid. Do not apply heavy braking force or accelerate when skidding, since this may cause further loss of control.

Use caution and maintain low speeds to avoid uncontrolled skidding on areas covered with clay, mud, ice, or snow. Use “4WD” (KAF400A) and low (KAF400A) range gearing efficiently. These conditions are particularly hazardous when descending a hill or making a turn. Remember that this vehicle is not for use on public streets, roads, or highways.

Remember:

- Be especially careful on very slippery surfaces.
- Don’t drive on public streets, roads, or highways.

Driving through Water

Avoid driving through water whenever it is possible. When driving across shallow water, choose a location to enter and exit the water where the banks are not too steep or slippery. Check before entering for rocks, holes or other obstacles which may cause you to overturn or become stuck or submerged.

Observe the following rules for operating the vehicle in water.

A. Axle Cap

⚠ WARNING

Operating the vehicle in rivers or streams where water is flowing quickly can cause the tires to lose traction and allow the vehicle to be swept into the current. Never operate the vehicle in fast-flowing water or in water deeper than the bottom edge of the axle caps.

After prolonged exposure to water, the wheel bearings may require lubrication or replacement.

Wash the vehicle in fresh water if it has been exposed to salt water or operated in muddy conditions.

⚠ WARNING

Wet brakes provide greatly reduced efficiency and could lead to an accident and injury. After operation in water, always apply the brakes long enough for friction to dry the linings. Also, the brake that gets wet may wear out faster. Check for brake wear more frequently if the vehicle is used in water.

Remember:

- Avoid driving through water whenever possible.
- Don't drive in deep and fast moving water.
- Dry out the brakes.

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 Mule 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 Mule.

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

Periodic Maintenance Chart

In addition to the following items, always perform the Daily Checks listed in the HOW TO OPERATE chapter.

● = Clean, adjust, lubricate, replace parts as necessary.
D = Service to be performed by an authorized Kawasaki Dealer or someone equally competent.
* = Service more frequently when operated in mud, dust, or other harsh riding conditions.
○ = Emission Related

OPERATION	FREQUENCY			
	Whichever comes first ↓ Every	First Service	Regular Service	
		After 50 hrs. or 1 000 km of use	Every 250 hrs. or 5 000 km of use	Every 500 hrs. or 10 000 km of use
ENGINE				
Converter belt-inspect*			D	
Converter driven pulley shoe-inspect*				D
Converter air cleaner element-clean*		●	●	
Converter dust or water-drain*				●
○ Fuel filter-change*				●
Fuel hoses and connections-inspect*		D	D	
○ Fuel system cleanliness-inspect*				●
○ Air cleaner element-clean*		●	●	
○ Spark plug-clean and gap			●	
○ Valve clearance-inspect		D		D
Engine oil-change*	1 year	●	●	
Oil filter-replace*		●		●
○ Throttle pedal play-inspect		●		●
○ Idle speed-adjust		●	●	
Spark arrester-clean			●	

OPERATION	FREQUENCY			
	Whichever comes first / Every	First Service	Regular Service	
		After 50 hrs. or 1 000 km of use	Every 250 hrs. or 5 000 km of use	Every 500 hrs. or 10 000 km of use
Fuel hose-replace	5 years (D)			
○ Evaporative emission control system-function*		●	●	
CHASSIS				
Steering-inspect		●	●	
Steering and axle shaft joint dust boots-inspect		D	D	
Brake pedal play-inspect*		●	●	
Parking brake lever-inspect		●	●	
Brake hose and pipe-inspect		D	D	
Brake fluid level-inspect		●	●	
Brake wear-inspect*			D	
Tire wear-inspect*		●	●	
Brake light switch-inspect		●	●	
Seat belt-inspect			●	
General lubrication-perform*			D	
Bolts, nuts, and fasteners tightness-inspect		D	D	
Wheel nuts tightness-inspect		●	●	

OPERATION	FREQUENCY			
	Whichever comes first ➡ / Every ⬇	First Service	Regular Service	
		After 50 hrs. or 1 000 km of use	Every 250 hrs. or 5 000 km of use	Every 500 hrs. or 10 000 km of use
Battery-inspect			●	
Front final gear case oil (KAF400A) and transmission case oil-change*	1 year	●		●
Brake fluid-change	2 years (D)			
Brake master cylinder cup and dust seal-replace	2 years (D)			
Brake wheel cylinder assembly-replace	2 years (D)			
Brake hose-replace	4 years (D)			

Engine Oil

⚠ WARNING

The cargo bed requires a supporting hook to remain in the raised position and will fall down if not supported, creating the potential for injury. Always latch the supporting hook when lifting the bed for engine or other maintenance below the bed.

In order for the engine 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

Vehicle operation with insufficient, deteriorated, or contaminated engine oil will cause accelerated wear and may result in engine seizure, accident, and injury. Check the oil level before each use and change the oil and filter according to the periodic maintenance chart in the owner's manual.

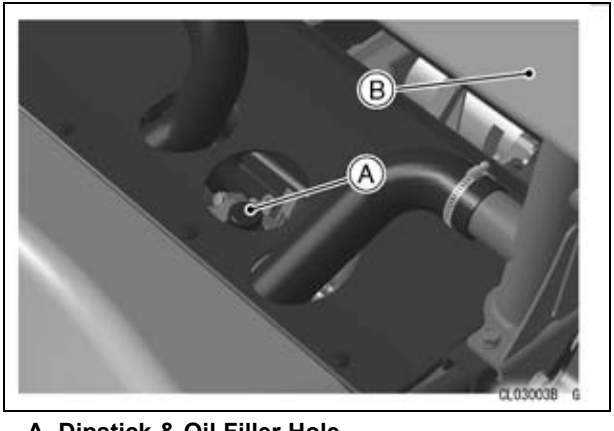
Oil Level Inspection

- 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.

NOTICE

Racing the engine before the oil reaches every part can cause engine damage.

- If the vehicle has just been used, wait several minutes for all the oil to drain down.
- Park the vehicle on level ground.
- Raise the seat.

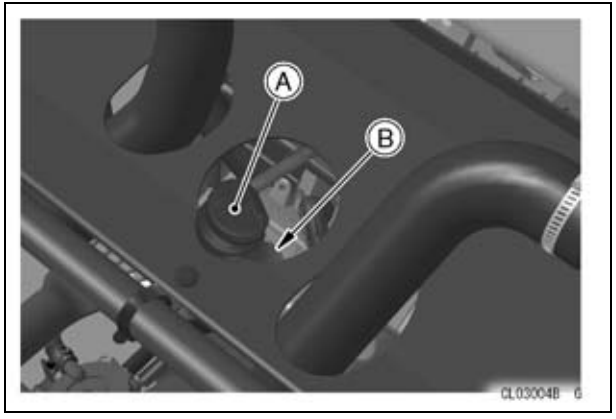


A. Dipstick & Oil Filler Hole
B. Seatback

- Pull up the dipstick, wipe it dry, and insert the dipstick till it bottoms.

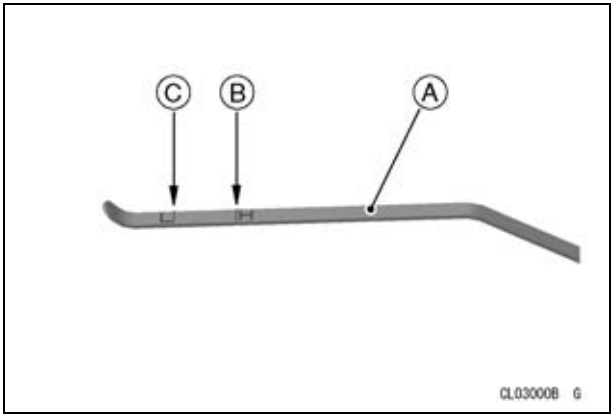
NOTE

○ *It is important to insert the dipstick with its chamfered cap edge facing rearwards.*



A. Dipstick
B. Oil Filler Hole

- Pull out the dipstick and check the oil level. The oil level should be between the “F” (Full) and “L” (Low) lines on the dipstick.

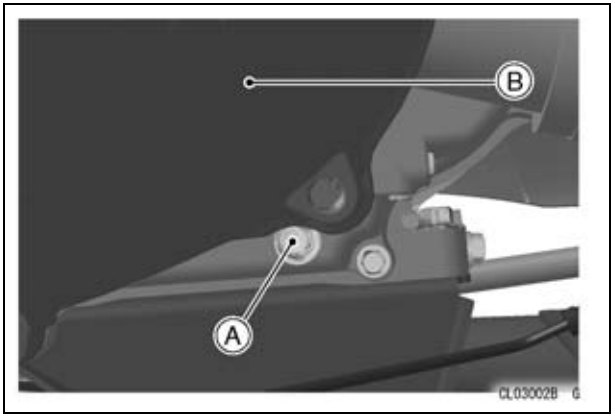


A. Dipstick
B. “H” (High) Line
C. “L” (Low) Line

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

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 drain plug on the right side at the bottom of the engine.
- Remove the dipstick.



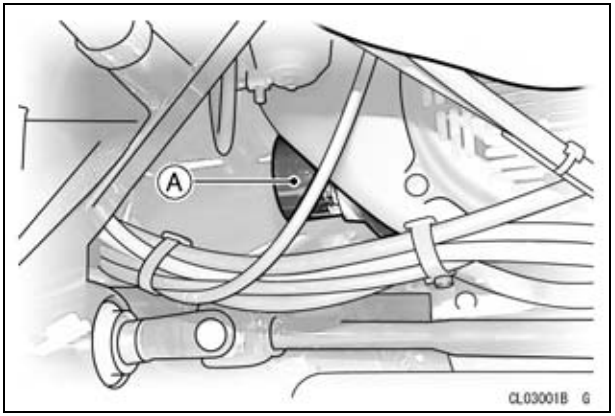
A. Drain Plug
B. Torque Converter Case

- With the vehicle held level, let the oil drain completely.

⚠ WARNING

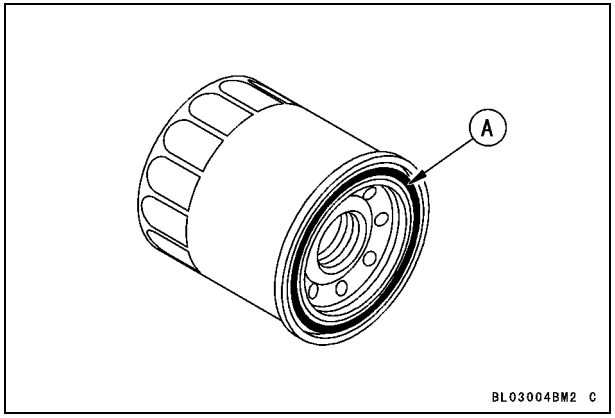
Engine oil is a toxic substance. Dispose of used oil properly. Contact your local authorities for approved disposal methods or possible recycling.

- If the oil filter is to be changed, first lift the cargo bed to support it with the hook, and then remove the oil filter cartridge and replace it with a new one.



A. Cartridge

- Apply a thin film of oil to the gasket and screw the cartridge in until the gasket touches the engine, then turn it 3/4 turn.



A. Gasket

- Install the drain plug with its gasket. Tighten it to the specified torque.

NOTE

○ *Replace any damaged gaskets with new ones.*

- Fill the engine up to the "F" (Full) line on the dipstick with high quality engine oil as specified in the table.
- Start the engine and check for oil leakage.

Tightening Torque

Drain Plug: 6.9 N·m (0.7 kgf·m, 61 in·lb)
Filter Cartridge: 9.8 N·m (1 kgf·m, 87 in·lb)

Recommended Engine Oil

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

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

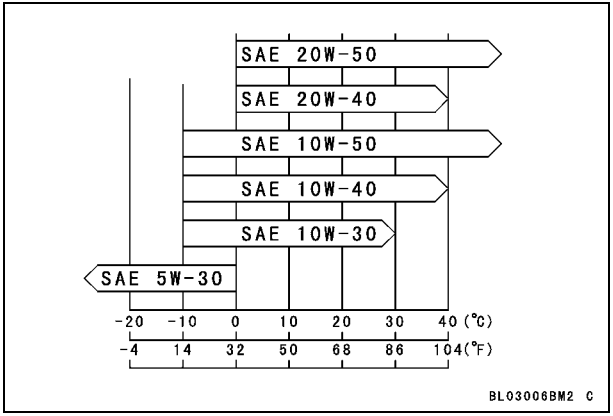
Although 10W-40 engine oil is the recommended oil for most conditions, the oil viscosity may need to be changed to accommodate atmospheric conditions in your riding area.

NOTE

○ *Do not add any chemical additive to the oil. Oils fulfilling the above requirements are fully formulated and provide adequate lubrication for both the engine.*

Engine Oil Capacity

when filter is not removed	1.1 L (1.16 US qt)
when filter is removed	1.3 L (1.37 US qt)



Front Final Gear Case Oil (KAF400A)

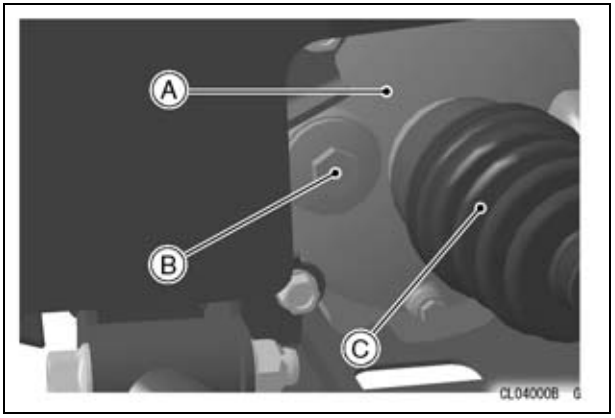
In order for the differential, pinion, and ring gears to function properly, check the oil level and change the oil in accordance with the Periodic Maintenance Chart.

⚠ WARNING

Vehicle operation with insufficient, deteriorated, or contaminated oil causes accelerated wear of the differential, pinion, and ring gears and may result in seizure. Seizure can lock the front and rear wheels and skid the front and rear tires, with consequent loss of control. Check the differential oil according to the periodic maintenance chart.

Oil Level Inspection

- With the vehicle level front-to-rear and side-to-side, remove the filler cap from the front final gear case.

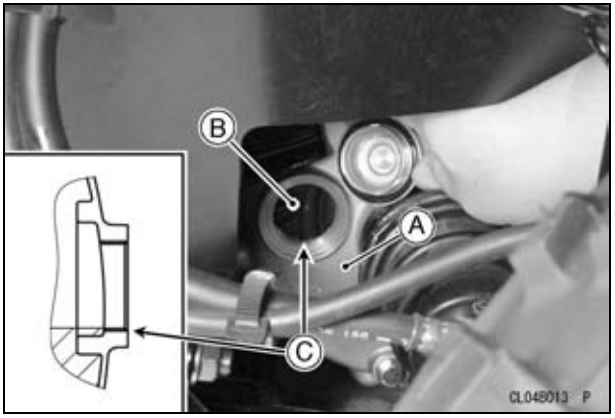


A. Front Final Gear Case
B. Filler Cap (on the left side)
C. Front Axle

NOTICE

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

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



A. Front Final Gear Case
B. Filler Opening
C. Bottom Thread

- Install the filler cap.

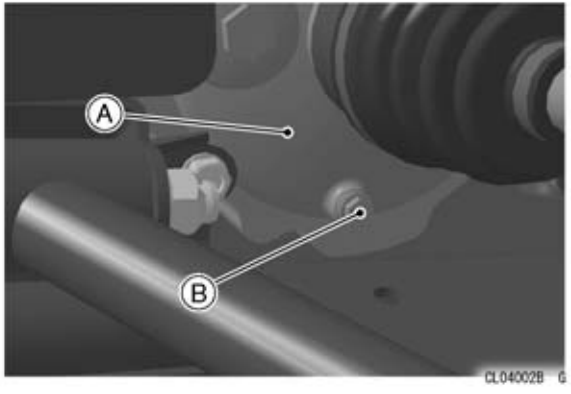
NOTE

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

Oil Change

NOTE

○ *Before draining the oil, warm it up by running the vehicle. Warm oil drains easily and picks up any sediment.*



A. Front Final Gear Case
B. Drain Plug

- With the vehicle level, place an oil pan beneath the gear case.
- Remove the filler cap and drain plug.

⚠ WARNING

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

⚠ WARNING

Oil on tires can make them slippery which can cause an accident and injury. When draining or filling the gear case, be careful that no oil gets on the tires or rims. Clean off any oil that inadvertently gets on them with soap and water.

- After the oil has completely drained out, install the drain plug and gasket. If the gasket is damaged, replace it with a new one.

Tightening Torque

Drain Plug: 20 N·m (2.0 kgf·m, 15.0 ft·lb)

- Fill the gear case up to the bottom thread of the filler opening with a high quality oil as specified in the table.

Front Final Gear Case Oil

Oil Capacity	about 0.35 L (0.37 US qt)
Oil Type	API “GL-5” SAE140 or API “GL-6” SAE90 Hypoid gear oil for Limited Slip Differentials

- Install the filler cap.

Transmission Case Oil

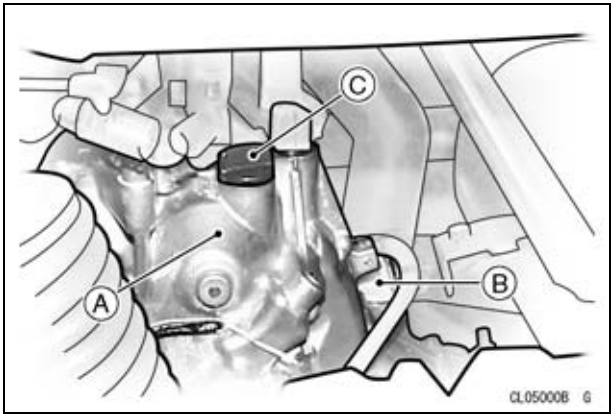
In order for the transmission, differential, pinion, and ring gears to function properly, check the oil level and change the oil in accordance with the Periodic Maintenance Chart.

⚠ WARNING

Vehicle operation with insufficient, deteriorated, or contaminated oil causes accelerated wear of the transmission, differential, pinion, and ring gears and may result in seizure. Seizure can lock the rear wheels and skid the rear tires, with consequent loss of control. Check the differential oil according to the periodic maintenance chart.

Oil Level Inspection

- Park the vehicle on level ground.
- Lift the cargo bed and support it with the hook.
- Unscrew the oil filler plug, and dipstick, wipe its dipstick dry, and insert it into the filler hole but DO NOT SCREW IT IN.

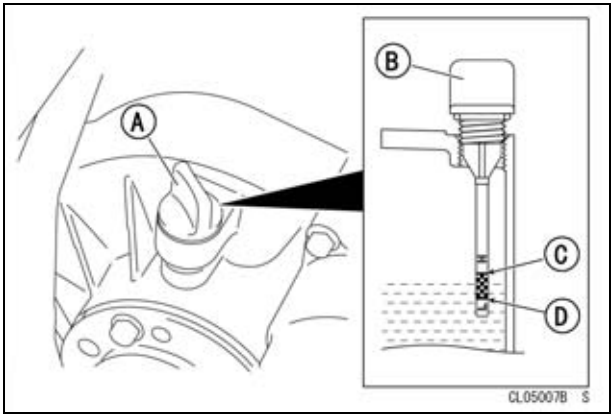


A. Transmission Case
B. Dipstick
C. Oil Filler Plug

NOTICE

Be careful not to allow any dirt or foreign materials to enter the transmission case.

- Pull out the dipstick and check the oil level. The oil level should be between the “H” (High) and “L” (Low) lines on the dipstick.



A. Oil Filler Plug and Dipstick
B. Insert the dipstick into the filler hole but do not screw it in.
C. "H" (High) Line
D. "L" (Low) Line

- If the oil level is too high, remove the excess oil, using a syringe or other suitable device, through the oil filler opening.
- If the oil level is too low, add the correct amount of oil.
- Install the filler plug and dipstick.

NOTE

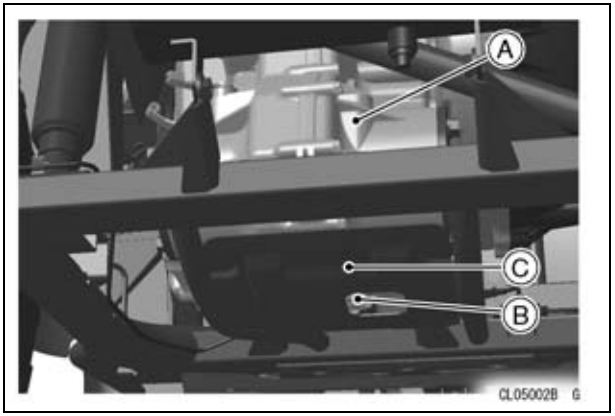
○ *Use the same type and brand of oil that is already in the transmission case.*

Oil Change

NOTE

○ *Before draining the oil, warm it up by running the vehicle. Warm oil drains easily and picks up any sediment.*

- With the vehicle level, apply the parking brake securely.
- Place an oil pan beneath the transmission case.
- Remove the drain plug.



A. Transmission Case
B. Drain Plug
C. Guard Plate

⚠ WARNING

The exhaust system can get extremely hot during normal operation and cause serious burns. To avoid a serious burn, never touch a hot muffler or exhaust pipe during oil draining.

- Lift the cargo bed and support it with the hook.
- Remove the filler plug.

⚠ WARNING

Oil on tires can make them slippery which can cause an accident and injury. When draining or filling the transmission case, be careful that no oil gets on the tires or rims. Clean off any oil that inadvertently gets on them with soap and water.

- After the oil has completely drained out, install the drain plug with its gasket. Tighten it to the specified torque. If the gasket is damaged, replace it with a new one.
- Fill the transmission case up to the “H” (High) line on the dipstick with a good quality oil as specified in the table.

Tightening Torque

Drain Plug: 15 N·m (1.5 kgf·m, 11 ft·lb)

Transmission Case Oil Type

API “GL-5” Hypoid gear oil above 5°C (41°F) SAE 90 below 5°C (41°F) SAE 80

Transmission Case Oil Capacity

KAF400A:	2.4 L (2.5 US qt)
KAF400B:	2.2 L (2.3 US qt)

- Install the filler plug and dipstick.

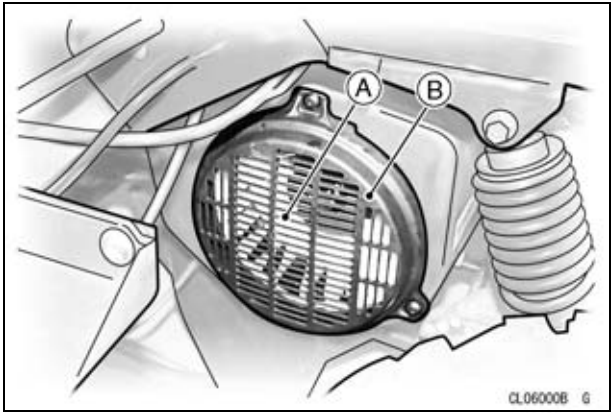
Cooling Fan

The engine is cooled by the cooling fan attached to the left side of the engine.

Check and clean the screen for mud and other debris.

⚠ WARNING

A spinning fan can cause serious injury. To avoid injury when checking and cleaning the screen, turn off the ignition switch and be sure the fan has stopped turning.



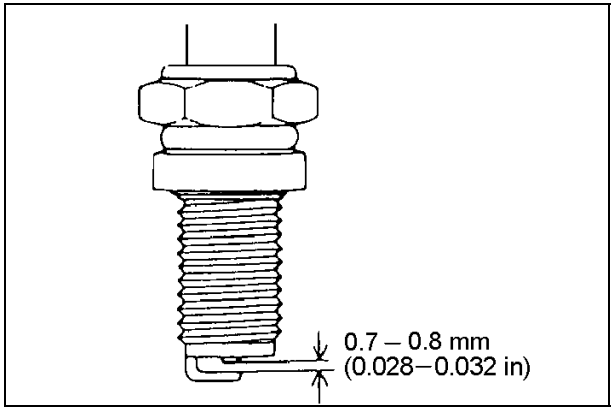
A. Cooling Fan
B. Screen

Spark Plug

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

Maintenance

If the plug is oily or has carbon built up on it, have it cleaned, preferably in a sand-blasting device, and then clean off any abrasive particles. The plug may also be cleaned using a high flash-point solvent and a brush. Measure the gap with a wire-type thickness gauge, and adjust the gap if incorrect by bending the outer electrode. If the insulator is cracked, replace the plug. Use the standard plug.

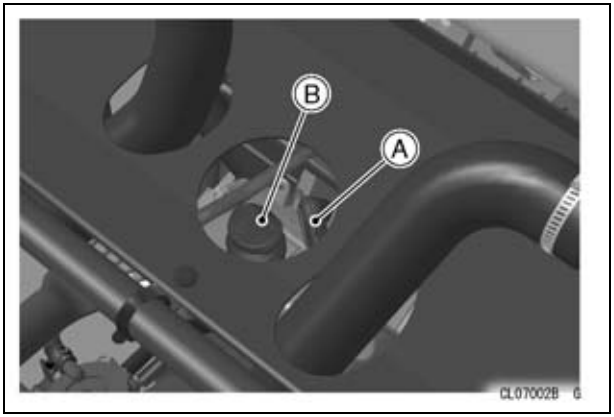


Spark Plug

Standard Plug	NGK BPR5ES
Plug Gap	0.7 ~ 0.8 mm (0.028 ~ 0.032 in.)
Tightening Torque	22 N·m (2.2 kgf·m, 16 ft·lb)

Spark Plug Removal

- Raise the seat.
- Carefully pull the spark plug cap from the spark plug.



A. Spark Plug Cap
B. Engine Oil Dipstick Cap

- Unscrew the spark plug.

NOTE

○ *When installing the spark plug, fit the plug cap securely onto the spark plug, and pull the cap lightly to make sure that it is properly installed.*

Valve Clearance

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

NOTICE

If valve clearance is left unadjusted, 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 by an authorized Kawasaki dealer.

Valve Clearance (EX & IN) :	0.10 ~ 0.15 mm (0.0039 ~ 0.0059 in.)

Engine Air Cleaner

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

⚠ WARNING

A clogged air cleaner may allow dirt and dust to enter the carburetor and the throttle may stick resulting in a hazardous operating condition. Clean the air filter according to the periodic maintenance chart; more often if the vehicle is used in extremely dusty conditions.

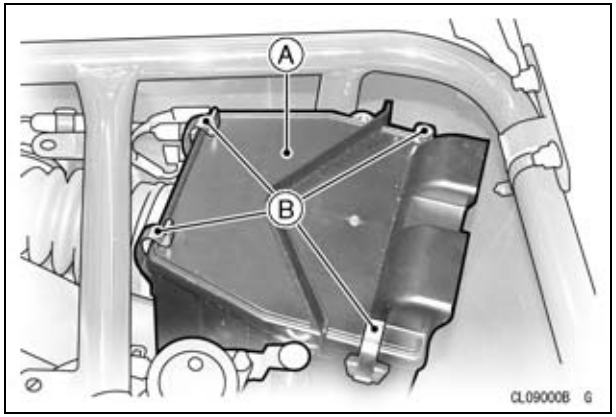
NOTICE

A clogged air cleaner may allow dirt and dust to enter the engine causing excessive wear and possible engine damage.

The air filter element should be cleaned in accordance with the Periodic Maintenance Chart. In dusty areas, the elements should be cleaned more frequently than the recommended interval.

Element Removal

- Raise the seat.
- Release the snaps and remove the air cleaner housing cover from the housing.



A. Air Cleaner Housing Cover
B. Snaps

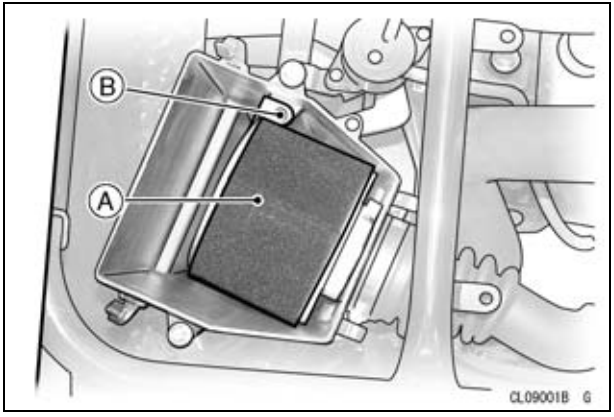
- Remove the screw and pull the air cleaner element out of the housing.
- Push a clean, lint-free towel into the air cleaner housing to keep dirt or other foreign material from entering.

⚠ WARNING

If dirt or dust is allowed to pass through into the carburetor, the throttle may stick or become inoperable resulting in a hazardous operating condition.

NOTICE

If dirt gets into the engine, excessive engine wear and possible engine damage may occur.



A. Element
B. Screw

NOTE

○ *Element installation is performed in the reverse order of removal.*
○ *Install the housing cover with its snaps.*

Element Cleaning

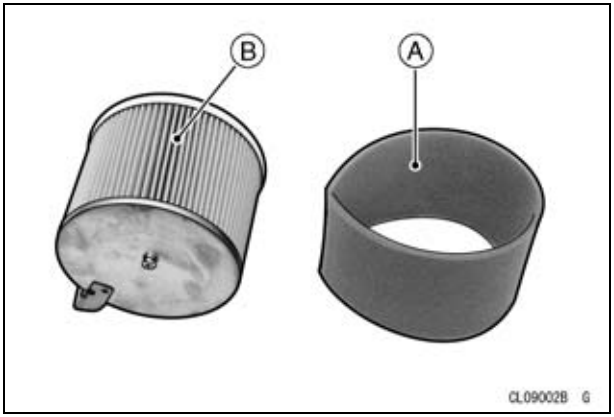
- Remove the element (see Element Removal).
- Remove the urethane foam element from the paper element.

- Clean the foam element in a bath of high flash -point solvent using a soft bristle brush.
- Squeeze it dry in a clean towel. Do not wring the element or blow it dry; the element can be damaged.
- Inspect the foam element for damage. If it is torn, punctured, or hardened, replace it.

NOTE

○ *Replace the foam element after cleaning it five times or if it is damaged.*

- Clean the paper element by tapping it lightly to loosen dust.
- Blow away the remaining dust by applying compressed air from the inside to the outside (from the clean side to the dirty side).
- Inspect the element material for damage. If any part of the element is damaged, the element must be replaced.



A. Urethane Foam Element
B. Paper Element

Dust and/or Water Inspection

- There is a plastic drain cap at the bottom of the air cleaner housing. If you see any dust and/or water accumulated in the housing, remove the drain cap and expel it.

Spark Arrester

This vehicle is equipped with a spark arrester approved for off-highway use by the U.S. Forest Service. It must be properly maintained to ensure its efficiency. Clean the spark arrester in accordance with the Periodic Maintenance Chart.

NOTICE

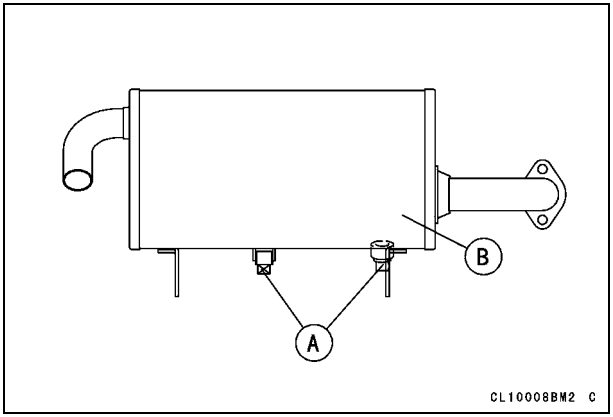
The spark arrester must be functioning properly to provide adequate fire protection.

Spark Arrester Cleaning

⚠ WARNING

The muffler can become extremely hot during normal operation and cause severe burns.
Since the engine must be running during this procedure, wear heat-resistant gloves while cleaning the spark arrester.

- Remove the drain plug from the muffler.



A. Drain Plug
B. Spark Arrester (inside the muffler)

- Apply the parking brake.
- In an open area away from combustible materials, start the engine with the gear shift lever in the “N” (Neutral) position.
- Raise and lower engine speed while tapping on the muffler with a rubber mallet until carbon particles are purged from the muffler.

⚠ DANGER

Exhaust gas contains carbon monoxide, a colorless, odorless poisonous gas.
Inhaling carbon monoxide can cause serious brain injury or death.
DO NOT run the engine in enclosed areas. Operate only in a well-ventilated area.

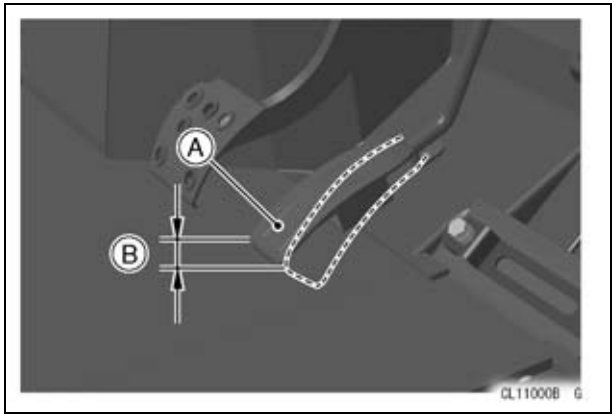
- Stop the engine.
- Install the drain plug.

Throttle Pedal

If the throttle pedal has excessive play due to either cable stretch or misadjustment, it will cause a delay in throttle response, especially at low engine speed. Also, the throttle may not open fully. If the throttle pedal has no play, the throttle may be hard to control, and the idle speed may be erratic. Check the throttle pedal play periodically in accordance with the Periodic Maintenance Chart, and adjust the play if necessary.

Throttle Pedal Play Inspection

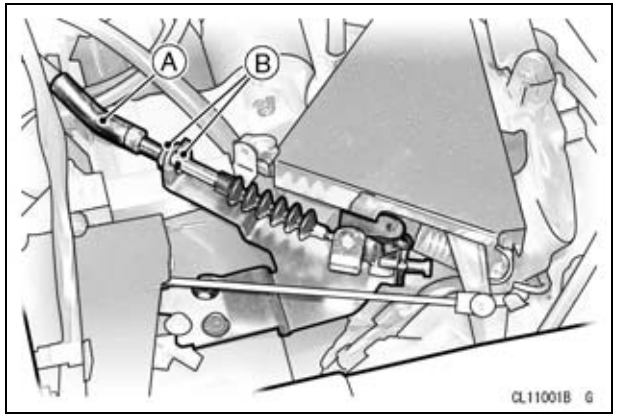
- Apply the parking brake.
- Put the gear shift lever in the “N” (Neutral) position.
- Start the engine, and warm it up thoroughly.
- Measure the distance the throttle pedal moves before the engine begins to pick up speed. Free play should be 2 ~ 5 mm (0.1 ~ 0.2 in.).



A. Throttle Pedal
B. 2 ~ 5 mm (0.1 ~ 0.2 in.)

Throttle Pedal Play Adjustment

- Lift the cargo bed and support it with the hook.
- Loosen and turn the throttle cable mounting nuts located above the transmission case until the proper amount of throttle pedal play is obtained.



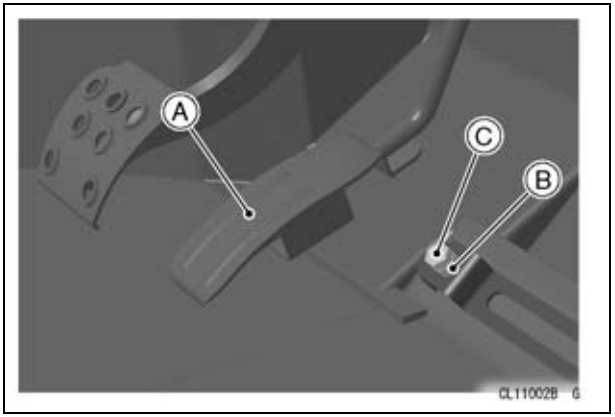
A. Throttle Cable
B. Mounting Nuts

- Tighten the mounting nuts securely.

Throttle Pedal Stop Position Adjustment

The full throttle pedal stop position can be adjusted to prevent pulling the throttle cable more than required.

- Loosen the locknut.
- Screw in the throttle pedal stop bolt.
- Depress the throttle pedal until the speed control lever above the transmission case is in the fully opened position and hold it there.
- Turn the throttle pedal stop bolt until the bolt head lightly touches the bottom of the throttle pedal.
- Tighten the locknut securely.



A. Throttle Pedal
B. Locknut
C. Throttle Pedal Stop Bolt

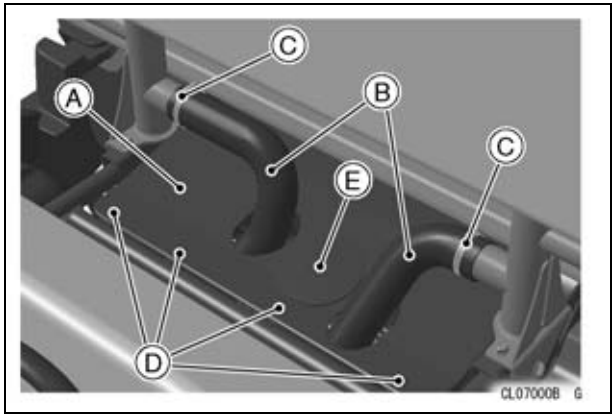
Choke Knob

Pulling the choke knob makes the carburetor provide a rich mixture for easy starting when the engine is cold.

If starting is difficult or rich fuel mixture trouble occurs, inspect the choke knob, and adjust it if necessary.

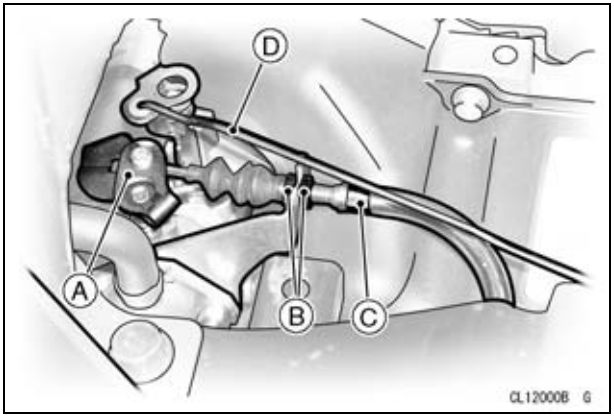
Inspection

- Check that the choke knob returns properly and that the inner cable slides smoothly. If there is any irregularity, have the choke cable checked by an authorized Kawasaki dealer.
- Lift the cargo bed and support it with the hook.
- Raise the seat.
- Remove the guard plate by releasing the two air intake ducts and the 6 quick rivets.



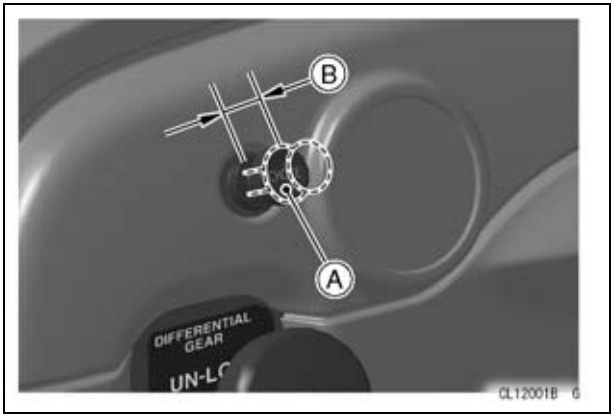
A. Guard Plate
B. Air Intake Ducts (2 p.c.s.)
C. Clamps
D. Quick Rivets (6 p.c.s.)
E. Cap

- Make sure the choke knob is all the way into its released position.
- To determine the amount of choke cable play at the knob, pull the choke knob out until the starter lever at the carburetor starts to move; the amount of choke knob travel is the amount of cable play.



A. Starter Lever
B. Mounting Nuts
C. Choke Cable
D. Throttle Link

- The proper amount of play is 0 ~ 1 mm (0.00 ~ 0.04 in.) at the choke knob. If there is too much or too little play, adjust the choke cable.



A. Choke Knob
B. 0 ~ 1 mm (0.00 ~ 0.04 in.)

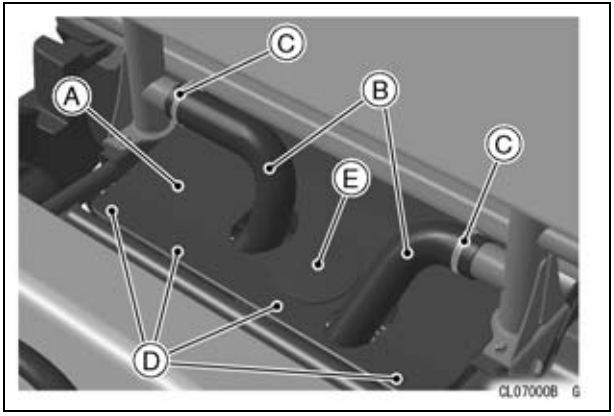
Adjustment
- Loosen and turn the choke cable mounting nuts next to the starter lever until the cable has the proper amount of play.
- Tighten the nuts after adjustment.

Carburetor

The idle speed adjustment should be performed in accordance with the Periodic Maintenance Chart or whenever the idle speed is changed.

The following procedure covers the idle speed adjustment.

Idle Speed Adjustment
- Apply the parking brake.
- Raise the seat.
- Remove the guard plate by releasing the two air intake ducts and the 6 quick rivets.



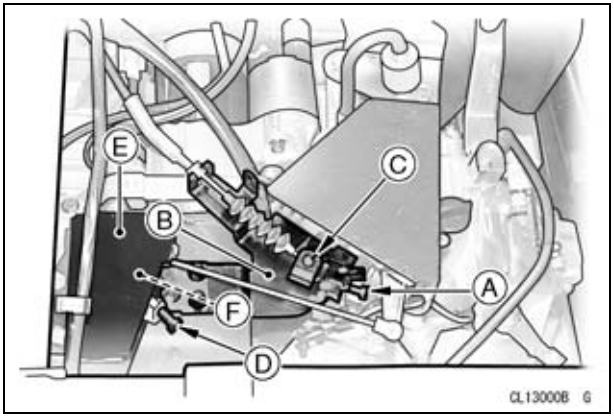
A. Guard Plate
B. Air Intake Ducts (2 p.c.s.)
C. Clamps (6 p.c.s.)
D. Quick Rivets (6 p.c.s.)
E. Cap

- Put the gear shift lever in the “N” (Neutral) position.
- Start the engine, and warm it up thoroughly.

⚠ DANGER

Exhaust gas contains carbon monoxide, a colorless, odorless poisonous gas.
Inhaling carbon monoxide can cause serious brain injury or death.
DO NOT run the engine in enclosed areas. Operate only in a well-ventilated area.

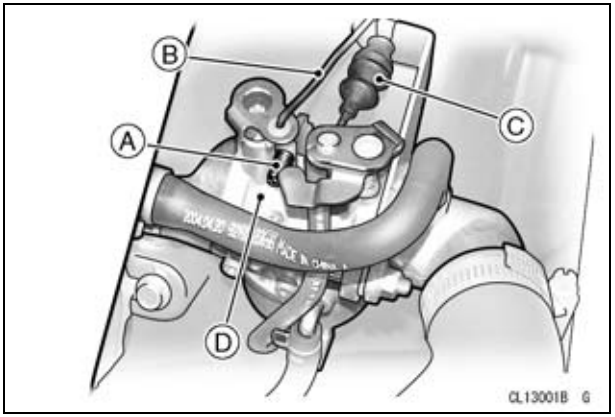
- Lift the cargo bed to support it with the hook.
- Remove the cover plate on the idle adjusting screw.
- Loosen the axel lever stopper screw on the base plate above the transmission case and the idle adjusting screw on the engine.



A. Axel Lever Stopper Screw
B. Base Plate
C. Axel Lever
D. Idle adjusting Screw
E. Cover Plate
F. Link Lever

- Adjust the idle speed to the lowest stable speed by turning the idle adjusting screw located on the carburetor.

Idle Speed: 1 175 ±75 r/min (rpm)



A. Idle Adjusting Screw
B. Throttle Link
C. Choke Cable
D. Carburetor

- After adjustment, screw in the idle adjusting screw on the base plate until it lightly touches the link lever.
- Finally screw in the axel lever stopper screw until it keeps clearance by 1 mm to the axel lever.

NOTE

○ *The idling speed could become unstable with the throttle valve stuck closed, if the adjustment screw is turned excessively.*

- Depress and release the throttle pedal a few times to make sure that the idle speed does not change. Readjust if necessary.

Fuel System

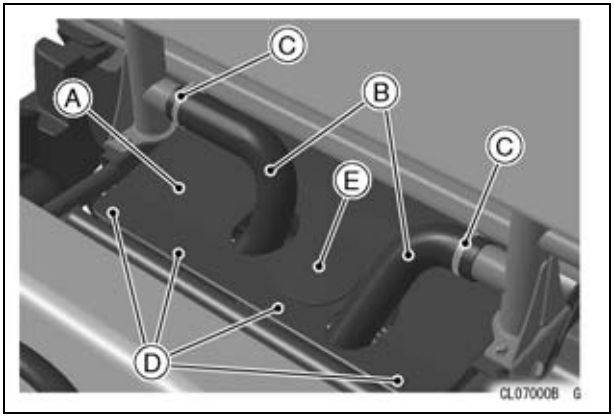
Accumulation of moisture or sediment in the fuel system can restrict the flow of fuel and cause carburetor malfunction. The system should be checked in accordance with the Periodic Maintenance Chart.

⚠ WARNING

Gasoline is extremely flammable and can be explosive under certain conditions and cause severe burns. Before performing any service, turn the ignition switch "OFF". Do not smoke. Make sure the area is well-ventilated and free from any source of flame or sparks, including any appliance with a pilot light. Make sure the engine is cold before servicing. Wipe any fuel off the engine before starting it.

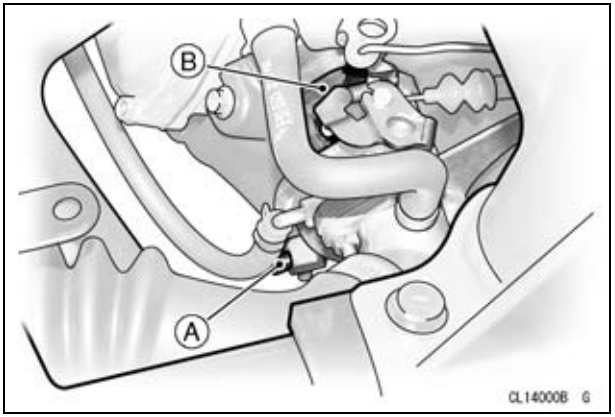
Dust and/or Water Inspection

- Lift the cargo bed to support it with the hook.
- Raise the seat.
- Remove the guard plate by releasing the two air intake ducts and the 6 quick rivets.



A. Guard Plate
B. Air Intake Ducts (2 p.c.s.)
C. Clamps (2 p.c.s.)
D. Quick Rivets (6 p.c.s.)
E. Cap

- Place a suitable container under the carburetor.
- Turn out the drain screw a few turns to drain the carburetor, and check to see if water or dirt has accumulated in the carburetor.



A. Drain Screw
B. Carburetor

● Tighten the drain screw.

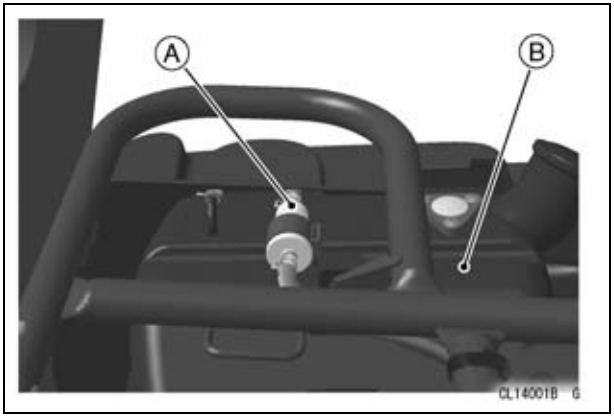
NOTE

○ *If any water or dirt appears during the above operation, have the fuel system checked by an authorized Kawasaki dealer.*

Fuel Filter

The vehicle is equipped the fuel filter at the middle of the fuel line to prevent dirt or other foreign material from entering the carburetor and fuel pump.

Have your authorized Kawasaki dealer inspect and clean or replace the fuel filter in accordance with the Periodic Maintenance Chart, or whenever any foreign material or water can be seen trapped in the fuel filter.



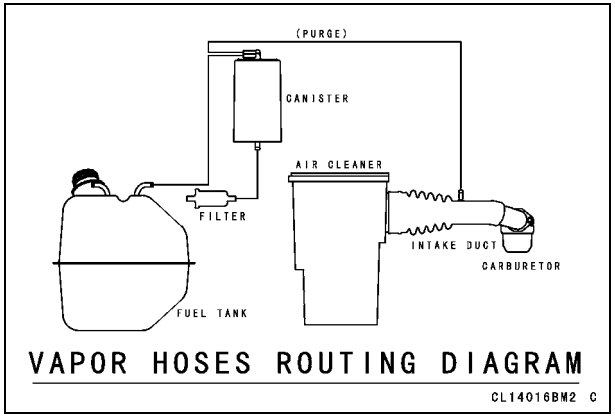
A. Fuel Filter
B. Fuel Tank

Evaporative Emission Control System

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 requited, a thorough visual inspection must be made at the intervals specified by the “Periodic Maintenance Chart”.

Inspection

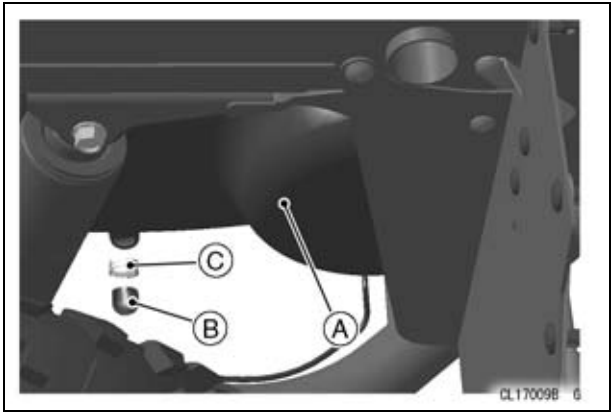
● Check that the hoses are securely connected.
● Replace any kinked, deteriorated, or damaged hoses.



Belt Drive Torque Converter

The vehicle is equipped with a belt drive torque converter type automatic transmission. The belt, driven pulley shoes and drain hose should be checked in accordance with the Periodic Maintenance Chart.

The belt and driven pulley shoes inspection should be done by an authorized Kawasaki dealer.



A. Belt Drive Torque Converter (inside)
B. Drain Boot
C. Clamp

Dust and/or Water Inspection

- Remove the clamp to take off the drain boot on the bottom of the converter housing to expel dust and/or water accumulated inside.

High Altitude Use

The original belt drive torque converter settings of this vehicle are best for seal level use. when the vehicle is used at high altitude, the engine performance will decrease. This is why readjustment of the weights of the torque converter are required.

Have the torque converter adjusted by your authorized Kawasaki dealer if you intend to use tis vehicle above 1 500 m (4 900 feet.)

However the belt drive transmission must be returned to original settings before using at lower altitudes for best sea level use.

Belt Drive Torque Converter Air Cleaner

A clogged belt drive torque converter air cleaner may cause the torque converter to malfunction.

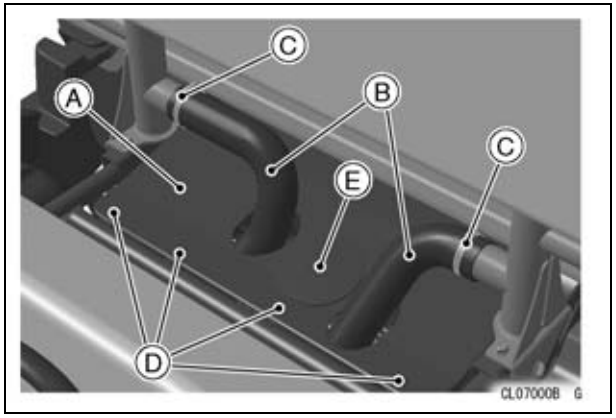
NOTICE

A clogged air cleaner may allow dirt and dust to enter the belt drive torque converter causing excessive wear of the inner parts and loss of driving power.

The air cleaner elements must be cleaned in accordance with the Periodic Maintenance Chart. In dusty areas, the elements should be cleaned more frequently than the recommended interval. The elements should be replaced if they are damaged.

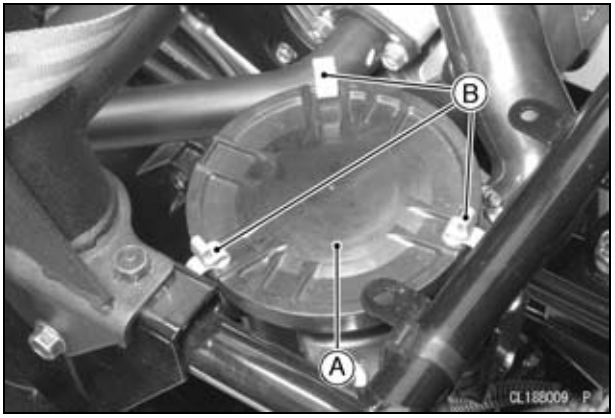
Element Removal

- Lift the cargo bed and support it with the hook.
- Raise the seat.
- Remove the guard plate by releasing the two air intake ducts and the 6 quick rivets.

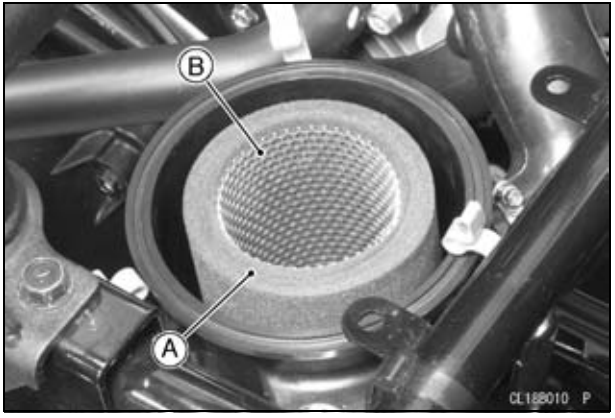


A. Guard Plate
B. Air Intake Ducts (2 p.c.s.)
C. Clamps
D. Quick Rivets (6 p.c.s.)
E. Cap

- Release the snaps and remove the air cleaner housing cover from the housing.
- Pull the air cleaner element out of the housing.
- Push a clean, lint-free towel into the air cleaner housing to keep dirt or other foreign material from entering.



A. Air Cleaner Housing Cover
B. Snaps



A. Urethane Foam Element
B. Holder

NOTICE

If dirt gets into the belt drive torque converter, excessive wear and loss of driving power may result.

NOTE

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

Element Cleaning

- Remove the element (see Element Removal).
- Remove the urethane foam element from the holder.
- Clean the foam element in a bath of high flash -point solvent using a soft bristle brush.
- Squeeze it dry in a clean towel. Do not wring the element or blow it dry; the element can be damaged.
- Inspect the foam element for damage. If it is torn, punctured, or hardened, replace it.

NOTE

○ *Replace the foam element after cleaning it five times or if it is damaged.*

- Clean the holder by tapping it lightly to loosen dust.
- Blow away the remaining dust by applying compressed air from the inside to the outside (from the clean side to the dirty side).
- Inspect the element material for damage. If any part of the element is damaged, the element must be replaced.

Brakes

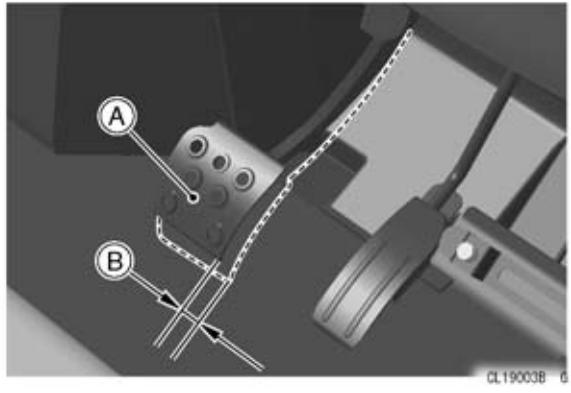
The vehicle is equipped with hydraulically activated drum brakes on all four wheels.

Brake Pedal

Brake Pedal Free Play Inspection

In accordance with the Periodic Maintenance Chart, check the brake pedal free play.

- Depress the brake pedal lightly by hand.
- There should be 2 ~ 5 mm (0.1 ~ 0.2 in.) of free play.



A. Brake Pedal
B. 2 ~ 5 mm (0.1 ~ 0.2 in.)

- If the brake pedal has more or less free play than specified or the pedal action feels rough or "catchy," have the brake system inspected immediately by an authorized Kawasaki dealer.

Brake Shoe Linings

Brake Shoe Lining Wear Inspection

In accordance with the Periodic Maintenance Chart have the brake shoe linings checked for wear by an authorized Kawasaki dealer.

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

Use heavy-duty brake fluid only from a fresh, unopened container marked DOT3.

⚠ WARNING

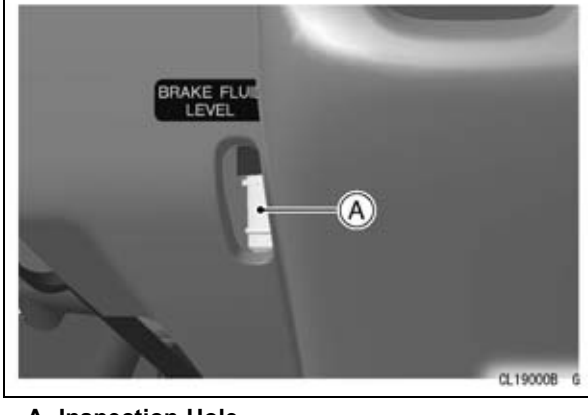
Over time, brake fluid can absorb moisture, lowering its boiling point and reducing brake effectiveness. Do not use fluid from a container that has been left unsealed or that has been open for a long time. Do not mix two types and brands of fluid for use in the brakes. Don't leave the reservoir cap off for any length of time to avoid moisture contamination of the fluid. Don't add or change brake fluid in the rain or during conditions of blowing dust or debris.

NOTICE

Brake fluid quickly ruins painted surfaces. Wipe up any spilled fluid immediately.

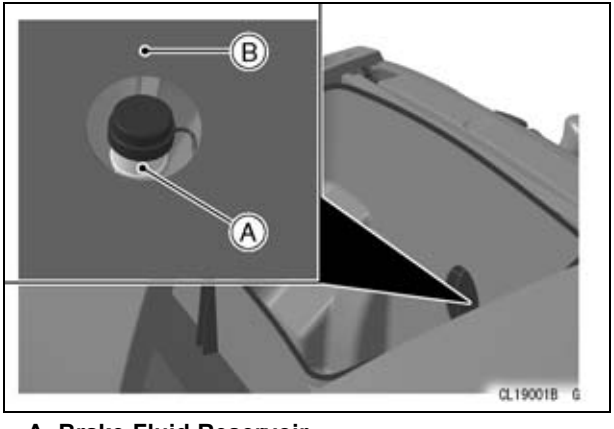
Fluid Level Inspection

- With the vehicle on level ground, check, through the inspection hole in the dashboard, that the fluid level in the reservoir is between the upper (marked MAX) and lower (marked MIN) level lines.



A. Inspection Hole

- If the fluid level is lower than the lower level line, check for fluid leaks in the brake lines, and open the front cargo hood (see “Front Cargo Compartment” section in the “General Information” chapter) and remove a round cap on the cargo compartment rear wall
- The brake fluid reservoir is inside the access hole, and using a funnel fill the reservoir to the upper level line.



A. Brake Fluid Reservoir
B. Cargo Compartment Wall

⚠ WARNING

Mixing two types and brands of fluid for use in the brake lowers the brake fluid boiling point and could reduce brake effectiveness. Change the fluid in the brake system completely if the fluid level is low but the type and brand of the fluid already in the reservoir are unknown.

- Apply the brake forcefully for a few seconds and check for fluid leakage around the fittings.

⚠ WARNING

Air in brake line can make the brake feel mushy or soft. This may cause reduced braking performance or brake failure and result in an accident. If brake lever travel is excessive or the brake feels mushy, have an authorized Kawasaki dealer inspect it immediately.

Fluid Change

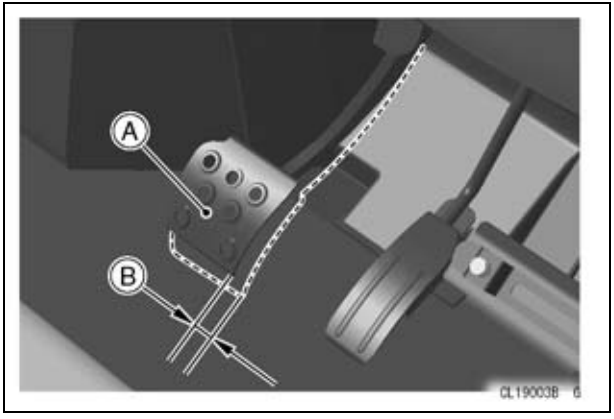
Have the brake fluid changed by an authorized Kawasaki dealer.

Brake Light Switch

When the brake pedal is depressed, the brake light goes on. The brake light switch should be inspected in accordance with the Periodic Maintenance Chart.

Inspection

- Turn the ignition switch to the “ON” position.
- Depress the brake pedal. The brake light should go on after about 10 mm (0.4 in.) of pedal travel.

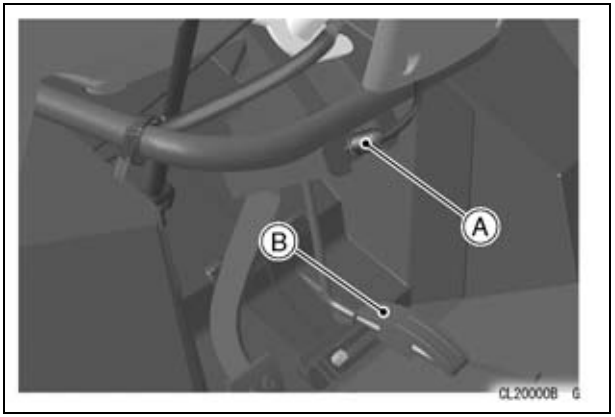


A. Brake Pedal
B. 10 mm (0.4 in.)

- If it does not, check the bulb and, if necessary, adjust the brake light switch.

Adjustment

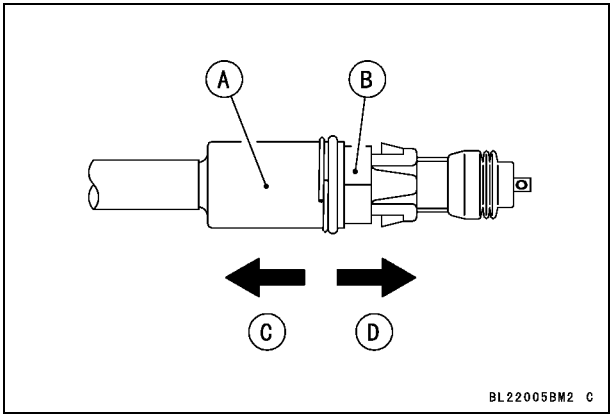
- Brake light switch is located above the brake pedal.



A. Brake Light Switch
B. Throttle Pedal

- To adjust the brake light switch, move the switch forward or rearward, by turning the adjusting nut.

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



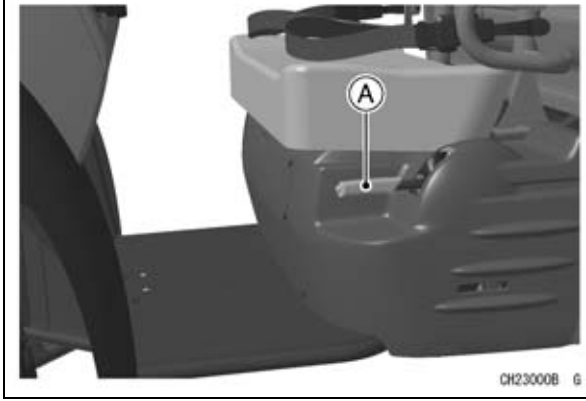
A. Brake Light Switch
B. Adjusting Nut
C. Lights sooner.
D. Lights later.

Parking Brake Lever

The parking brake helps hold the vehicle from rolling while parked.

In accordance with the Periodic Maintenance Chart, check that the parking brake lever functions properly.

Inspection

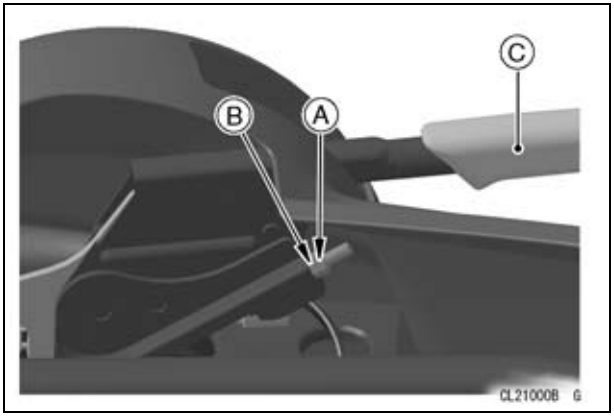


A. Parking Brake Lever

- Pull the parking brake lever up and to the rear.
- After 8 to 12 clicks of lever travel, the vehicle should not roll while parked.
- If it does, adjust the parking brake lever.

Adjustment

- Raise the seat.
- Loosen the locknut (upper nut) on the middle of the parking brake lever, and turn the nut next to the locknut until the brake lever will only move 8 ~ 12 clicks upward.



A. Locknut
B. Nut
C. Brake Lever

- Tighten the locknut securely.

NOTE

○ *Be sure to hold the cable end with a wrench to prevent the cable from twisting.*

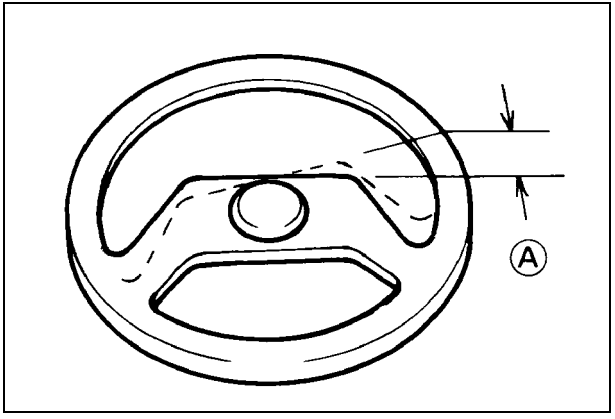
○ *If the brake lever can not be adjusted with the nuts shown here, or if there is any doubt as to the condition or braking effectiveness, have the parking brake system inspected by an authorized Kawasaki dealer.*

Steering Wheel

In accordance with the Periodic Maintenance Chart, check the steering wheel for the specified free play and smooth operation.

Free Play Inspection

- Park the vehicle on level ground.
- Lightly turn the steering wheel left and right.
- There should be 0 ~ 20 mm (0 ~ 0.8 in.) of free play.
- If there is excessive free play or strange noises, or the steering feels rough or "catchy," have the steering system checked by an authorized Kawasaki dealer.



A. 0 ~ 20 mm (0 ~ 0.8 in.)

Wheels

Rims

The rims are a drop-center, tubeless tire design. Take care not to damage the sealing surfaces of the tire or rim when removing or installing tires. Note that the rims, like automotive rims, are not symmetrical. All wheels must be installed so that the valve stems are on the outside of the vehicle.

Wheel Nuts

Check for wheel nut tightness in accordance with the Periodic Maintenance Chart.

Tightening Torque:	29 ~ 39 N·m (3.0 ~ 4.0 kgf·m, 21 ~ 29 ft·lb)

Tires

The front and rear tires are knobby tubeless tires. When replacing tires, check the valve stems and cores for damage. Take care not to damage the tire sealing surfaces of the rims.

Standard Tires

	KAF400A
Front	24 × 9.00-10 DUNLOP KT869M 24 × 9.00-10 DURO DI-K968M
Rear	24 × 11.00-10 DUNLOP KT869 24 × 11.00-10 DURO DI-K968
	KAF400B
Front	22 × 9.00-10 DUNLOP KT901 22 × 9.00-10 DURO DI–K109
Rear	22 × 11.00-10 DUNLOP KT869 22 × 11.00-10 DURO DI–K968

Tire Air Pressure (when cold)

	KAF400A	KAF400B
Front	47 kPa (0.47 kgf/cm², 7 psi)	47 kPa (0.47 kgf/cm², 7 psi)
Rear	97 kPa (0.97 kgf/cm², 14 psi)	110 kPa (1.1 kgf/cm², 16 psi)

NOTE

○ *Tires are an important part of the suspension of the vehicle. Tire construction characteristics and tire inflation pressure can greatly influence vehicle handling. Kawasaki recommends that you always replace tires with standard replacement tires as shown above. It is also very important to have tires of the same type and size on all axles, and at the same inflation pressure, on each axle.*

○ *Installation of non-standard tires, or use of different tires on one axle, can change or impair the handling of the vehicle.*

○ *Installation of tubeless tires on rims requires compressed air and is normally recommended as a dealer service operation. Nevertheless, a tube can be inserted into the tire by the operator as an emergency repair.*

Maximum Tire Air Pressure for Seating Beads

Front and Rear	250 kPa (2.5 kgf/cm², 36 psi)

Payload and Tire Pressure

Failure to maintain proper inflation pressures or observe payload limits for your tires can change or impair handling and performance of the vehicle. The maximum recommended load carrying capacity is 420 kg (924 lb).

Use a tire pressure gauge to accurately set tire pressure.

⚠ WARNING

Operating with unequally or improperly pressurized tires can adversely affect steering or handling. Inflate both front tires to the same pressure and both rear tires to the same pressure.

Tire Wear, Damage

As tire tread wears down, tires become more susceptible to puncture and failure.

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

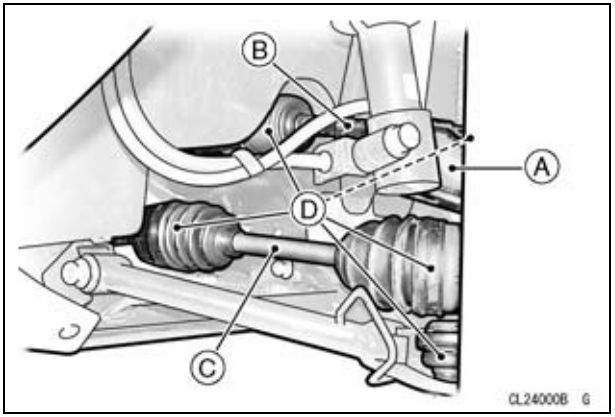
A. Tire Depth Gauge

Minimum Tread Depth: 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.

Joint Boots

In accordance with the Periodic Maintenance Chart, inspect the joint boots on the front axles, tie rod ends, and steering knuckles for cracks, holes, damage or deterioration. If there is any one of them, have the joint boot replaced by an authorized Kawasaki dealer.

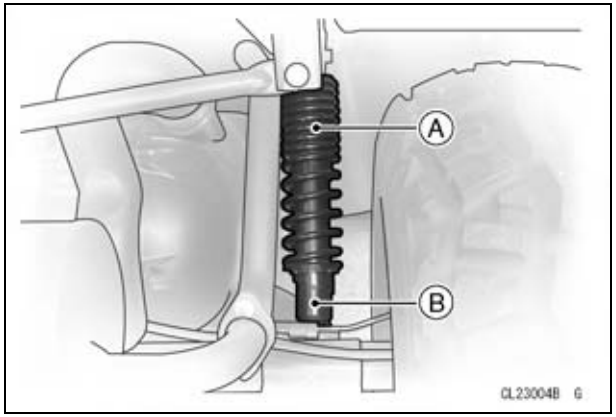


A. Steering Knuckle
B. Tie Rod
C. Front Axle (KAF400A)
D. Joint Boots

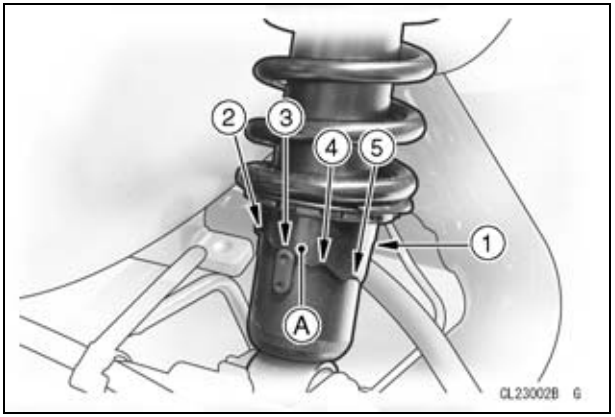
Suspension

Rear Shock Absorber Spring Force Adjustment

The spring adjusting sleeves on the rear shock absorbers have 5 positions so that the springs can be adjusted for different riding and loading conditions.



A. Shock Absorber
B. Adjusting Sleeve



A. Adjusting Sleeve

If the spring action feels too soft or too stiff, have the sleeves adjusted by an authorized Kawasaki dealer in accordance with the following table.

- Turn the adjusting sleeves on the shock absorbers to the desired position with the hook wrench.

Spring Action

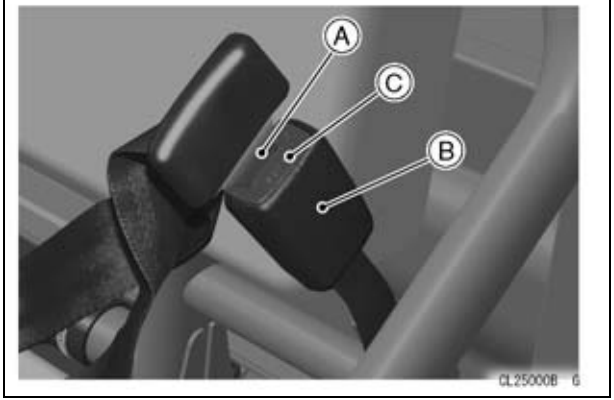
Position	Spring Force	Setting	Load	Surface	Speed
1	|	Soft	Light	Good	Low
2	|	↑	↑	↑	↑
3	|	|	|	|	|
4	↓	↓	↓	↓	↓
5	Strong	Hard	Heavy	Bad	High

⚠ WARNING

Uneven shock absorber adjustment can cause poor handling and loss of stability, which could lead to an accident. Always adjust the shock absorbers on the left and right side to the same setting.

Seat Belts

In accordance with the Periodic Maintenance Chart, check that each seat belt functions properly. Push the latch plate into the buckle until it clicks. The latch plate must slide smoothly into the buckle. The click sound indicates it is securely latched. Push the red button in the buckle to make sure it releases freely. Also check the belt webbing for wear, cuts or damage. If any irregularities are found, have the seat belt system checked or replaced by an authorized Kawasaki dealer.

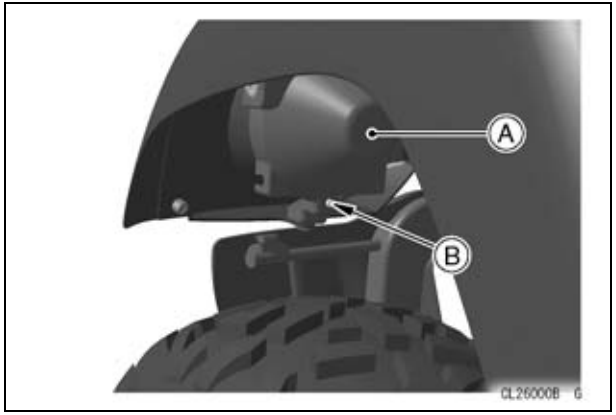


A. Latch Plate
B. Buckle
C. Red Button

Headlight Beam

The headlight beams can be adjusted vertically.

- Turn the adjusting screw on each headlight rim to adjust the headlight vertically.



A. Lamp Body (backside)
B. Adjusting Screws

Battery

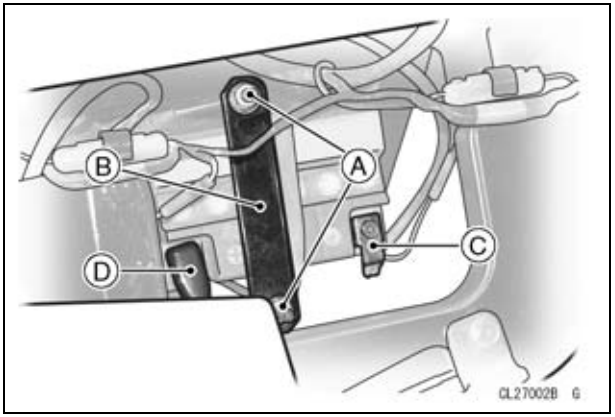
The battery is located under the left end of the seat.

⚠ DANGER

Battery contains sulfuric acid and produce hydrogen gas. Sulfuric acid can cause burns and hydrogen gas can cause an explosion. Read and heed the battery safety label.

Battery Removal

- Raise the seat. The battery is located under the left end of the seat.
- Remove the rubber mud cover on the battery.
- Unscrew the battery holder.



A. Bolt
B. Holder
C. (–) Terminal
D. (+) Terminal

- Disconnect the leads from the battery, first from the (–) terminal and then the (+) terminal.
- Lift 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.
- Perform a visual inspection. Inspect for defective or cracked case and cover, and loose or damaged terminal posts or cables. Replace battery and/or cables immediately if any damage is found.

Battery Installation

- Check that the rubber dampers on the battery holder and the battery case are properly in place.
- Put the battery in place, and route the battery vent hose through the hole in the floor board.
- Connect the capped lead to the (+) terminal, and then connect the black lead to the (–) terminal.
- Put a light coat of grease on the terminals to prevent corrosion.
- Cover the (+) terminal with its protective cap.
- Reinstall the battery holder and rubber mud cover.

⚠ DANGER

Batteries contain sulfuric acid that can cause burns and produce hydrogen gas which is highly explosive. Use caution when handling batteries and do not expose them to spark or flame. Read and understand the battery safety label.

NOTICE

Do not reverse the battery connections, or damage to the regulator/rectifier unit will result.

Battery Characteristics

The battery installed in this Mule is a conventional type and requires regular inspection to maintain the proper electrolyte level and a full charge.

In order to maximize battery life and ensure that it will provide the power needed to start your Mule, you must properly maintain the battery's electrolyte level and charge. When used regularly, the charging system in your Mule helps keep the battery fully

charged. If your Mule is only used occasionally or for short periods of time, the battery is more likely to discharge.

Due to their internal composition, batteries continually self discharge. The discharge rate depends on the type of battery and ambient temperature. As temperatures rise, so does the rate. Every 15°C (59°F) doubles the rate.

Electrical accessories, also draw current from the battery even when the key is switched off. Combine such “key-off” draws with hot temperatures, and a battery can go from fully charged to completely discharged in a matter of days.

Self-discharge		
Temperature	Approx. Number of Days From 100% Charged to 100% discharged	
	Lead-Antimony Battery	Lead-Calcium Battery
40°C (104°F)	100 Days	300 Days
25°C (77°F)	200 Days	600 Days
0°C (32°F)	550 Days	950 Days

Current Drain (Y50-N18L-A)		
Discharging Ampere	Days from 100% Charged to 50% discharged	Days from 100% Charged to 100% discharged
7 mA	60 Days	119 Days
10 mA	42 Days	83 Days
15 mA	28 Days	56 Days
20 mA	21 Days	42 Days
30 mA	14 Days	28 Days

In extremely cold weather the fluid in an inadequately charged battery can easily freeze, which can crack the case and buckle the plates. A fully charged, properly maintained battery can withstand sub-freezing temperatures with no damage.

Battery Sulfation

A common cause of battery failure is sulfation.

Sulfate is a normal byproduct of the chemical reactions within a battery. Sulfation occurs when the electrolyte level is low and exposes the plates within the battery to air. The active lead on the plates oxidizes and sulfates, causing permanent damage so that the battery will not hold a charge. Low electrolyte levels also concentrates the acid in the electrolyte, causing further corrosion to the plates that often falls off and settles at the bottom of the battery. The accumulated corrosion can eventually bridge the plates and cause the battery to short.

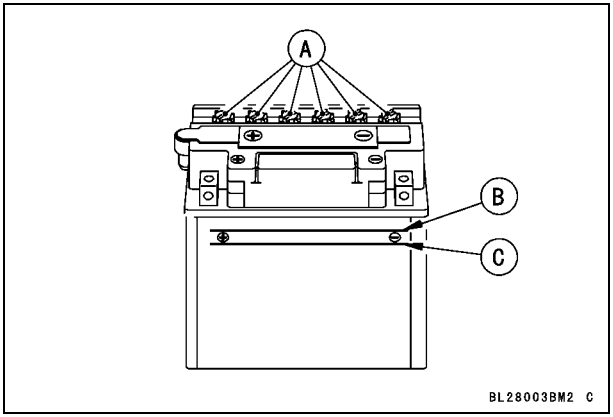
Sulfation also occurs when the battery is left in a discharged condition for an extended time. Sulfate is a normal byproduct of the chemical reactions within a battery. But when continuous discharge allows the sulfate to crystallize in the cells, the battery plates become permanently damaged and will not hold a charge. Battery failure due to sulfation is not warrantable.

Battery Maintenance

It is the owner's responsibility to maintain the battery electrolyte level and a full charge. Failure to do so can lead to battery failure and leave you stranded.

Inspect the battery fluid level monthly.

- The electrolyte level in each cell should be between the upper and lower level lines.
- If the fluid level is low in any cell, remove the battery filler caps and fill with distilled water until the electrolyte level in each cell reaches the upper level line. **DO NOT OVERFILL.** Overfilling can cause the electrolyte to leak out of the battery vent tube. Battery electrolyte contains sulfuric acid that will corrode vehicle components and parking surfaces, plus cause burns to exposed skin.



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

NOTICE

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.

If you are riding your Mule infrequently, inspect the battery voltage weekly using a voltmeter. If it drops below 12.5 volts, the battery should be charged using an appropriate charger (check with your Kawasaki dealer or visit buy kawasaki. com) at a rate of 1/10th of the battery capacity. If you will not be using your vehicle for longer than two weeks, the battery should be charged using an appropriate charger. Do not use an automotive-type

quick charger that may overcharge the battery and damage it.

NOTE

○ *Leaving the battery connected causes the electrical components to make the battery discharged, resulting the over discharge of the battery. In this case, the repair or replacement of the battery is not included in the warranty. If you do not drive for four weeks or more, disconnect the battery from the vehicle.*

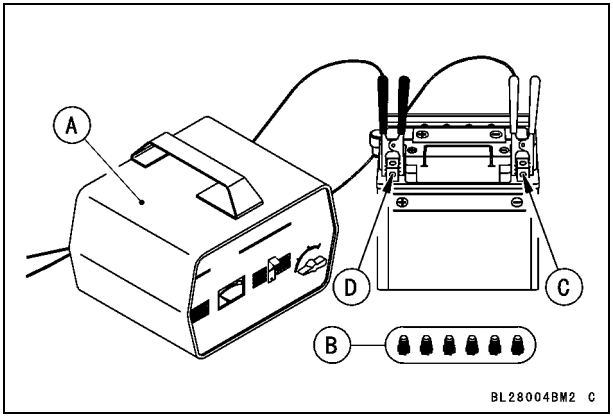
Battery Charging

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

NOTICE

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

- 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. Filler Caps (removed)
C. (–) Terminal
D. (+) Terminal

⚠ DANGER

Batteries produce hydrogen gas which can cause an explosion. Charge the battery in well-ventilated area. Keep sparks, flame, and cigarettes 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 gasses.

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

NOTICE

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 this vehicle's battery. 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 (113 °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 (See Battery Installation).

⚠ WARNING

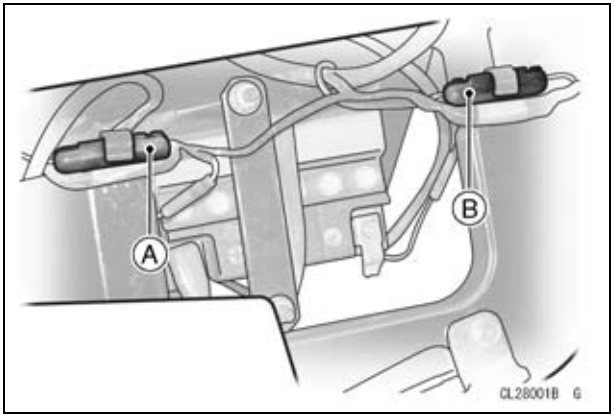
Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

Fuse

There are two plastic fuse cases next to the parking brake under the left end of the seat, one for the main (30 A) and the other for the accessory connector (10 A). If the electrical systems do not function, inspect the fuse. Before replacing a fuse, check the wiring harness and electrical equipment for bare wires or other possible damage.

NOTICE

Do not use a fuse of a higher capacity than the specified fuse rating, or damage to the electrical system could result. Refer to the Fuse Location label on the other side fuse case lid.



A. Fuse Cases (30 A)
B. Fuse Cases (10 A)

General Lubrication

In accordance with the Periodic Maintenance Chart, have the general lubrication performed by an authorized Kawasaki dealer or perform it referring to the Service Manual for this vehicle.

Cleaning

To prolong the life of your vehicle, wash it down immediately after it has been splashed with sea water or exposed to salt air, or operated on rainy days, rough terrain, or in dusty areas.

⚠ WARNING

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

Preparation for Washing

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

- Muffler rear opening - cover with a plastic bag.
- Ignition switch - cover the keyhole with tape.
- Air cleaner intake (middle of the rear ROPS top) - close opening with tape, or stuff in rags.

Where to be Careful

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

- Front and rear brakes - if water gets into the brake drums, they will not work effectively until they have dried out.
- Under the seat - if water gets into the ignition coils or into the spark plug cap, it can ground out the spark. When this happens the vehicle will not operate properly and the affected parts must be wiped dry.

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

Semi-gloss Finish

To clean the semi-gloss finish;

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

After Washing

- Remove the plastic bag and tape, and open the air cleaner intake.
- Lubricate as indicated in the “General Lubrication” section.
- Test the brakes before operation.
- Start the engine and run it for 5 minutes to dry it thoroughly.

Bolt and Nut Tightening

In accordance with the Periodic Maintenance Chart, have the tightness of the bolts, nuts, and fasteners checked by an authorized Kawasaki dealer.

STORAGE

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

⚠ WARNING

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

- Put in fresh engine oil.
- Empty the fuel from the fuel tank, and empty the carburetor by loosening the drain screw at the float bowl. Catch the fuel in a suitable container. (After a period of time, fuel will break down and could clog the fuel system.) Close the drain screw when finished.

⚠ WARNING

Gasoline is extremely flammable and can be explosive under certain conditions and cause severe burns. Do not smoke. Turn the ignition switch "OFF". Make sure the area is well-ventilated and free from any source of flame or sparks, including any appliance with a pilot light.

⚠ WARNING

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

NOTE

○ *As an alternative to draining the fuel system, a fuel stabilizer, such as STA-BIL, may be used. Follow the manufacturer's instructions for use.*

⚠ WARNING

Fuel stabilizers may contain poisonous substances. Heed the manufacturer's warnings for use.

- Remove the spark plug and spray fogging oil, such as Kawasaki K-Kare Fogging Oil (part number K61030–002), directly into each cylinder. Turn the engine over several times with the ignition switch key to coat the cylinder walls. Install the spark plugs.

⚠ WARNING

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

- 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 as indicated in the General Lubrication section.
- 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.

NOTICE

Keep the battery well charged during cold weather so that the electrolyte does not freeze and crack open the battery. The more discharged a battery becomes, the more easily it freezes.
Never remove the sealing strip, or the battery can be damaged.

- Tie a plastic bag over the exhaust pipe and air cleaner intake (rear ROPS top) to prevent moisture or small animals from entering.
- Put a cover over the vehicle to keep dust and dirt from collecting on it.

Removal from Storage:

⚠ DANGER

Exhaust gas contains carbon monoxide, a colorless, odorless poisonous gas.
Inhaling carbon monoxide can cause serious brain injury or death.
DO NOT run the engine in enclosed areas. Operate only in a well-ventilated area.

- Remove the plastic bags from the exhaust pipe and air cleaner intake.
- Clean the terminals of the battery, charge the battery if necessary, and install it in the vehicle.
- Make sure the spark plug is tight.
- Fill the fuel tank with fuel.
- Check all the points listed in the “Daily Checks” section.
- Lubricate as indicated in the “General Lubrication” section.

TROUBLESHOOTING GUIDE

Starter Motor Won't Turn
- Fuse failed (be sure to check for cause of failure)
- Battery leads do not make good electrical contact with battery terminals
- Battery discharged

Engine Cranks, But Won't Start
- No fuel in tank
- Fuel filter clogged
- Water in fuel
- Choke is not used when engine is cold
- Air filter clogged or intake blocked
- Engine flooded
- Fuel tank vent clogged
- Spark plug wire not on spark plug
- Spark plug dirty

Engine Stops
- No fuel in tank
- Water in fuel
- Fuel filter clogged
- Choke left on too long
- Air filter clogged or intake blocked
- Fuel tank cap vent clogged
- Engine overheated
  - Too much idling or low speed running (not enough air flow)
  - Overloaded
  - Wrong spark plug
  - Cooling fan screen clogged
  - Engine oil low

No Power
- Engine overheated
  - Too much idling or low speed running (not enough air flow)
  - Overloaded
  - Wrong spark plug
  - Cooling fan screen clogged
  - Engine oil low
- Compression leakage
  - Valve clearance insufficient
- Fuel filter clogged
- Air filter clogged or intake blocked
- Spark plug dirty or worn
- Choke left on
- Engine oil incorrect
- Water in fuel

Gear Shift lever won't move.
- Idling too high.

YOUR WARRANTY/OWNER SATISFACTION

Welcome to the Kawasaki family!

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

Frequently Asked Questions

What is a Limited Warranty?

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

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

What Am I Responsible For?
You are responsible for maintaining your vehicle according to the maintenance schedule shown in this owner's manual.

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

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

You may purchase a Kawasaki Service Manual and any necessary special tools directly from your Kawasaki dealer.

You will be responsible for paying for repairs needed because of an accident, to replace worn parts such as tires, chains, brakes, and for repairs needed because of a lack of maintenance, misuse or racing.

Whether you do it yourself or take your vehicle to a Kawasaki dealer, be sure to record your service in the Maintenance Record section of this Owner's Manual. Keep all receipts for the service and/or items necessary to perform the maintenance so that in the event of a failure you can document the service history.

What Are The Dealership's Responsibilities?

Your Kawasaki dealer offers a wide range of services, parts, accessories, and information on your product and on Kawasaki.

Each dealer is independently owned and operated and is responsible for the dealership's operations, its repair, warranty, and service work, and its personnel.

Your dealer is responsible for completing the set up and pre-delivery service of your new Kawasaki vehicle. The dealership should also explain its operation, maintenance, and warranty provisions so you understand them at the time of purchase or at any other time you have questions.

The dealership is responsible for inspecting your Kawasaki vehicle if there is a failure, investigating the cause of the problem, and getting any needed authorization from Kawasaki if the repair is one that will be covered by the limited warranty. The dealership will also file all necessary paperwork. The dealership is responsible for correctly completing any necessary repairs, whether they are covered by the limited warranty or not.

How Do I Get Warranty Service?

If there is a problem with your vehicle within the limited warranty period, you will need to schedule a service appointment and provide any maintenance records to an authorized Kawasaki dealer for inspection and diagnosis. You can go to any Kawasaki dealer for warranty repairs. Your Kawasaki dealer will inspect your vehicle and give you the results of the inspection. The dealer will perform the repairs at no cost to you if it is determined that the problem is covered by the warranty.

Kawasaki will work with your dealer to resolve any warranty issues. No authorization for warranty work can be given until your vehicle has been inspected by a Kawasaki dealer.

What if I am not Satisfied With My Warranty Service?

If you aren't satisfied with your dealership's repair work or operations, it is best to discuss the situation with the appropriate dealership manager. If you have already done this, then contact the dealership's owner or general manager to request a review of the issue.

If you are unable to resolve a problem after consulting with the dealership management and need further assistance, contact Kawasaki Motors Corp., U.S.A. at the address below. Please be certain to provide the model, vehicle identification number (VIN), mileage or hours of use, accessories, dates that events occurred and what action has been taken by both you and your dealer. Include the name and address of the dealership. To assist us in resolving your inquiry, please include copies of related receipts and any other pertinent information including the name of the dealership personnel with whom you have been working. Upon receipt of your correspondence, Kawasaki Motors Corp., U.S.A. will contact the dealership and work with it in resolving your problem.

Want to Contact Kawasaki?

This owner's manual should answer most of your questions about your Kawasaki. Your Kawasaki dealer should either be able to answer any other questions you might have immediately or be able to find the answer for you. Please send your correspondence to:

Consumer Services
Kawasaki Motors Corp., U.S.A..
P.O. Box 25252
Santa Ana, CA 92799-5252
(949) 460-5688

ENVIRONMENTAL PROTECTION

Kawasaki subscribes to the guidelines of Tread Lightly! a program dedicated to protecting the great outdoors through education and fostering responsible enjoyment of public lands. When using your Kawasaki Utility Vehicle (UV), please follow these Tread Lightly! guidelines:

Tread Lightly!

Travel responsibly on designated roads and trails or in permitted areas.

Respect the rights of others including private property owners and all recreational trail users, campers and others to allow them to enjoy their recreational activities undisturbed.

Educate yourself by obtaining travel maps and regulations from public agencies, planning for your trip, taking recreation skills classes, and knowing how to use and operate your equipment safely.

Avoid sensitive areas such as meadows, lakeshores, wetlands and streams, unless on designated routes. This protects wildlife habitat and sensitive soils from damage.

Do your part by leaving the area better than you found it, properly disposing of waste, minimizing the use of fire, avoiding the spread of invasive species, restoring degraded areas, and joining a local enthusiast organization.

Properly discard used batteries, tires, engine oil, other vehicle components, or the entire vehicle that you might dispose of in the future. Consult your authorized Kawasaki dealer or local environmental waste agency for their proper disposal procedure.

MAINTENANCE RECORD

Owner Name.....

Address .....

Phone Number .....

Engine Number .....

Vehicle Number.....

Key Code .....

Selling Dealer Name .....

Address .....

Phone Number .....

Warranty Start Date .....

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

Date	Traveled Distance	Maintenance Performed	Dealer Name	Dealer Address

Date	Traveled Distance	Maintenance Performed	Dealer Name	Dealer Address

Date	Traveled Distance	Maintenance Performed	Dealer Name	Dealer Address

Date	Traveled Distance	Maintenance Performed	Dealer Name	Dealer Address

Date	Traveled Distance	Maintenance Performed	Dealer Name	Dealer Address

Date	Traveled Distance	Maintenance Performed	Dealer Name	Dealer Address

KAF400AE
KAF400BE

Kawasaki

KAWASAKI HEAVY INDUSTRIES, LTD.
Motorcycle & Engine Company

Part No. 99987-1765

Printed in Japan

GB