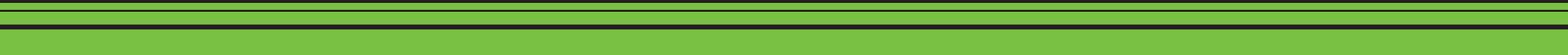


Utility Vehicle

GENERAL OWNER'S MANUAL

 **Read this manual carefully. It contains safety information.**

Kawasaki



ENGLISH

Utility Vehicle Owner's Manual

Original instructions

Quick Reference Guide

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

GENERAL INFORMATION

BREAK-IN

HOW TO OPERATE

SAFE OPERATION

MAINTENANCE AND ADJUSTMENT

STORAGE

TRANSPORTING AND STORAGE

TROUBLESHOOTING GUIDE

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.

<i>NOTICE</i>
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.*

NOTE

○ *This general OM contains following models. Please refer to where applicable to your MULE.*

KAF400A	MULE 610 4 × 4
KAF400B	MULE 600
KAF1000B	MULE PRO-DXT
KAF1000E	MULE PRO-DX

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.

(KAF1000B/E) Improper use of this vehicle can be hazardous. Never operate at speeds too fast for your skills or conditions. Handling characteristics of this vehicle change depending upon cargo load and driving modes.

Read the Owner's Manual

Read and understand this Owner's Manual. This is especially important for inexperienced operators. 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. Use of this vehicle on public roads and paved surfaces is hazardous. Do not operate this vehicle on public roads or paved surfaces.

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 handgrip or 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.

Use Proper Riding Gear

Proper protective gear can reduce the severity of injury in the event of an accident.

Choose a helmet most appropriate for your use of this utility vehicle. A helmet can reduce the risk of

head injuries. Wear appropriate eye protection and protective clothing.

Wearing Seat Belts

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.

Close the Doors (KAF1000B/E)

Be sure all doors are securely closed during operation and never remove a door.

The doors prevent branches, gravel, and debris from getting inside the passenger compartment.

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

(KAF400A/B) 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.

(KAF1000B/E) 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. Diesel fuel 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.

Maximum Seating Capacity

(KAF400A/B, KAF1000E) Do not exceed seating capacity: 2 occupants.

Occupants shall only ride in designated seating positions and with maximum 2 persons in the seat.

Do not carry small children on lap.

(KAF1000B) Do not exceed seating capacity: 4 occupants.

Occupants shall only ride in designated seating positions and with maximum 2 persons in each front and rear seat.

Do not carry small children on lap.

Reduce Speed When Carrying Cargo, Passenger(s), and/or Pulling a Trailer

Carrying cargo, passenger(s) and/or pulling a trailer can make the vehicle difficult to steer and

may affect vehicle handling in an unpredictable manner.

Braking distance is increased when carrying cargo, passenger(s), and/or pulling a trailer. Reduce speed and allow greater distance for braking when carrying cargo, passenger(s), and/or pulling a trailer. Use extreme caution when climbing and descending hills, and traversing slopes.

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.

All rights reserved. No part of this publication may be reproduced without our prior written permission.

This General Owner's Manual offers only the standard descriptions from various models so some descriptions shown may not apply to your particular model. For detailed information of your Mule (Mule handling, maintenance, service and technical data) refer to the English Owner's Manual. If not available, consult an authorized Kawasaki dealer.

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

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16 SPECIFICATIONS

Carburetor (KAF400A/B)

Ignition System (KAF400A/B)

Ignition Timing (KAF400A/B)

Spark Plug (KAF400A/B)

Injection Pump (KAF1000B/E)

Lubrication System

Engine Oil:

Type

Viscosity

Capacity

Coolant Capacity (KAF1000B/E)

DRIVE TRAIN

Driving Type:

Primary

Final

Transmission Type

Primary Reduction Ratio

Final Reduction Ratio:

Front

Rear

Overall Drive Ratio:

Forward

Reverse

Transmission Gear Ratio:

Forward

Reverse

Front Final Gear Case Oil

Front Final Gear Case Oil Capacity

Transmission Case Oil

Transmission Case Oil Capacity

FRAME

Type

Steering (KAF1000B/E)

Caster

Trail (KAF400A/B)

Tire Size: Front

Rear

Rim Size: Front

Rear

Fuel Tank Capacity

ELECTRICAL EQUIPMENT

Battery

Headlight:

High Beam

Low Beam

Brake/Tail Light

Reverse Light

LOAD CAPACITY

Maximum Vehicle Load (Including occupants, cargo and accessories)

Maximum Cargo Bed Load

Specifications are subject to change without notice.

DECLARATION OF CONFORMITY

SAMPLE 1

MANUFACTURERS
DECLARATION OF CONFORMITY
for

Product identification

Product : Utility Vehicle
Brand : KAWASAKI
Model/type : 
Starting frame number in range: 

Manufacturer / TCF: KAWASAKI HEAVY INDUSTRIES, LTD.
1-1 Kawasaki-cho
673-8666 Akashi, Hyogo Pref.
Japan

EU Representative: Kawasaki Motors Europe N.V.
Jacobus Spijkerdreef 1-3
2132 PZ Hoofddorp
The Netherlands

Means of conformity

1. The product is in conformity with the Machinery Directive 98/37/EC as last amended by directive 2006/42/EC.
2. The product is in conformity with the Electro Magnetic Compatibility Directive 2004/108/EC, based on the following harmonized standards applied:

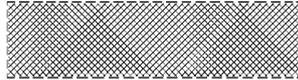
Approach 1: As an Engine-driven Machinery
EN 13309:2010 (Emission / Immunity – Construction Machinery)

Approach 2: As a General Electrical Equipment containing Engine
EN 55012:2007+A1:2009 (Emission – Engine-driven Devices)
EN 61000-6-2:2005 (Immunity – Generic Industrial Environment)

Notified Body: TÜV Rheinland Japan Ltd.,
Shin Yokohama Daini Center Bldg. 3-19-5,
Shin Yokohama, Kohoku-ku, Yokohama 222-0033,
Japan

Certificate No.: 

Signature of representative:



Hideto Yoshitake
Associate Officer, General Manager of Quality Assurance Division
Motorcycle & Engine Company
Kawasaki Heavy Industries, Ltd.

Place: Akashi, Hyogo Pref., Japan

Date: (day/month/year) 

Part No. 

20 DECLARATION OF CONFORMITY

SAMPLE 2

MANUFACTURERS DECLARATION OF CONFORMITY For

Product identification

Product : Utility Vehicle
Brand : KAWASAKI
Model/type : 
Starting frame number in range: 

Manufacturer / TCF: KAWASAKI HEAVY INDUSTRIES, LTD.
1-1 Kawasaki-cho
673-8666 Akashi, Hyogo Pref.
Japan

EU Representative: Kawasaki Motors Europe N.V.
Diamantlaan 14
2132 WV Hoofddorp
The Netherlands

Means of conformity

1. The product is in conformity with the Electro Magnetic Compatibility Directive 2004/108/EC, based on the following harmonized standards applied:

EN55012:2002+A1:2005

Vehicles, boats, and internal combustion engine driven devices –

Radio disturbance characteristics –

Limits and methods of measurement for the protection of receivers except those installed in the vehicle/boat/device itself or in adjacent vehicles/boats/devices

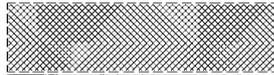
EN61000-6-2:2005

Electromagnetic compatibility (EMC) –

Part 6-2: Generic standards - Immunity for industrial environments

2. The product is in conformity with the Machinery Directive 98/37/EC as last amended by directive 2006/42/EC.

Signature of representative:



Sosuke Kinouchi

Executive Officer, General Manager of Quality Assurance Division

Consumer Products & Machinery Company

Kawasaki Heavy Industries, Ltd.

Place: Akashi, Hyogo Pref., Japan

Date: 

Part No. 

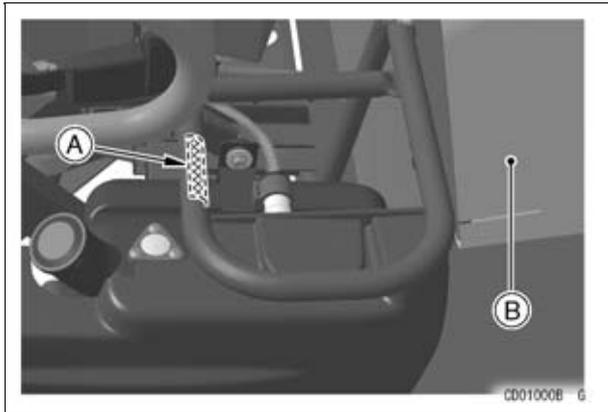
22 SERIAL NUMBER LOCATIONS

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.

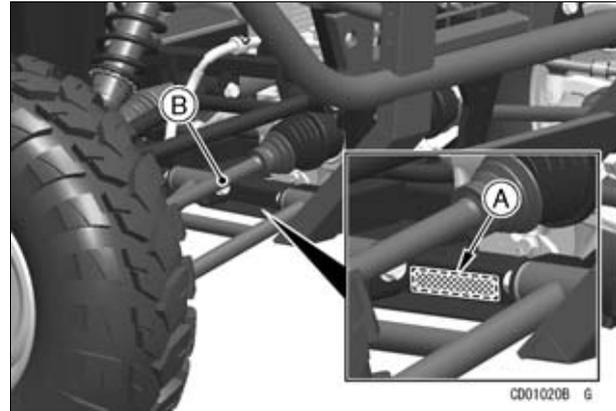
Frame No.

(KAF400A/B)



- A. Frame Number
- B. Seat (Raised Position)

(KAF1000B/E)

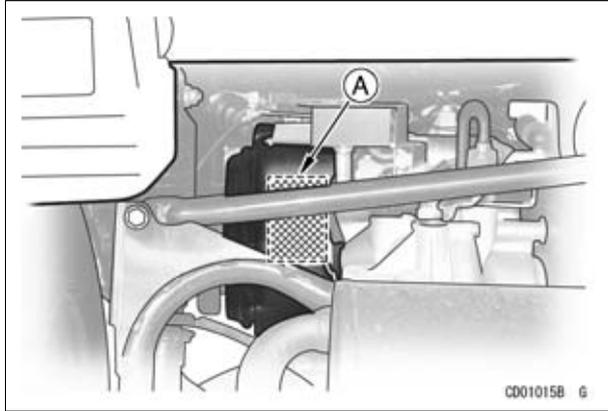


- A. Frame Number
- B. Right Front Axle

SERIAL NUMBER LOCATIONS 23

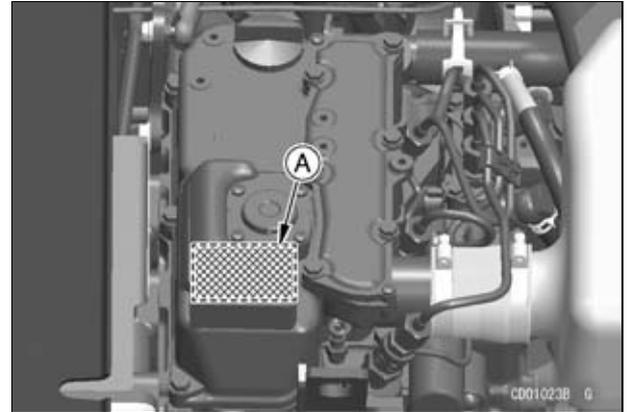
Engine No.

(KAF400A/B)



A. Engine Number

(KAF1000B/E)

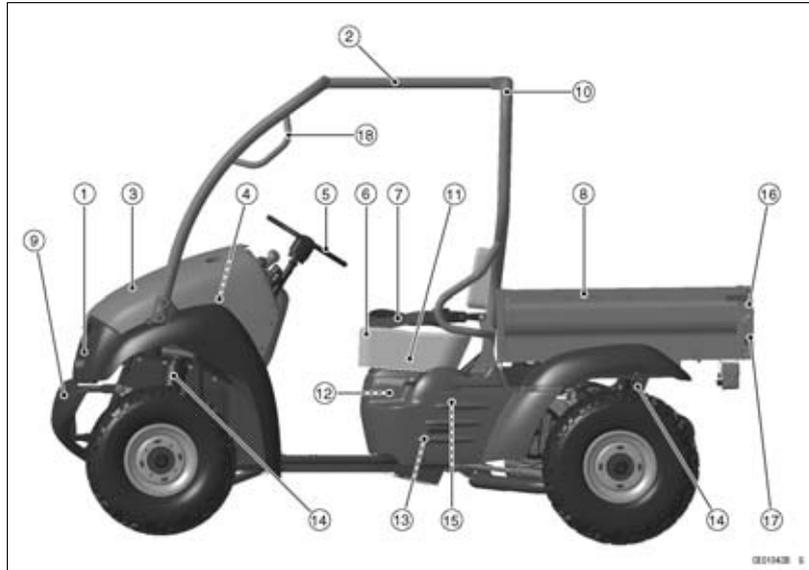


A. Engine Number

24 LOCATION OF PARTS

LOCATION OF PARTS

(KAF400A/B)



1. Headlights
2. ROPS (Roll Over Protective Structure)
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

LOCATION OF PARTS 25

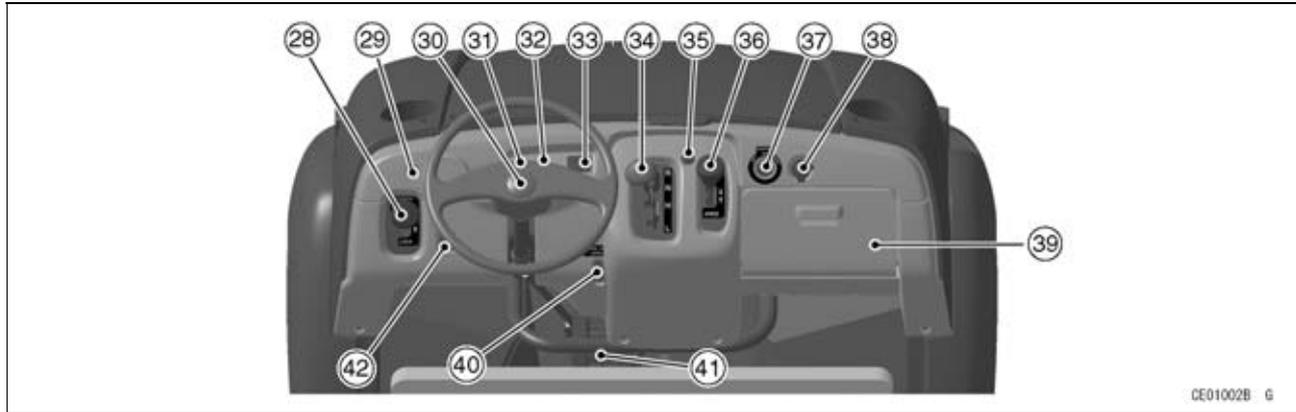


- 18. Handgrip
- 19. Air Cleaner (Belt Drive Torque Converter)
- 20. Belt Drive Torque Converter

- 21. Latch
- 22. Dashboard
- 23. Brake/Tail Light
- 24. Muffler

- 25. Fuel Tank
- 26. Fuel Tank Cap
- 27. Fuel Gauge

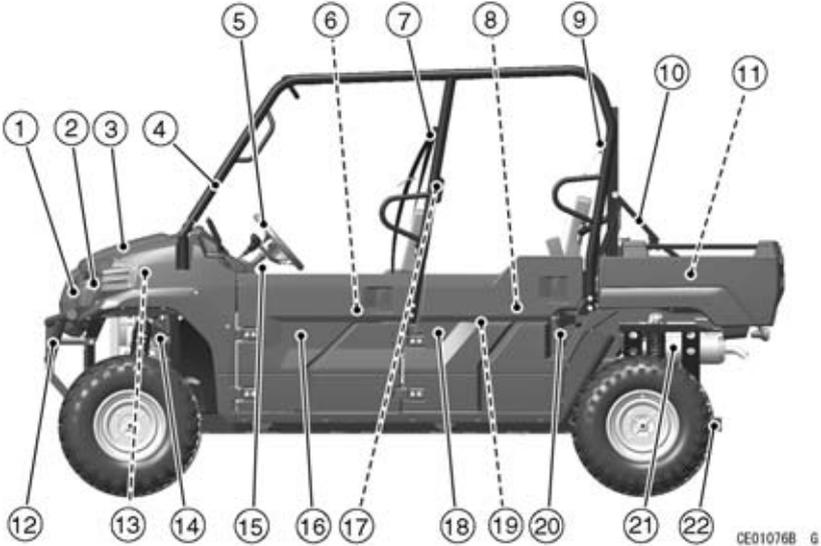
26 LOCATION OF PARTS



CE01002B G

- | | | |
|---------------------------------------------|---------------------------------------|-------------------------|
| 28. Differential Shift Lever | 33. Hour Meter | 38. Accessory Connector |
| 29. Choke Knob | 34. Gear Shift Lever | 39. Glove Compartment |
| 30. Horn Button | 35. Front Cargo Latch | 40. Brake Fluid Level |
| 31. Engine Oil Temperature
Warning Light | 36. 2WD-4WD Shift Lever(KA-
F400A) | 41. Brake Light Switch |
| 32. Parking Brake Warning Light | 37. Ignition Switch | 42. Light Switch |

(KAF1000B, 4-Persons Mode)



- 1. LED Sub Headlights
- 2. Headlights
- 3. Front Access Cover
- 4. ROPS (Roll Over Protective Structure)
- 5. Steering Wheel
- 6. Front Seat
- 7. Front Seat Belts
- 8. Rear Seat

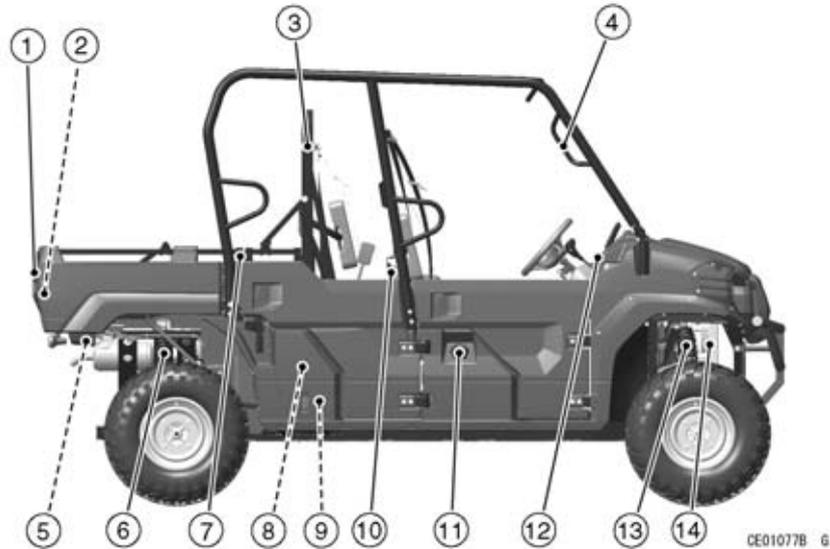
- 9. Rear Seat Belts
- 10. Screen Lock Arm
- 11. Cargo Bed
- 12. Front Guard
- 13. Coolant Reserve Tank
- 14. Brake Fluid Reservoir
- 15. Steering Wheel Tilt Lock Lever
- 16. Front Door

- 17. Handhold for Rear Seat Passengers
- 18. Rear Door
- 19. Cargo Bed Handgrip
- 20. Cargo Bed Latch
- 21. Muffler (Spark Arrestor)
- 22. Trailer Hitch Bracket

CE01076B G

28 LOCATION OF PARTS

(KAF1000B, 2-Persons Mode)



1. Tailgate Latch Handle

2. Tailgate

3. Screen

4. Handgrip for Front Right Seat
Passenger

5. Tail/Brake Light

6. Rear Shock Absorber

7. Cargo Bed Side Plate

8. Air Cleaner

9. Battery

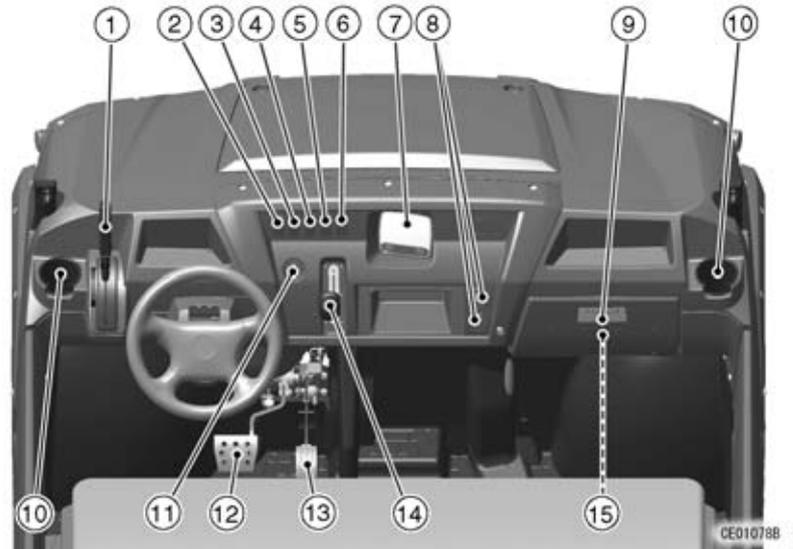
10. Rear Seat (Folded Position)

11. Fuel Tank Cap

12. Dashboard

13. Front Shock Absorber

14. Radiator



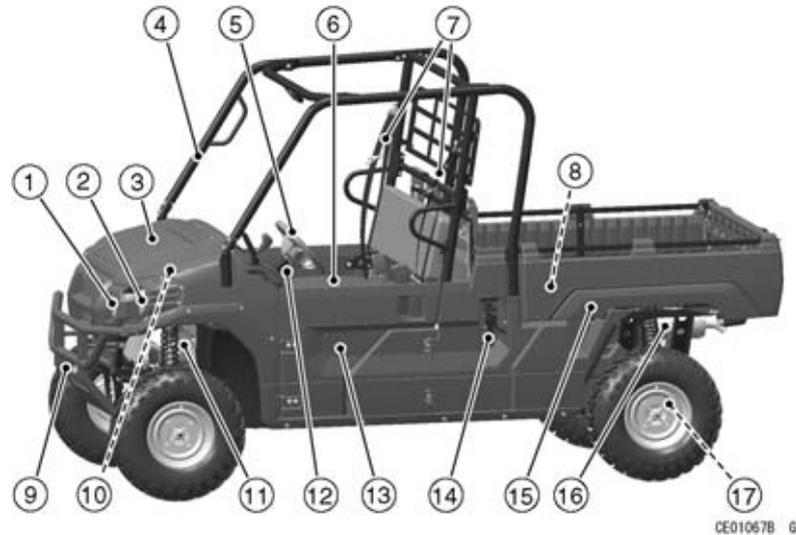
- 1. Parking Brake Lever
- 2. Horn Switch
- 3. Selectable DIFF-LOCK Shift Switch
- 4. Selectable 2WD/4WD Shift Switch

- 5. Headlight Switch
- 6. LED Sub Headlight Switch
- 7. Multifunction Meter
- 8. Power Outlet Sockets
- 9. Glove Compartment
- 10. Cupholders

- 11. Main Switch
- 12. Brake Pedal
- 13. Throttle Pedal
- 14. Gear Shift Lever
- 15. Tool Kit

30 LOCATION OF PARTS

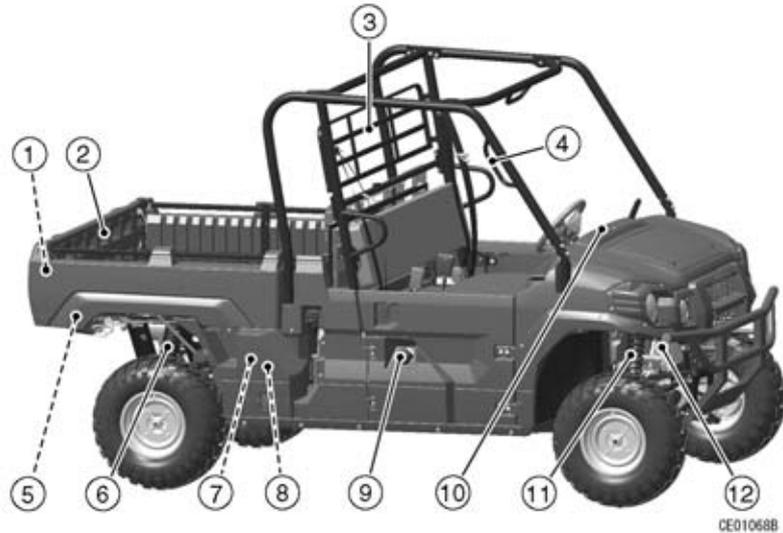
(KAF1000E)



- 1. LED Sub Headlights
- 2. Headlights
- 3. Front Access Cover
- 4. ROPS (Roll Over Protective Structure)
- 5. Steering Wheel
- 6. Seat

- 7. Seat Belts
- 8. Cargo Bed
- 9. Front Guard
- 10. Coolant Reserve Tank
- 11. Brake Fluid Reservoir
- 12. Steering Wheel Tilt Lock Lever
- 13. Door

- 14. Cargo Bed Latch
- 15. Cargo Bed Handgrip
- 16. Muffler (Spark Arrester)
- 17. Trailer Hitch Bracket



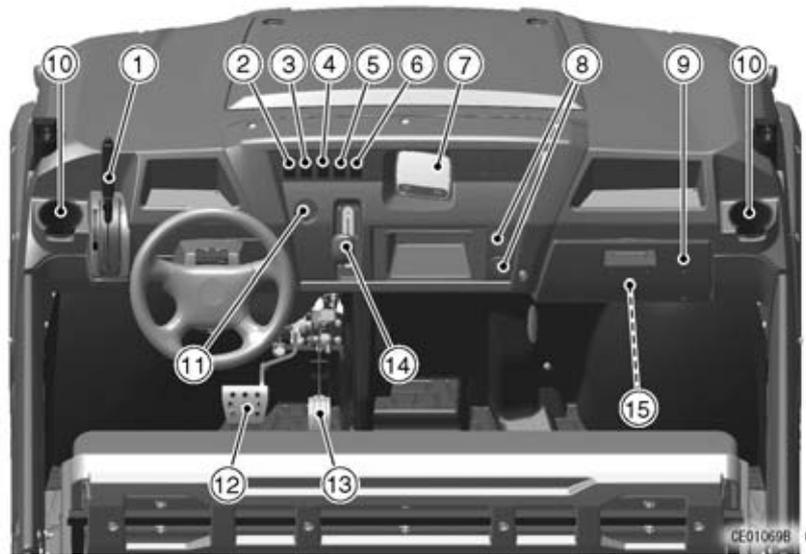
CE01068B 6

- 1. Tailgate Latch Handle
- 2. Tailgate
- 3. Screen
- 4. Handgrip for Right Seat Passenger

- 5. Tail/Brake Light
- 6. Rear Shock Absorber
- 7. Air Cleaner
- 8. Battery
- 9. Fuel Tank Cap

- 10. Dashboard
- 11. Front Shock Absorber
- 12. Radiator

32 LOCATION OF PARTS



- 1. Parking Brake Lever
- 2. Horn Switch
- 3. Selectable DIFF-LOCK Shift Switch
- 4. Selectable 2WD/4WD Shift Switch

- 5. Headlight Switch
- 6. LED Sub Headlight Switch
- 7. Multifunction Meter
- 8. Power Outlet Sockets
- 9. Glove Compartment
- 10. Cupholders

- 11. Main Switch
- 12. Brake Pedal
- 13. Throttle Pedal
- 14. Gear Shift Lever
- 15. Tool Kit

LOCATION OF LABELS

Some labels are not applicable to all models, and their location may also vary depending on models. Please note that illustrations of models and labels used here are for representation purposes only.

For information specific to your model, refer to the English Owner's Manual or contact an authorized Kawasaki dealer or the distributor.

NOTE

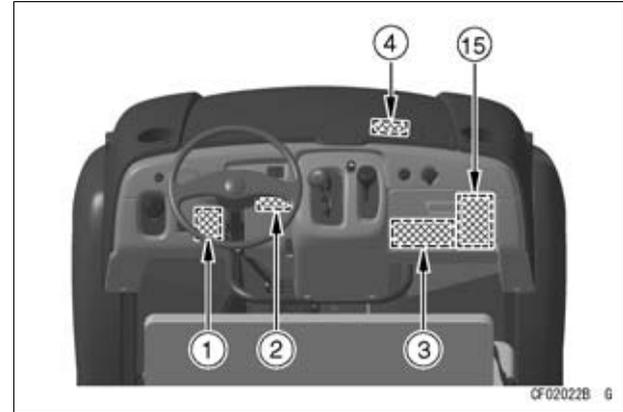
○ *Labels and their locations listed hereafter are for KAF1000B for example use only. See your own OM in English for relevant information.*

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

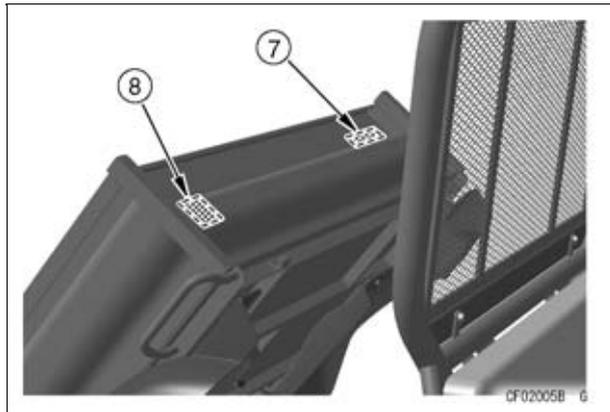
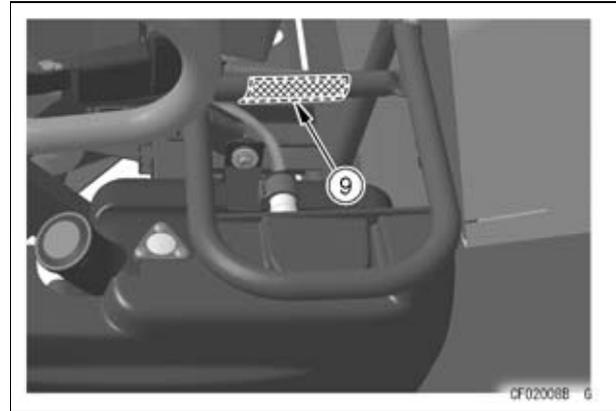
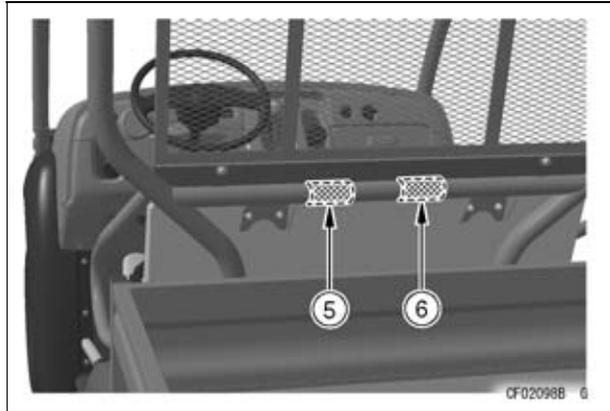
- *The sample warning labels in this section have part numbers to help you and your dealer obtain the correct replacement.*
- *Refer to the actual vehicle label for model specific data grayed out in the illustration.*

(KAF400A/B)



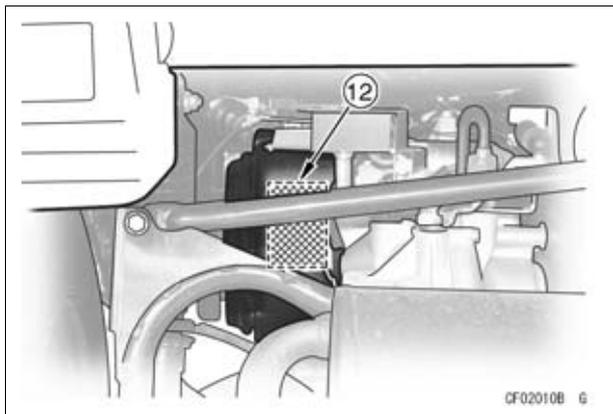
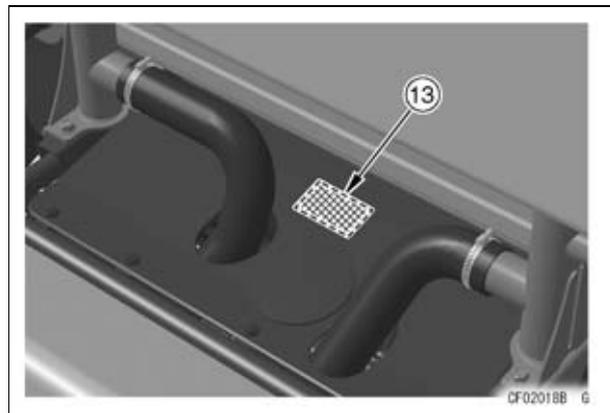
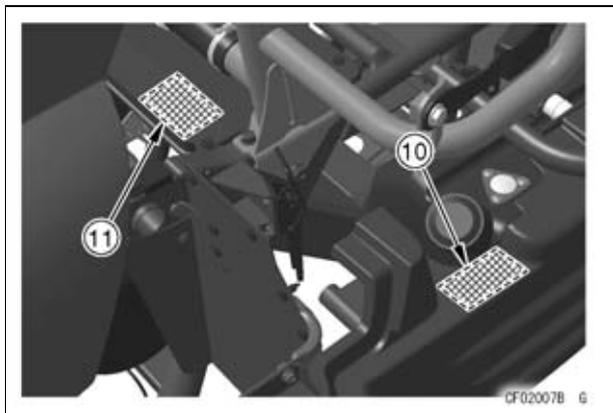
1. **Warning (Off-Highway Utility Vehicle)**
2. **Notice (Shifting)**
3. **Warning (General)**
4. **Warning (Front Cargo Hood)**
15. **Warning (Read Owner's Manual)**

34 LOCATION OF LABELS



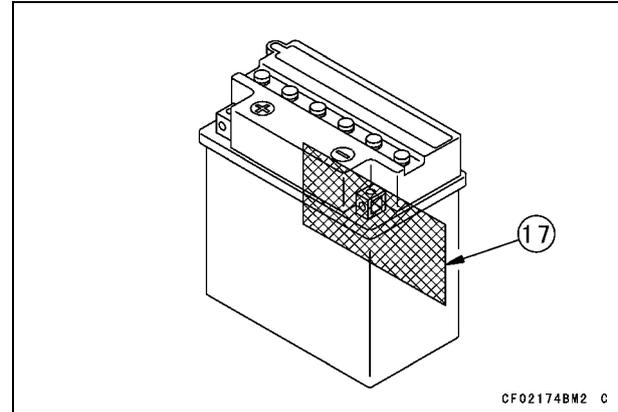
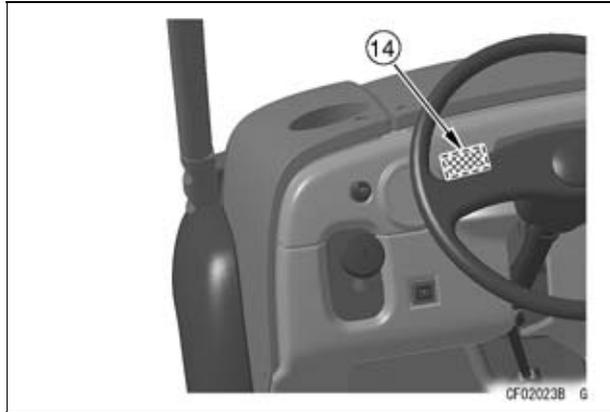
- 5. Warning (Passengers in Cargo Bed)
- 6. Warning (Cargo Bed)
- 7. Important Information (Tires/Max. Load)
- 8. Carrier Hook Operation
- 9. Specification

LOCATION OF LABELS 35

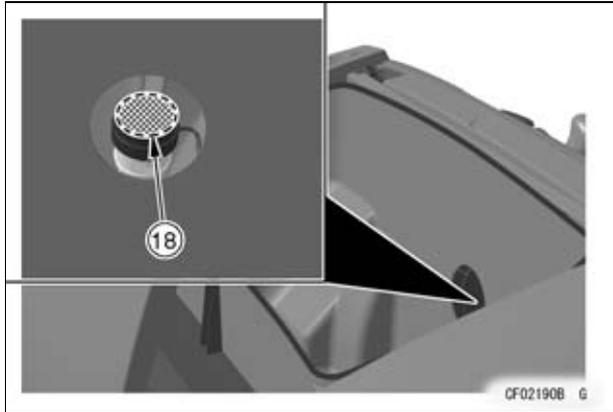


- 10. Warning (Refueling)
- 11. Warning (Hot Surface)
- 12. Important Emission Control Information
- 13. Engine Oil Information

36 LOCATION OF LABELS



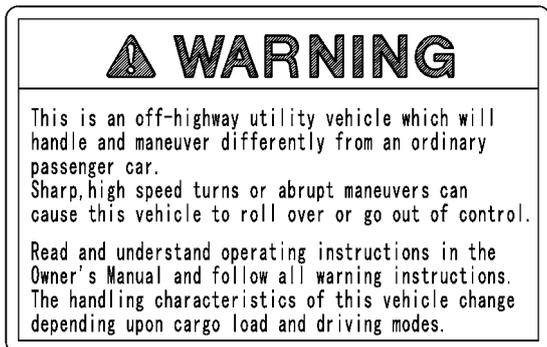
- 14. CE Mark
- 16. Certification (ROPS)
- 17. Battery Danger/Poison (On the backside)



18. Brake Fluid

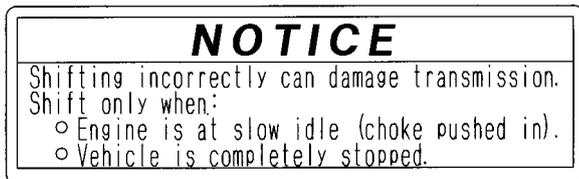
38 LOCATION OF LABELS

(1)



56070-0050
CF03052BM2 C

(2)



56071-0132

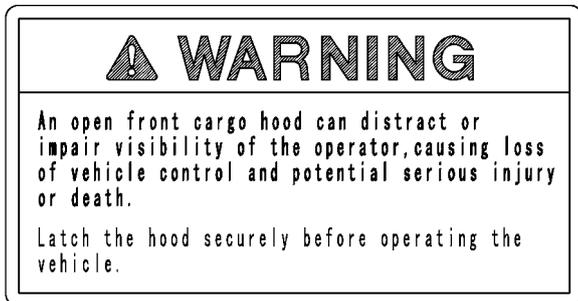
(3)

 WARNING	
<p>The Owner's Manual and warning labels contain important information on safe operation of this vehicle. You must read and fully understand instructions in Owner's Manual and warning labels before operating this vehicle. Keep Owner's Manual with this vehicle at all time.</p>	<p>Protective head gear reduces the risk of head injuries. A helmet is recommended when this vehicle is being used for recreational purposes or any aggressive driving. Please refer to the Owner's Manual for information on proper riding gear.</p>
<p>Improper use of this vehicle can be hazardous. Never operate at speeds too fast for your skills or conditions. Handling characteristics of this vehicle change depending upon cargo load and driving modes. Use proper driving techniques on hills, in rough terrain, and in water.</p>	<p>Seat belts reduce injuries. Operator and passenger must always fasten seat belts during vehicle operation.</p>
<p>Use of this vehicle on public roads and paved surfaces is hazardous. This vehicle is designed and equipped for off-highway use only. Do not operate this vehicle on public roads or paved surfaces.</p>	<p>Carrying passengers outside the passenger compartment can be hazardous. This vehicle is designed to carry the operator and only one passenger in the seat provided. Never carry a passenger in the cargo bed.</p>
<p>Children may not have skills and judgment to safely operate this vehicle. All operators of this vehicle should possess a valid driver's license.</p>	<p>Failure to apply parking brake may result in vehicle moving inadvertently with the potential for causing damage and injury. Always apply parking brake before exiting vehicle.</p>
	<p>Alcohol and drugs impair reaction time and judgment. Never operate this vehicle under influence of alcohol or drugs.</p>

56071-0101

40 LOCATION OF LABELS

(4)



56070-0053

CF03051BM2 C

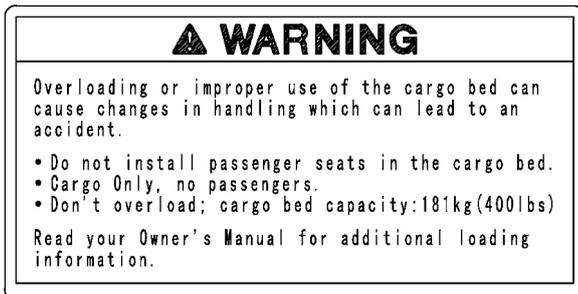
(6)



56070-7515

CF03124BM2 C

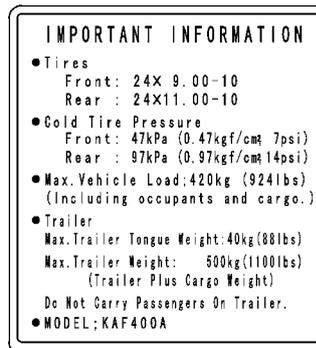
(5)



56071-0134

CF03370BM2 C

(7) (KAF400A)



56053-0503

CF03586BM2 C

(7) (KAF400B)

IMPORTANT INFORMATION

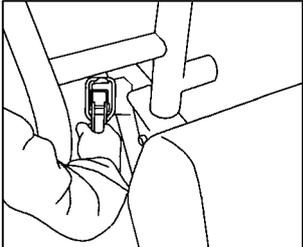
- Tires
 Front : 22X 9.00-10
 Rear : 22X11.00-10
- Cold Tire Pressure
 Front : 47kPa (0.47kgf/cm² 7psi)
 Rear : 110kPa (1.1kgf/cm² 16psi)
- Max. Vehicle Load: 420kg (924lbs)
 (Including occupants and cargo.)
- Trailer
 Max. Trailer Tongue Weight: 40kg (88lbs)
 Max. Trailer Weight: 500kg (1100lbs)
 (Trailer Plus Cargo Weight)
 Do Not Carry Passengers On Trailer.
- MODEL: KAF400B

56053-0505

CF03588BM2 C

(8)

HOOK OPERATION



Open the seat and operate the carrier's hook.

56030-0081

CF03060BM2 C

(9)

MFD. BY KAWASAKI MOTORS MFG. CORP., U.S.A.
 MODEL: [] MODEL YEAR: []
 MAX. POWER : [] [kW/rpm]
 CURB MASS : [] kg
 G. V. W. R. : [] kg

CF03823BN6 C

(10)

WARNING

Gasoline is flammable.
 Fire can cause severe injury or death.

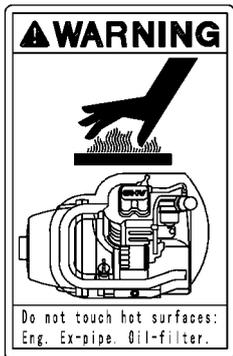
Refuel in well ventilated area.
 Shut engine off.
 Keep away from flame or sparks.

56071-7501

CF03150BM2 C

42 LOCATION OF LABELS

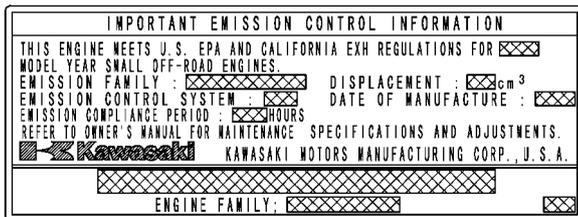
(11)



56070-1125

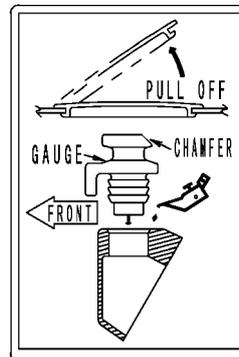
CF03062BM2 C

(12)



CF03022CM2 C

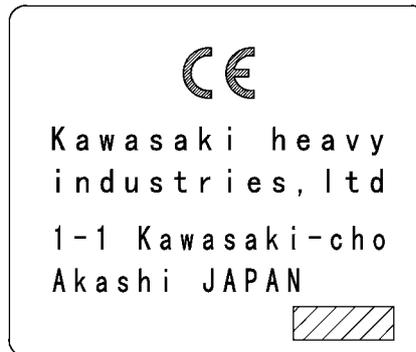
(13)



56030-0096

CF03403BM2 C

(14)



BD03161CM2 C

(15)

GB Read Owner's manual before use. It contains important information.

D Vor Inbetriebnahme Bedienungsanleitung lesen. Sie enthält wichtige Informationen.

F Lire le manuel du propriétaire avant utilisation. Celui-ci contient des informations importantes.

E Lea el manual de instrucciones antes de usar el vehículo. Contiene información importante.

SW Läs instruktionsboken noga före start. Den innehåller viktig information.

P Leia o manual de utilizador antecipadamente. Contém informação importante.

NL Lees voor gebruik de handleiding. Deze bevat belangrijke informatie.

Kawasaki 58070-1233

(16)

KAWASAKI HEAVY INDUSTRIES, LTD.
Cab Frame for Model Type

Notified Body No.

CF03960BM2 C

(17)

! DANGER/POISON

 SHIELD EYES EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY.	 NO • SPARKS • FLAMES • SMOKING	 SULFURIC ACID CAN CAUSE BLINDNESS OR SEVERE BURNS.	 FLUSH EYES IMMEDIATELY WITH WATER. GET MEDICAL HELP FAST.
KEEP OUT OF REACH OF CHILDREN			
PROPOSITION 65 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. BATTERIES ALSO CONTAIN OTHER CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. WASH HANDS AFTER HANDLING. SPSYMBWPD			

BD03107C S

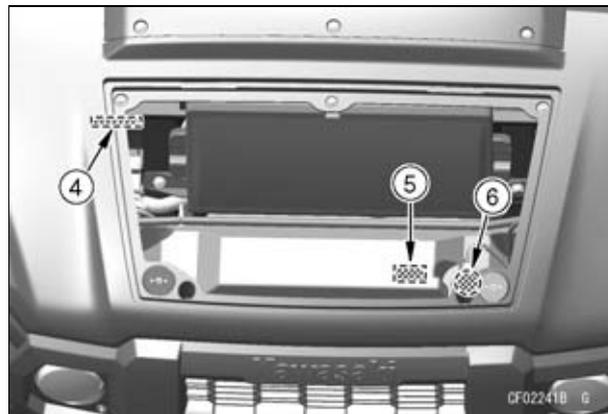
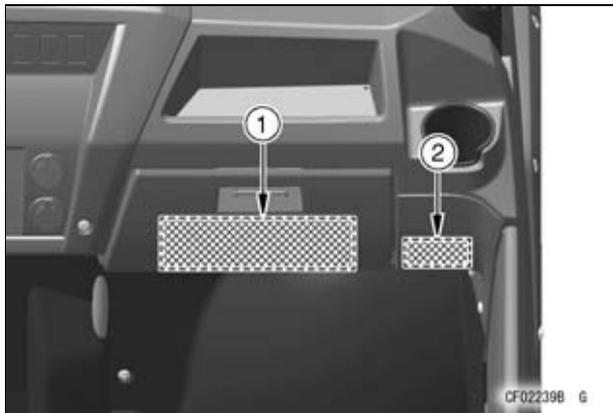
44 LOCATION OF LABELS

(18)



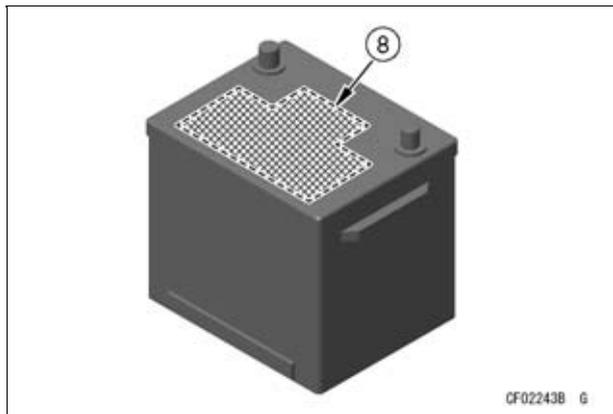
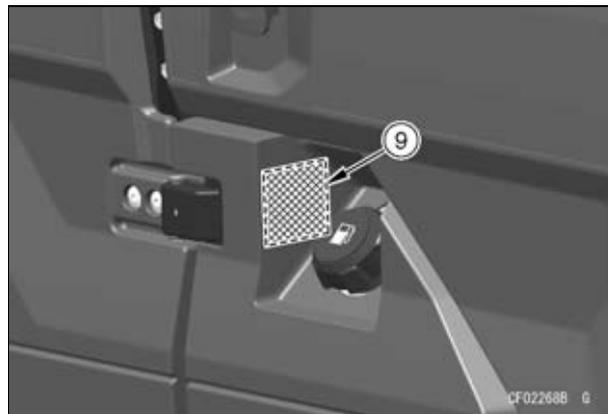
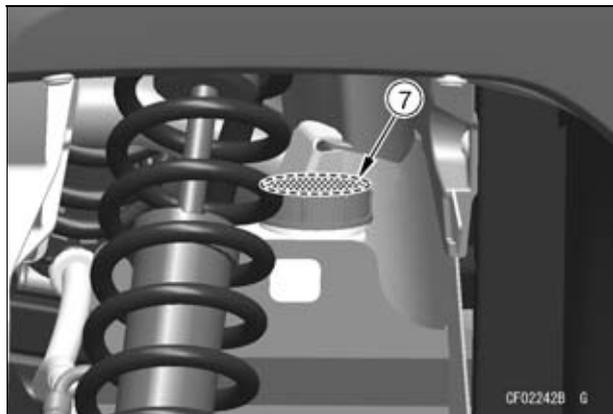
CF03962B S

(KAF1000B)



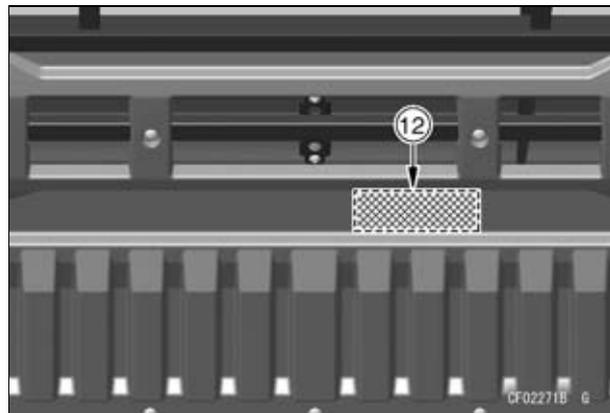
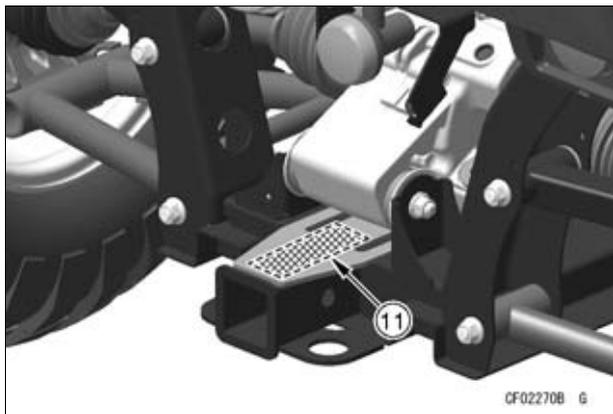
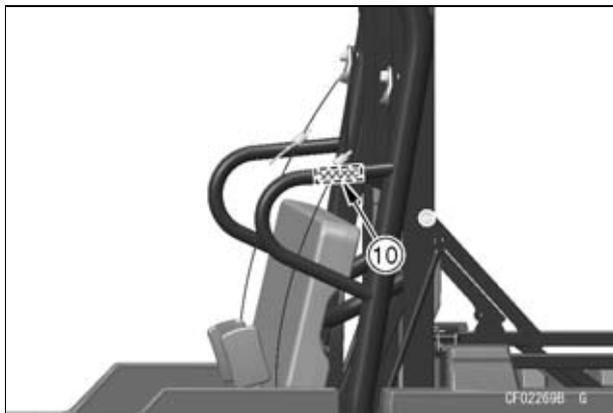
1. Warning (General)
2. CE Mark
3. Specification (ROPS)
4. Specification (Model)
5. Danger (Radiator Cap)
6. Danger (Radiator Cap)

46 LOCATION OF LABELS



- 7. Warning (Brake Fluid)
- 8. Danger/Poison (Battery)
- 9. Warning (Refueling)

LOCATION OF LABELS 47

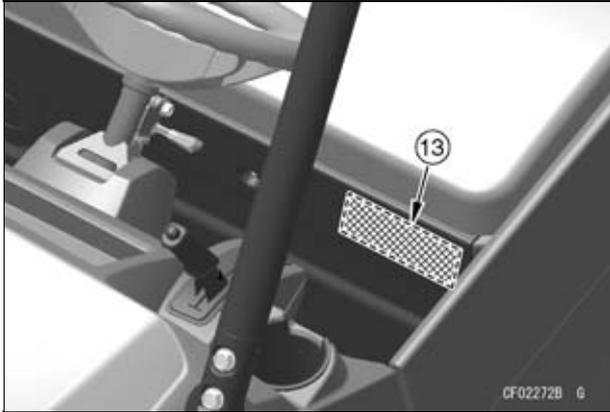


10. Warning (Cargo Bed Lifting: both sides)

11. Warning (Trailer Towing)

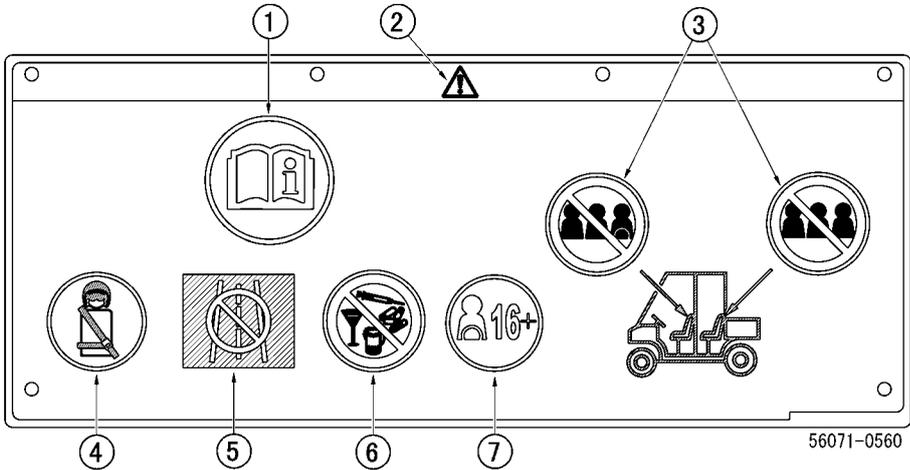
12. Warning (Cargo Bed Loading)

48 LOCATION OF LABELS



13. Important Information (Tires/Max. Load)

(1)



- 1. Read Owner’s Manual
- 2. Safety alert symbol
- 3. Maximum seating capacity: 2 persons in each seat, see “BASIC SAFE DRIVING” section
- 4. Fasten seat belts. Wear an approved helmet and protective gear, see “BASIC SAFE DRIVING” section
- 5. Never use on public roads, see “BASIC SAFE DRIVING” section
- 6. Never use with drugs or alcohol, see “BASIC SAFE DRIVING” section
- 7. Make sure operators are 16 years or older with a valid driver’s license, see “BASIC SAFE DRIVING” section

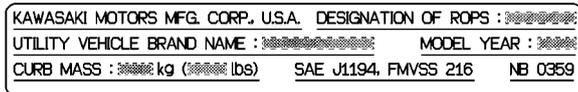
50 LOCATION OF LABELS

(2)



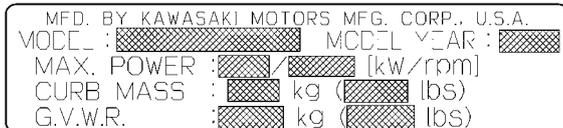
BD03999BM2 C

(3)



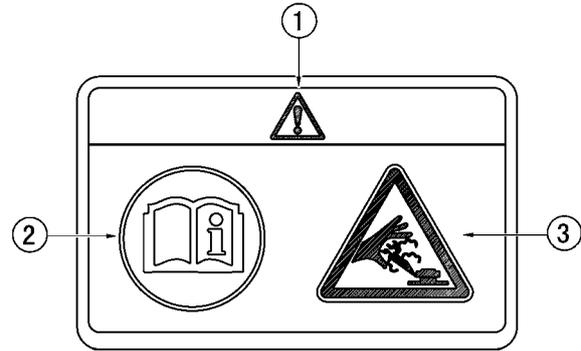
CF03180C S

(4)



CF03182C S

(5)



56071-0594

CF03174C S

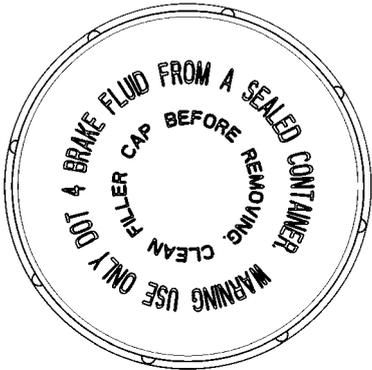
1. Safety alert symbol
2. Read Owner's Manual
3. Hot liquid. Never open when engine is hot

(6)



CF03130B G

(7)



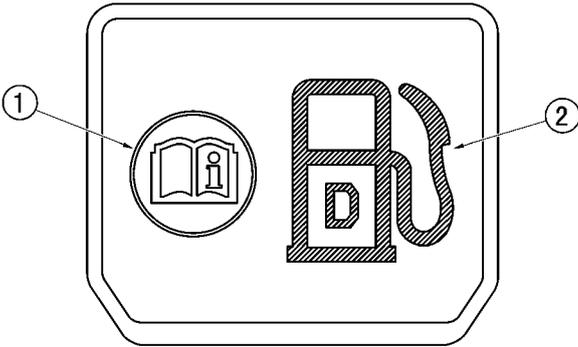
CF03067C S

(8)



CF03079C S

(9)



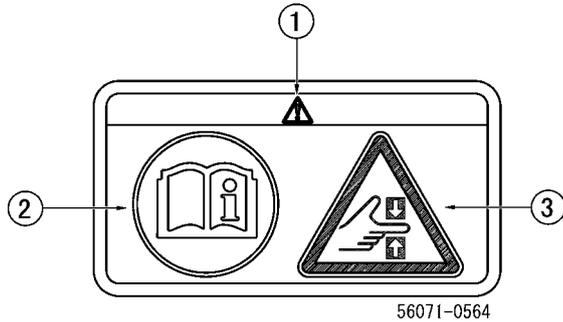
56033-0958

CF03181C S

- 1. Read Owner's Manual
- 2. Use diesel fuel only

52 LOCATION OF LABELS

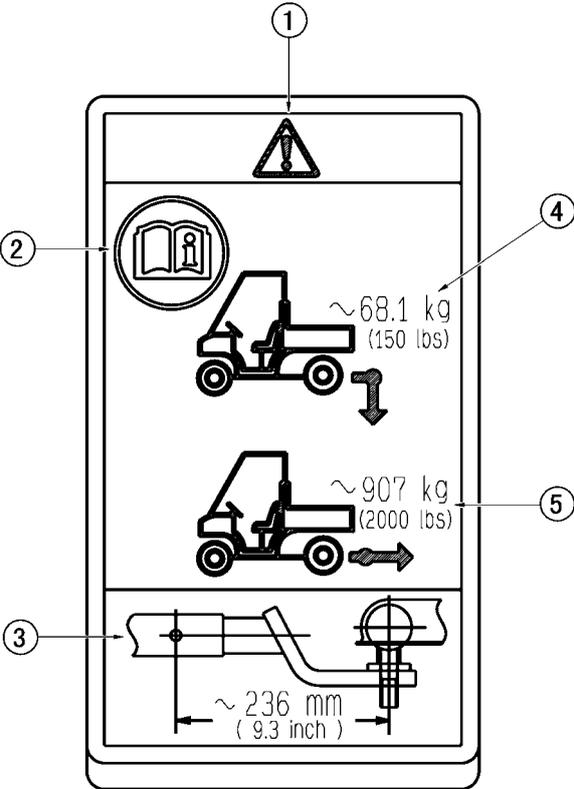
(10)



CF03171C S

1. Safety alert symbol
2. Read Owner's Manual
3. Hand crush

(11)

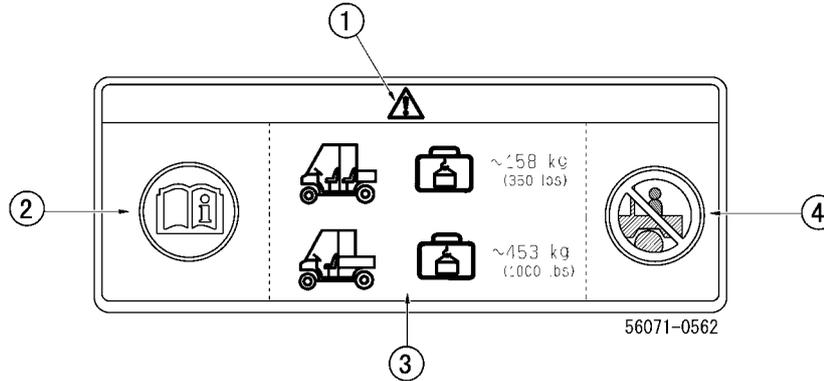


- 1. Safety alert symbol
- 2. Read Owner's Manual
- 3. Maximum arm length
- 4. Vertical force limitation
- 5. Horizontal force limitation

56071-0563

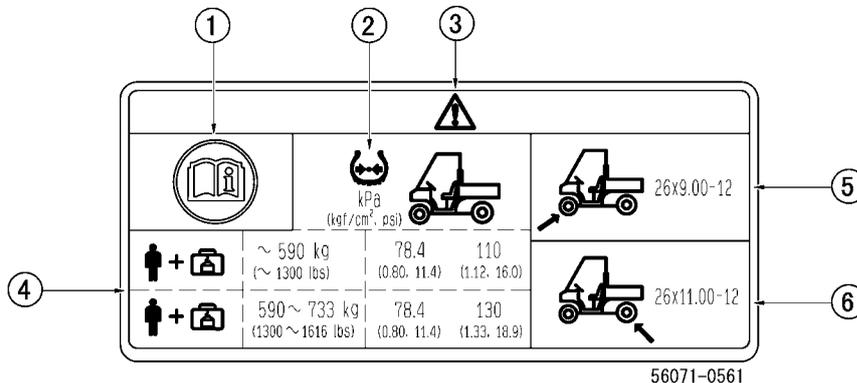
54 LOCATION OF LABELS

(12)



1. Safety alert symbol
2. Read Owner's Manual
3. Maximum cargo bed load
4. Never carry passengers in cargo bed

(13)



QF03173C S

1. Read Owner's Manual
2. Tire pressure
3. Safety alert symbol
4. Load condition (including occupants and cargo)
5. Front tire size
6. Rear tire size

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 other person(s) involved.

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. Always follow these precautions:

- Carrying cargo, passengers and/or pulling a trailer can make the vehicle difficult to steer and may affect vehicle handling in an unpredictable manner. Use extreme caution when climbing and descending hills, and traversing slopes.
- Braking distance is increased when carrying cargo, passengers, and/or pulling a trailer. Reduce speed and allow greater distance for braking.
- 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.
- 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 weight. Do not place cargo, lean or sit on them, or they may break.

- 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 transported in the cargo bed can be tossed about or even thrown out causing serious injury or death. Do not install seating or transport passengers in the cargo bed.

- (Maximum Cargo Bed Load) Do not carry more than maximum cargo bed load as specified below.

kg (lb)

- (Maximum Vehicle Load) Weight of operator, passenger(s), cargo, accessories, and trailer tongue must not exceed following limits.

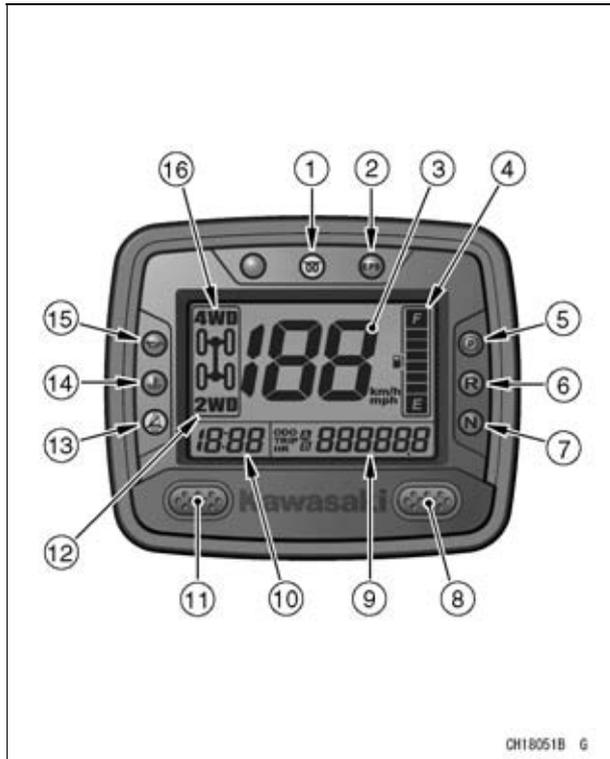
kg (lb)

NOTE

- *Maximum cargo bed load and vehicle load for your Mule are show in your English OM titled "LOADING INFORMATION" chapter. Refer to the relevant page and copy the data value into the space provided in this page.*
- Do not operate this vehicle faster than 16 km/h (10 mph) when pulling a trailer. Refer to the "Trailer Hitch Bracket" section in the "GENERAL INFORMATION" chapter.

GENERAL INFORMATION

Multifunction Meter (KAF1000B/E)



1. Amber Glow Plug Indicator Light
2. Red EPS Warning Indicator Light
3. Speedometer
4. Fuel Level Gauge
5. Red Parking Brake Indicator Light
6. Red Reverse Indicator Light
7. Green Neutral Indicator Light
8. Right Button
9. Odometer/Trip Meters (Trip Meter A and B)/Hour Meter
10. Clock
11. Left Button
12. "2WD" Indicator Symbol
13. Red Seat-Belt Use Reminder
14. Red Coolant Temperature Warning Indicator Light
15. Red Oil Pressure Warning Indicator Light
16. "4WD" Indicator Symbol

Pushing the left button shifts the display in the odometer/trip meters/hour meter through the 4 modes; odometer, trip meter A and B, and hour meter.

When the main switch is turned on, all the "LCD" segments and "LED" lights are displayed for a second, then the clock and meters operate normally depending on the mode selected.

Speedometer

The speedometer shows the speed of the vehicle.



A. Speedometer

mph-km/h Display:

mph-km/h display can alternate between English and metric modes (mph and km/h) in the digital meter. Make sure that mph or km/h is correctly displayed according to local regulations before driving. Shift the mph-km/h display in the digital meter as follows.

NOTE

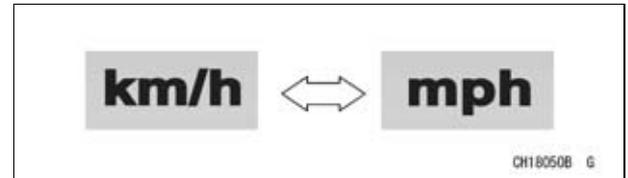
- Do not operate the vehicle with the digital meter displaying in the wrong unit (mph or km/h).
- Display the odometer in the digital meter.

- The mph-km/h display shifts by pushing and holding the left button and pushing the right button within two seconds.



- A. mph-km/h Display**
- B. Left Button**
- C. Right Button**

- The mph-km/h display shifts as follows.



NOTE

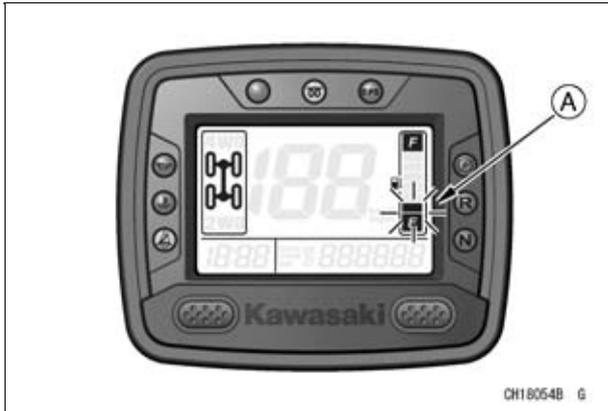
- The data is maintained even if the battery is disconnected.

60 GENERAL INFORMATION

Fuel Level Gauge

The fuel in the fuel tank is shown in segments. All 6 segments are displayed when the fuel tank is full. As fuel is consumed the segments go out accordingly. When the bottom segment is reached, it will begin blinking to warn of a low fuel level.

When it begins blinking, 6.6 liters (1.7 US gal) of fuel remains. Fill the fuel tank as soon as possible because there is no reserve tank in this vehicle (see Fuel section).

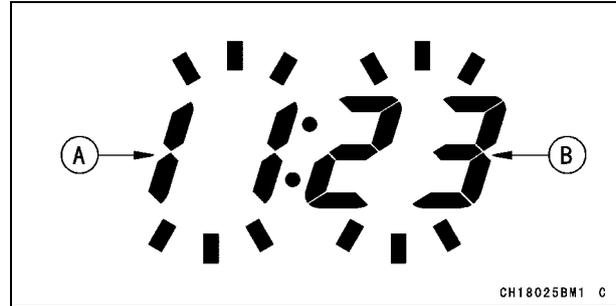


A. Blinking to warn of a low fuel level

Clock

To adjust hours and minutes:

- Turn the main switch on.
- The odometer is displayed.
- Push the right button for more than two seconds. Both the hour and minute displays start blinking.



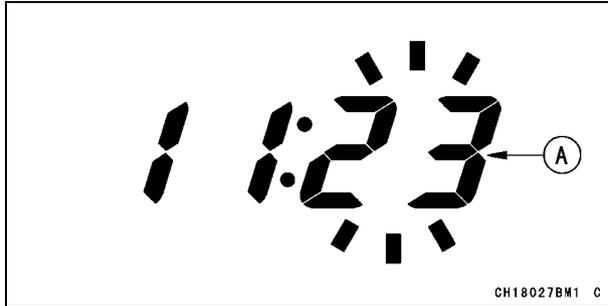
- A. Hour Display
- B. Minute Display

- Push the right button. The hour display only blinks. Push the left button to advance the hours.



- A. Hour Display

- Push the right button. The hour display stops blinking and the minute display starts blinking. Push the left button to advance the minutes.



A. Minute Display

- Push the right button. Both the hour and minute displays start blinking again.
- Push the left button. The displays stop blinking and the clock starts working.

NOTE

- Pushing the left button momentarily advances the hour or minute step by step. Pushing and holding the button advances the hour or minute continuously.
- The clock works normally from the back-up power while the main switch is turned off.
- When the battery is disconnected, the clock resets to 1:00, and starts working again when the battery is connected.

Odometer

The odometer shows the total distance in kilometers or miles that the vehicle has been driven. The meter cannot be reset.

NOTE

- When the figures come to 999999, they are stopped and locked.



A. Odometer

Trip Meters (Trip Meter A/B)

The trip meter shows the distance in kilometers or miles traveled since it was last reset to zero.

To reset the trip meter:

- Push the left button to display the trip meter A or B.
- Push the right button and hold it in.
- After two seconds, the figure display turns to 0.0, and then starts counting when the vehicle is operated. The meter counts until it is next reset.

NOTE

- When the trip meter reaches 9999.9 when the vehicle is running, it turns back to 0.0 and starts counting again.

62 GENERAL INFORMATION



A. Trip Meter A

Hour Meter

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

NOTE

○ *When the figures come to 99999.9, they are stopped and locked.*



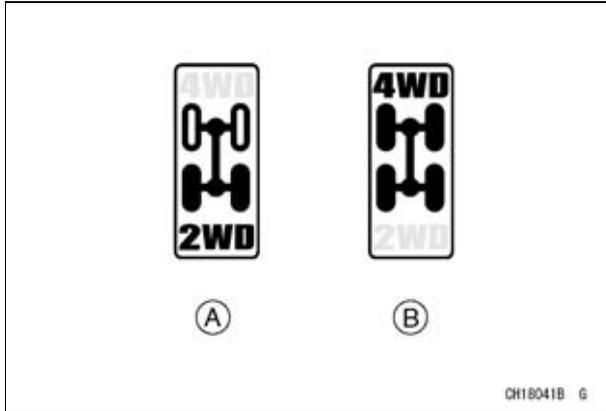
A. Hour Meter

2WD/4WD Indicator Symbol

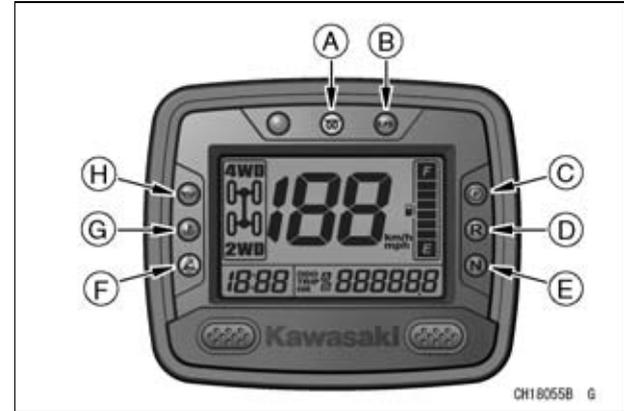
This vehicle can be driven in either "2WD" or "4WD."

When the selectable 2WD/4WD shift switch is in "4WD," the "4WD" indicator symbol will appear.

After shifting there is a momentary delay before the indicator symbols change.



- A. "2WD" Indicator Symbol
B. "4WD" Indicator Symbol



- A. Amber Glow Plug Indicator Light
B. Red EPS Warning Indicator Light
C. Red Parking Brake Indicator Light
D. Red Reverse Indicator Light
E. Green Neutral Indicator Light
F. Red Seat-Belt Use Reminder
G. Red Coolant Temperature Warning Indicator Light
H. Red Oil Pressure Warning Indicator Light

Amber Glow Plug Indicator Light

The glow plug indicator light goes on for 4 seconds when the main switch key is turned to the "ON" position. The indicator light also goes on whenever the key is in the "START" position. The indicator light goes off after the plug is fully heated. If it does not go on or go off, have the glow plug and related system checked by an authorized Kawasaki dealer.

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Refer to the “Starting the Engine” section in the “HOW TO OPERATE” chapter for detailed information.

Red EPS Warning Indicator Light

The EPS warning indicator light will momentarily illuminate when the engine starts, then go off in a second if the system is in order. If this warning indicator light illuminates any other time, it indicates the ECU or actuator has malfunctioned, or the wiring harness has become disconnected. Stop driving immediately and contact an authorized Kawasaki dealer to have the system checked.

NOTE

○ *If this warning indicator light does not go on when the main switch is turned on, there may be a problem with the light itself. Contact an authorized Kawasaki dealer for inspection.*

Red Parking Brake Indicator Light

When the parking brake is applied with the main switch in the “ON” position, the parking brake indicator light illuminates.

Red Reverse Indicator Light

When the transmission is in reverse gear, the reverse indicator light illuminates.

Green Neutral Indicator Light

When the transmission is in neutral, the neutral indicator light illuminates.

Red Seat-Belt Use Reminder

When the main switch is turned on, the seat-belt use reminder will illuminate and stay on for approximately 8 seconds, even if the operator's belt is buckled. The light is a reminder to the operator to make sure that passengers have buckled their seat belts.

Red Coolant Temperature Warning Indicator Light

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

Be sure to check that the radiator fan is free from mud and other obstacles. Refer to the “Breaker” section in the “MAINTENANCE AND ADJUSTMENT” chapter.

NOTICE

Do not continue running the engine with the temperature warning indicator light continuously illuminated. Prolonged engine operation can result in engine damage from overheating.

NOTE

○ *When you touch the fan, be sure to disconnect the negative (-) battery cable, since the fan can*

operate automatically even with the main switch off.

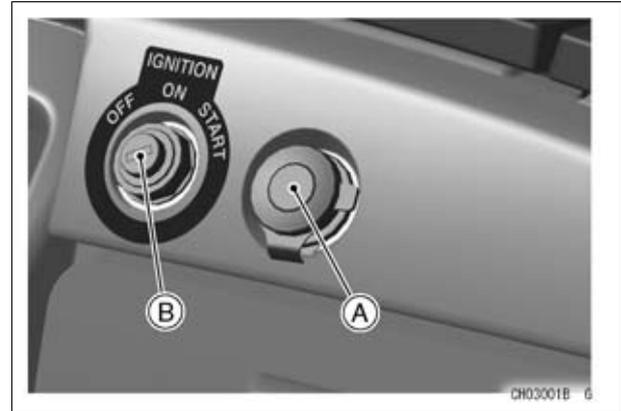
Red Oil Pressure Warning Indicator Light

The oil pressure warning indicator light blinks to warn the operator whenever the oil pressure is dangerously low or the main switch is in the "ON" position with the engine not running, and goes off when the proper engine oil pressure is reached. Refer to the "MAINTENANCE AND ADJUSTMENT" chapter for more detailed engine oil information.

Lighting/Electrical Accessory Connector (KAF400A/B)

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.

Lighting/Electrical Accessory Socket (KAF1000B/E)

The lighting/electrical accessory 12 volt sockets are located on the dashboard.

An auxiliary light or an accessory may be connected to these connectors.



A. Power Outlet Sockets

NOTICE

Do not connect a light or load of more than 120 watts on one or both sockets, or the battery may rapidly discharge.

Light Switches

(KAF400A/B)

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

(KAF1000B/E)

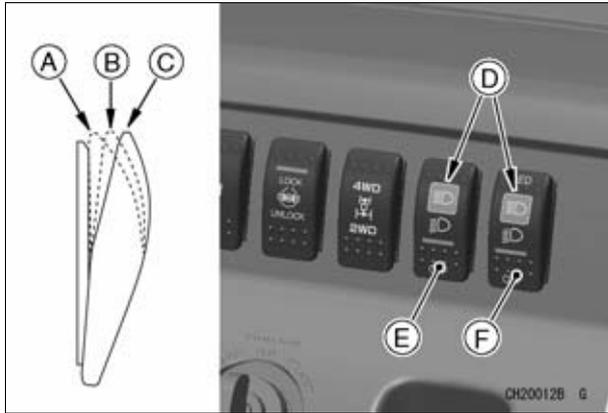
The light switches are 3-position type with an indicator.

The headlights can be turned on by pushing the headlight switch to the “” or “” position when the main switch is in the “ON” position.

 : Low Beam

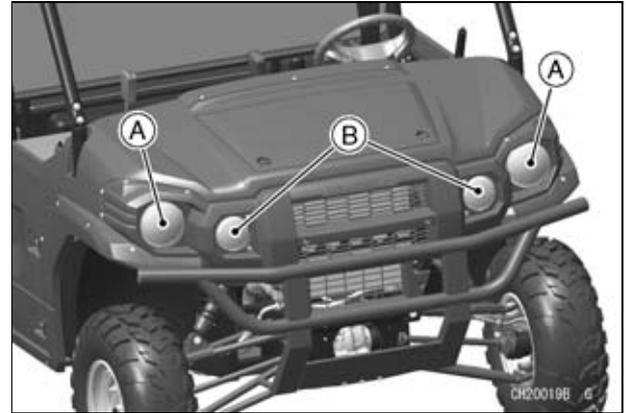
 : High Beam

When the headlights are on high beam, the high beam indicator light in the switch goes on as a reminder. The headlights go off when the headlight switch is pushed in “OFF” position.



- A. High Beam Position**
- B. Low Beam Position**
- C. OFF Position**
- D. High Beam Indicators**
- E. Headlight Switch**
- F. LED Sub Headlight Switch**

This vehicle is equipped with LED sub headlights. The operation of the LED sub headlight switch is similar with the headlight switch.



- A. Headlights**
- B. LED Sub Headlights**

Steering Wheel (KAF1000B/E)

This vehicle is equipped with an electric power steering system. The system does not require regular maintenance by users. Do not tamper with the electronic control unit (ECU) or loosen the fittings of steering actuator, or the neutral position setting of the steering will be adversely affected and will cause serious driving problems. If such components need service, contact an authorized Kawasaki dealer.

If the steering becomes more difficult than usual or you feel a steering problem, refer to the “Steering Wheel” section in the “MAINTENANCE AND ADJUSTMENT” chapter.



A. Steering Wheel

NOTE

- *The power steering system functions only when engine is running.*
- *If you install wireless equipment on board, contact an authorized Kawasaki dealer. Installing such equipment improperly may affect the ECU.*

Steering Position Adjustment

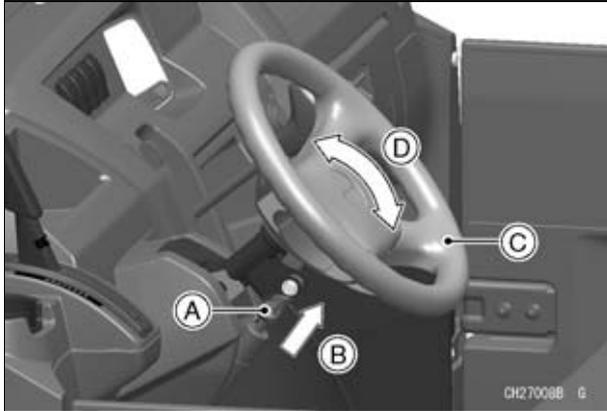
The steering wheel position can be adjusted to suit the operator.

Make any steering wheel adjustment before starting the vehicle.

⚠ WARNING

Adjusting the steering wheel position while driving could cause loss of control and an accident resulting in serious injury or death. To prevent loss of control, do not adjust the steering wheel position unless the vehicle is stopped.

- Move the steering wheel up or down while pulling up the tilt lock lever under the steering wheel.
- Release the tilt lock lever to lock the steering wheel in position.



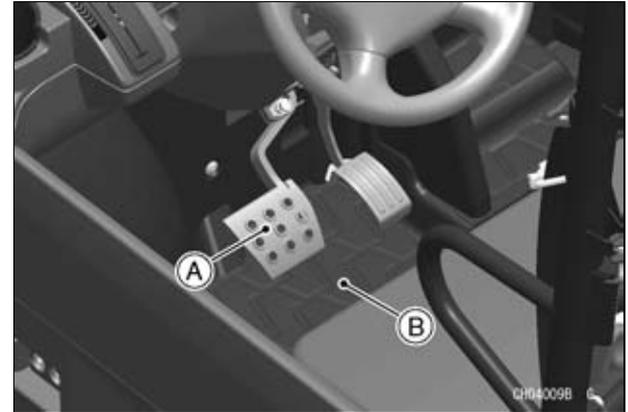
- A. Tilt Lock Lever
- B. Pull up.
- C. Steering Wheel
- D. Adjusting Direction

NOTE

- *Make sure you have securely locked the steering wheel in place by moving it up and down.*

Brake Pedal

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



- A. Brake Pedal
- B. Floorboard

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Converting Rear Seat and Cargo Bed (KAF1000B)

This vehicle can be converted to accommodate more passengers and less cargo or fewer passengers and more cargo.

The seats and the cargo bed can be converted in the following way.

⚠ WARNING

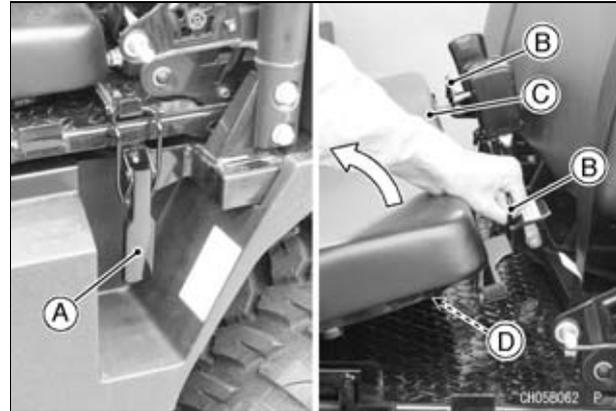
The latches must be unlocked during the converting operation, allowing the possibility for the cargo bed to suddenly lift and cause serious injury. To prevent the cargo bed from suddenly lifting, do not convert the rear seat with the cargo bed loaded.

From 4-Persons to 2-Persons Mode

⚠ WARNING

Fingers or hands could be pinched during cargo bed conversion. When converting the cargo bed, be careful not to catch fingers, hands, or any other body parts between the folding bed side walls.

1. Open the rear doors and release the cargo bed latches on both sides.
2. Lift the rear seat by holding the handgrip on either side, and turn the rear seat forward.



- A. Cargo Bed Latch (Both Sides)
- B. Handgrips
- C. Rear Seat Cushion
- D. Plastic Seat Base

NOTICE

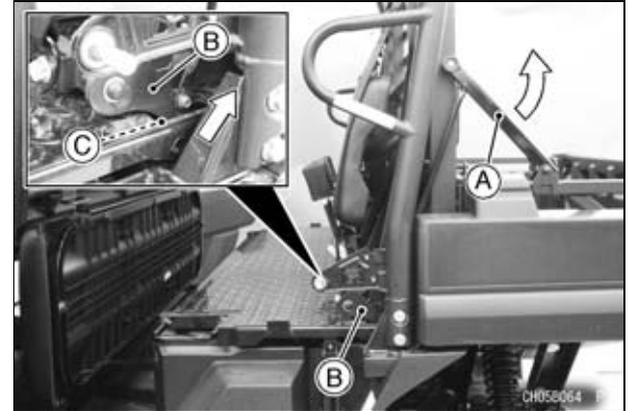
Do not lift the rear seat using the plastic seat base as it will break the plastic seat base.

3. Push the rear seat frame forward into the stored position.



A. Rear Seat Frame (Stored Position)

4. On both sides, pull the lower end of the screen lock arms to release it from the cargo bed frame.
5. Turn the screen lock arms upward until lower locking arm is released from the lock pin in the cargo bed base.



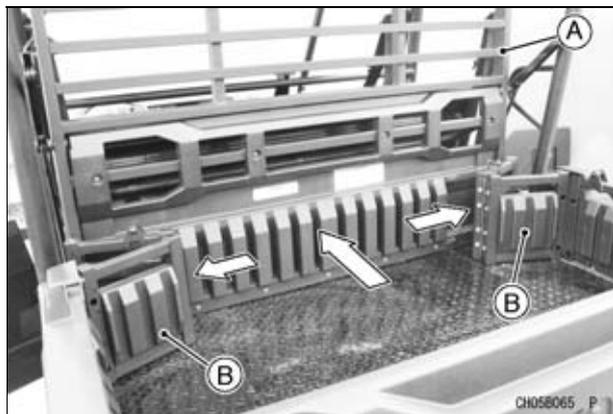
A. Screen Lock Arm (Both Sides)
B. Lower Locking Arm (Both Sides)
C. Lock Pin (Both Sides)

6. Slide the cargo bed screen forward in conjunction with pushing the hinge between the cargo bed side plates on both sides.

NOTE

- *To move the screen smoothly, push both cargo bed side plates evenly as much as possible.*

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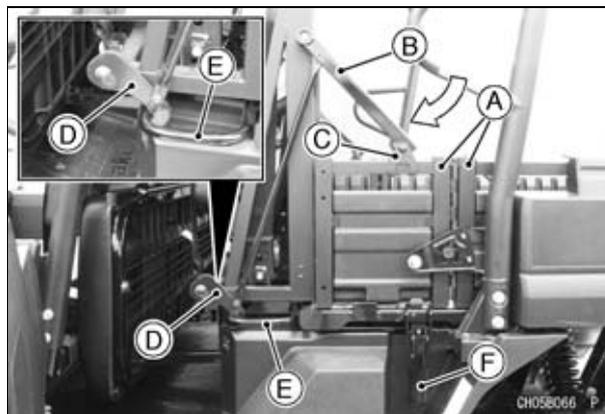
- A. Cargo Bed Screen
- B. Cargo Bed Side Plates

7. After fully extending the cargo bed side plates, lower both screen lock arms, aligning their lower locking arms with the lock pins in the cargo bed base.
8. Push the screen lock arms into the brackets on the side plates on both sides until you hear a click.

NOTE

○ Pull the screen lock arms lightly to check if they are locked securely.

9. Secure the cargo bed side plates with the cargo bed latches on both sides.



- A. Cargo Bed Side Plates
- B. Screen Lock Arm
- C. Bracket
- D. Lower Locking Arm
- E. Handgrip
- F. Cargo Bed Latch

10. Close the rear doors.

⚠ WARNING

Failure to properly lock the cargo bed or screen may allow them to move suddenly while driving, causing loss of control and an accident resulting in serious injury or death. To prevent the cargo bed from suddenly moving, make sure that the cargo bed and screen has been locked properly after handling them.

From 2-Persons to 4-Persons Mode

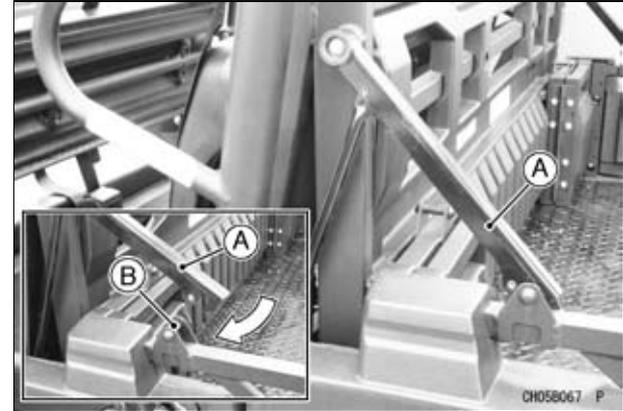
⚠ WARNING

Fingers or hands could be pinched during cargo bed conversion. When converting the cargo bed, be careful not to catch fingers, hands, or any other body parts between the folding bed side walls.

- Reverse the procedure for 4-persons to 2-persons mode conversion.

NOTE

- *After folding the cargo bed side plates, push both screen lock arms to the lock pin until you hear a click.*



A. Screen Lock Arm
B. Lock Pin

⚠ WARNING

Failure to properly lock the cargo bed or screen may allow them to move suddenly while driving, causing loss of control and an accident resulting in serious injury or death. To prevent the cargo bed from suddenly moving, make sure that the cargo bed and screen has been locked properly after handling them.

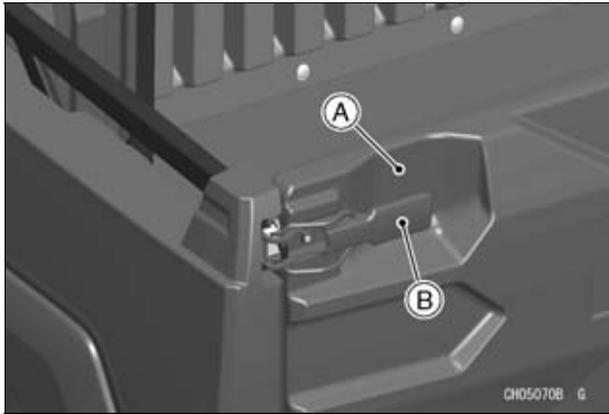
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Cargo Bed

Tailgate

The tailgate of the cargo bed can be lowered. Before lowering the tailgate, park on a firm level surface and set the parking brake.

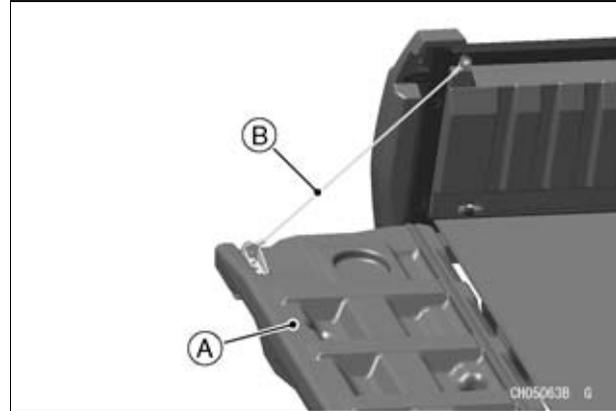
To open the tailgate, release the latches and lower the tailgate. Cables hold the tailgate level with the cargo bed.



- A. Tailgate
- B. Latch Handle (Both Sides)

To close the tailgate, lift to the upright position and secure firmly with the latches.

Push the tailgate latch handles forward to make sure the latches stay securely closed. Do not drive the vehicle with the tailgate lowered.



- A. Tailgate
- B. Cable

Cargo Bed (KAF400A/B)

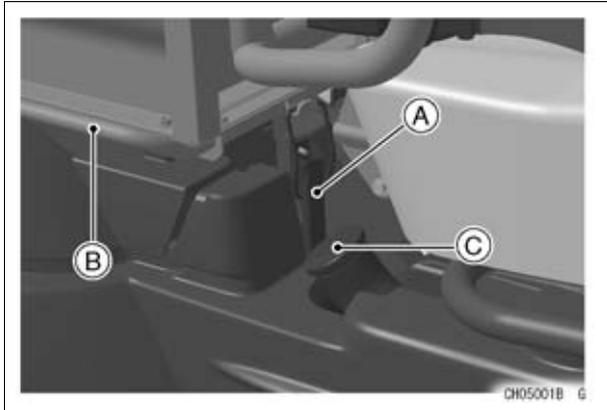
The cargo bed can be tilted by releasing the latches on right side, and then lifting the bed with the handgrip. Before tilting the cargo bed, park on a firm level surface and set the parking brake.

After lifting the bed, support the bed in the tilted position with the supporting rod provided on the bottom of the cargo bed.

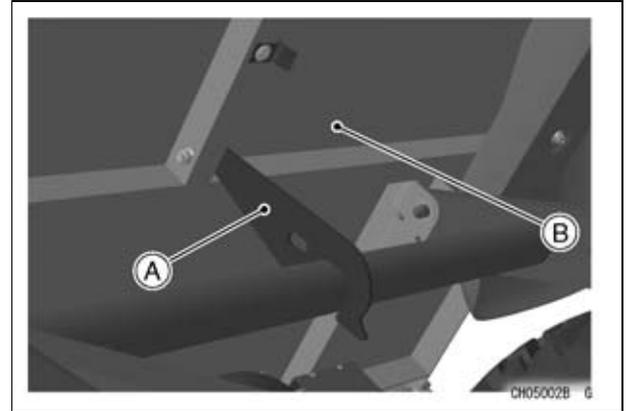
To lower the bed, check to be sure the area under the cargo bed is clear, then carefully lower the bed into position.

Latch the latch and check that the bed is properly locked into place. Do not leave the cargo bed unlatched.

Do not drive the vehicle with the front end of the cargo bed raised or unlatched.



- A. Latch (locked position)
- 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.

 **WARNING**

- Overloading, failure to properly secure cargo, 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 severe 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.

**Loading Cargo Bed
(KAF1000B)**

 **WARNING**

Loading the cargo bed before the conversion operation is completed and the cargo bed is unlocked may cause the bed to suddenly tilt, resulting in serious injury. To prevent the bed from suddenly lifting, be sure the conversion is complete and the cargo bed latches are firmly locked.

NOTICE

Do not carry more than the maximum load stated here in the convertible cargo bed.

- Short bed mode: 158 kg (350 lb)
- Long bed mode: 453 kg (1 000 lb)

⚠ WARNING

- Overloading, failure to properly secure cargo, 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 transported in the cargo bed can be tossed about or even thrown out causing serious injury or death. Do not install seating or transport 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.

(KAF1000E)

NOTICE

Do not carry more than 453 kg (1 000 lb) in the cargo bed.

⚠ WARNING

- Overloading, failure to properly secure cargo, 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 transported in the cargo bed can be tossed about or even thrown out causing serious injury or death. Do not install seating or transport 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 Cargo Bed (KAF1000B)

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, park on a firm level surface and set the parking brake.

Empty the cargo bed prior to raising the cargo bed.

Support the bed in the tilted position with the supporting damper and 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.

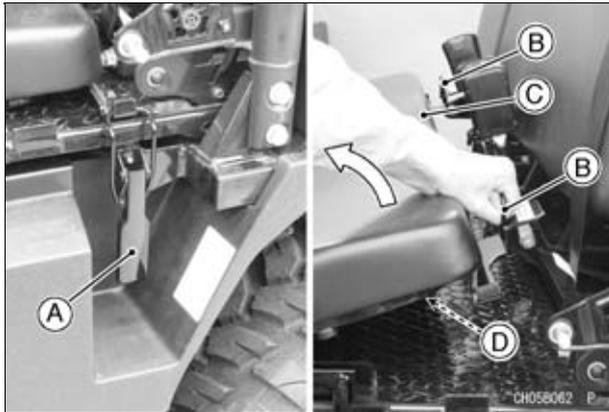
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To lower the bed, check to be sure the area under the front of the cargo bed is clear, then carefully lower the bed into position.

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

Lifting the Cargo Bed while in Short Configuration

1. Open the rear doors and release the cargo bed latches on both sides.
2. Lift the rear seat by holding the handgrip on either side, and turn the rear seat forward.



- A. Cargo Bed Latch (Both Sides)
- B. Handgrips
- C. Rear Seat Cushion
- D. Plastic Seat Base

NOTICE

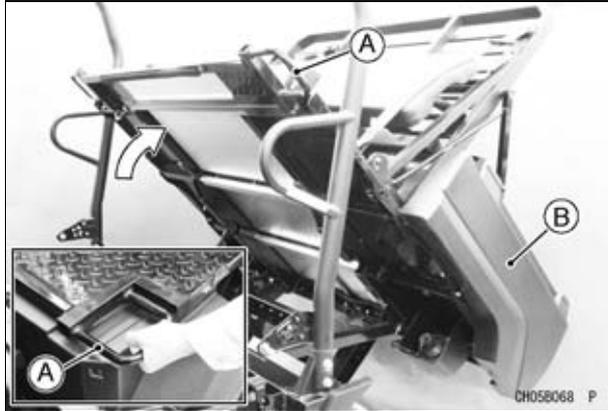
Do not lift the rear seat using the plastic seat base as it will break the plastic seat base.

3. Push the rear seat frame forward into the stored position.



A. Rear Seat Frame (Stored Position)

4. Hold the handgrip as shown. Holding the handgrip, lift the cargo bed carefully.

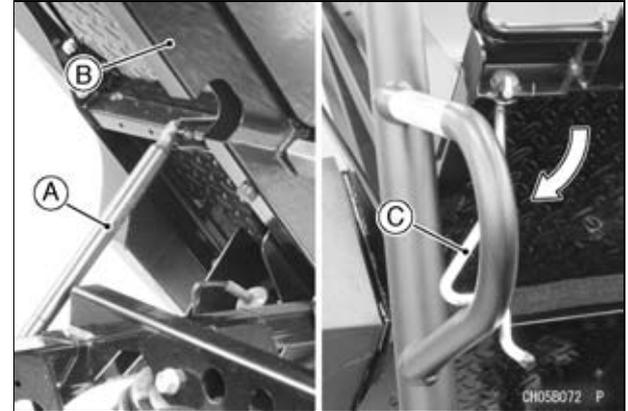


A. Handgrip
B. Cargo Bed

⚠ WARNING

Reduced clearance between the cargo bed and the ROPS can cause arm injury when lifting or lowering the cargo bed. To avoid injury, grasp cargo bed at the handle and do not hold the ROPS when lifting or lowering the cargo bed.

5. Pull the supporting rod out of its clip and securely hook the curved end of the supporting rod onto the bar of the ROPS to support the cargo bed.



A. Supporting Damper
B. Cargo Bed (Raised Position)
C. Supporting Rod

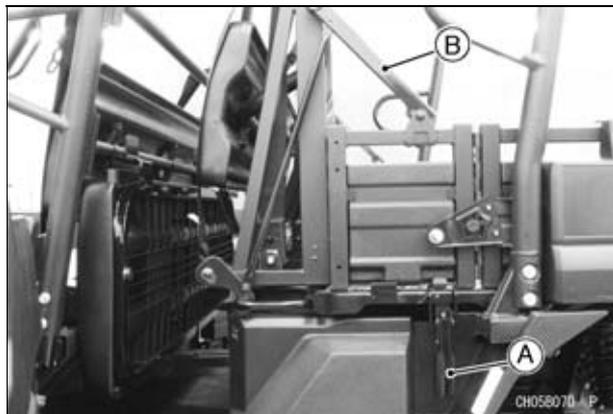
⚠ WARNING

Using only the bed supporting damper for cargo bed support may allow the cargo bed to suddenly lower. To prevent injury caused by sudden lowering of the cargo bed, support the cargo bed with the support rod whenever lifting the cargo bed.

Lifting the Cargo Bed in Extended Configuration

1. Open the rear doors. Make sure the screen lock arms are locked properly then release the cargo bed latches on both sides.

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A. Cargo Bed Latch (Both Sides)
B. Screen Lock Arm (Both Sides)

⚠ WARNING

Failure to properly lock the screen lock arms could cause the cargo bed side plates to fold and allow the screen to slide down while lifting the cargo bed, resulting in serious injury. To prevent the cargo screen from sliding down, make sure that the screen lock arms are locked properly before lifting the cargo bed.

⚠ WARNING

The front of the cargo bed becomes heavier in the extended mode and may raise and lower more quickly, increasing the risk of arm injury. To prevent injury, use extra care when raising or lowering the bed in extended mode.

2. Hold the handgrip as shown. Holding the handgrip, lift the cargo bed carefully.

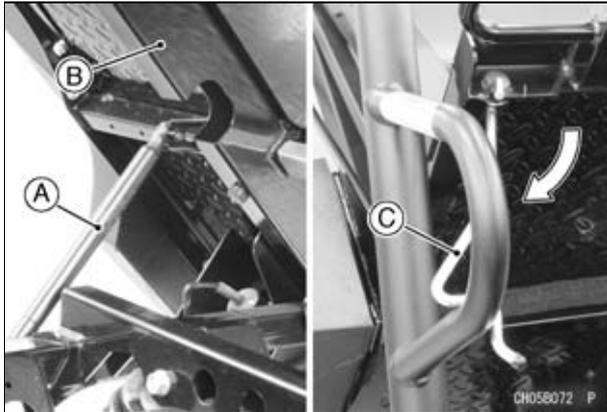


A. Handgrip
B. Cargo Bed

⚠ WARNING

Reduced clearance between the cargo bed and the ROPS can cause arm injury when lifting or lowering the cargo bed. To avoid injury, grasp cargo bed at the handle and do not hold the ROPS when lifting or lowering the cargo bed.

3. Pull the supporting rod out of its clip and securely hook the curved end of the supporting rod onto the bar of the ROPS to support the cargo bed.



- A. Supporting Damper
B. Cargo Bed (Raised Position)
C. Supporting Rod

⚠ WARNING

Using only the bed supporting damper for cargo bed support may allow the cargo bed to suddenly lower. To prevent injury caused by sudden lowering of the cargo bed, support the cargo bed with the support rod whenever lifting the cargo bed.

Lowering the Cargo Bed

Before lowering the bed, check to be sure the area under the front of the cargo bed is clear. Return the supporting rod to the original position and secure it with the clip. Hold the handgrip and carefully lower the bed into position. Check that both latches have locked the bed into place. Do not leave the cargo bed unlatched.

⚠ WARNING

The front of the cargo bed becomes heavier as it lowers into position and can suddenly lower, trapping arms between the bed and frame causing serious injury. To prevent the bed from suddenly lowering, use the handles to properly support the bed when lowering or lifting the bed.

NOTE

- To lower the cargo bed, follow the reverse procedure for lifting. Be sure to restore the seat as

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before and put the latches on. Never drive the Mule without locking the latches to the cargo bed.

⚠ WARNING

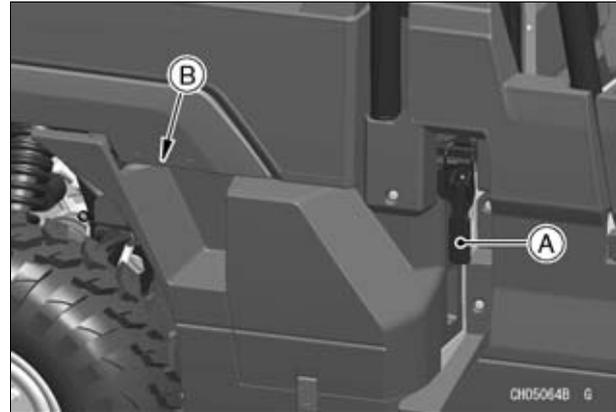
- **Overloading, failure to properly secure cargo, or improper use of the cargo bed can cause changes in handling which can lead to an accident. Follow guidelines provided in the “LOADING INFORMATION” chapter.**
- **Passengers transported in the cargo bed can be tossed about or even thrown out causing serious injury or death. Do not install seating or transport 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.**

(KAF1000E)

⚠ WARNING

Reduced clearance between the cargo bed and the cargo screen may trap and seriously injure an arm while lifting or lowering the cargo bed. To avoid possible injury, do not place hands on any part of the cargo screen when lifting or lowering the cargo bed.

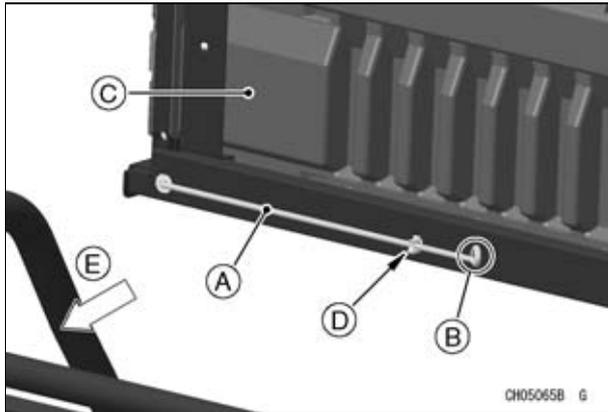
The cargo bed can be tilted by releasing the latches on each side, and then lifting the bed with the handgrips.



- A. Cargo Bed Latch (Both Sides)**
- B. Handgrip (Both Sides)**

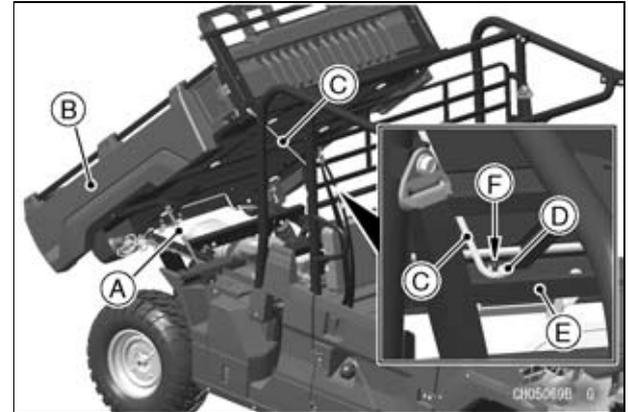
Lifting the Cargo Bed

- Before tilting the cargo bed, park on a firm level surface and set the parking brake.
- Empty the cargo bed prior to raising the cargo bed.
- Lift the bed with the handgrips. The supporting damper under the cargo bed helps lifting the bed.
- Pull the supporting rod out of its mounting clip on the front of the cargo bed.



- A. Supporting Rod
- B. Pull here to free rod from clip.
- C. Cargo Bed
- D. Clip
- E. Forward

- With the cargo bed at the highest position, hook the ring of the supporting rod on the stopper pin of the bottom horizontal bar of the screen.



- A. Supporting Damper
- B. Cargo Bed (Tilted Position)
- C. Supporting Rod
- D. Ring of the supporting rod
- E. Screen
- F. Stopper Pin

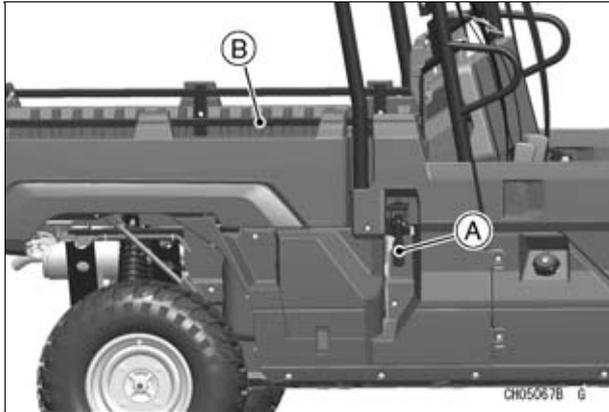
⚠ WARNING

Using only the bed supporting damper for cargo bed support may allow the cargo bed to suddenly lower. To prevent injury caused by sudden lowering of the cargo bed, support the cargo bed with the support rod whenever lifting the cargo bed.

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Lowering the Cargo Bed

- Before lowering the bed, check to be sure the area under it is clear.
- Return the supporting rod to its original position and secure it with the clip.
- To lower the cargo bed push down the side rail of the cargo bed. And then hold the handgrip with another hand and carefully lower the bed in place.
- Latch both latches and check that the bed is properly locked into place. Do not leave the cargo bed unlatched.



A. Cargo Bed Latch (Locked Position)

B. Side Rail

- Do not drive the vehicle with the front end of the cargo bed raised or unlatched.

⚠ WARNING

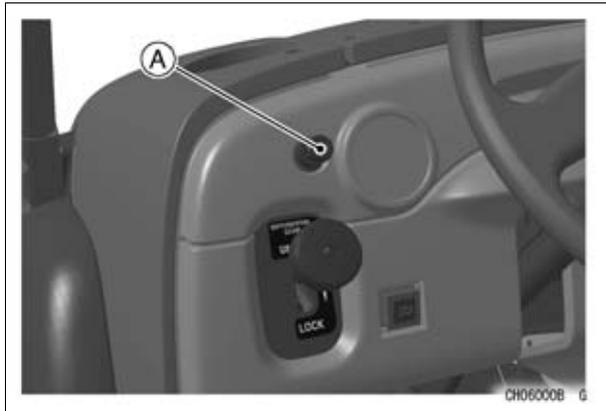
The front of the cargo bed becomes heavier as it lowers into position and can suddenly lower, trapping arms between the bed and frame causing serious injury. To prevent the bed from suddenly lowering, use the handgrips to properly support the bed when lowering or lifting the bed.

Choke Knob (KAF400A/B)

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

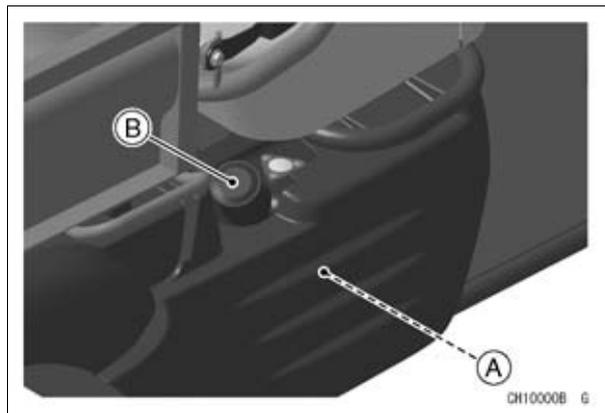
Do not let the engine continue running with a warning light on. Prolonged engine operation can result in engine damage from overheating.

Fuel Tank (KAF400A/B)

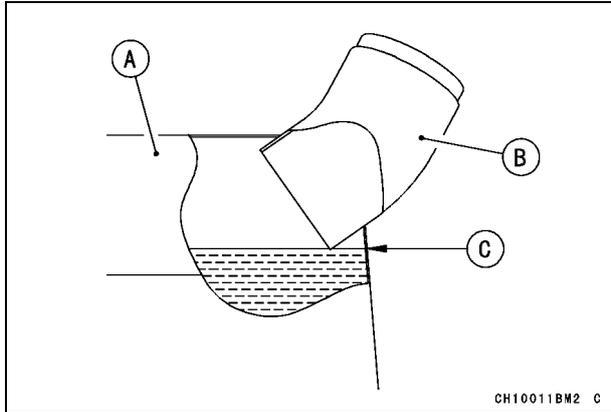
Filling the Tank:

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.

Never fill the tank completely to the top. As the fuel expands in a warm tank, it may overflow from the vent hose. After refueling, make sure the filler cap is closed securely.



A. Fuel Tank
B. Filling Cap



- A. Fuel Tank
- B. Filler Neck
- C. Top Level

⚠ 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.

NOTICE

Certain ingredients in gasoline may cause paint fading or damage. Be extra careful not to spill gasoline or gasoline oxygenates blends during refueling.

Fuel

Fuel Requirements:

Your Kawasaki engine is designed to use only unleaded gasoline with a minimum octane rating shown below. Never use gasoline with an octane rating lower than the minimum specified by Kawasaki to prevent severe engine damage.

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The octane rating of a gasoline is a measure of its resistance to detonation or “knocking.” The term commonly used to describe a gasoline’s octane rating is the Research Octane Number (RON).

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 no recommended fuel may not be covered under your warranty.

Fuel Type and Octane Rating

Use clean, fresh unleaded gasoline with an ethanol volume content not more than 10 % and an octane rating equal to or higher than that shown in the table.

Fuel Type	Unleaded Gasoline
Ethanol Content	E10 or less
Minimum Octane Rating	Research Octane Number (RON) 91

NOTICE

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

*E10 means fuel containing up to 10% ethanol as specified by European directive.

Fuel (KAF1000B/E)

Diesel Fuel Requirements

Kawasaki recommends diesel fuels that meet the following requirements for use in this vehicle. Use clean, fresh diesel fuel to maintain performance and life from the engine.

Fuel Specification and Cetane Number

- (1) The diesel fuel must meet the European EN590 specification.
- (2) Use diesel fuel with a cetane number equal to or higher than that shown below. If available in your area, a high cetane “premium” diesel fuel may offer improved cold-starting and warm-up performance.

Fuel type: Diesel fuel for vehicle

Minimum cetane number: 45

Lower Sulfur

A sulfur content less than 0.05% by volume is recommended. To avoid engine corrosion, and engine oil contamination, do not use fuel with more than 0.5% sulfur content.

When using CJ-4 oil (low ash oil) in your engine, use fuel with less than 0.05% sulfur content to avoid engine oil deterioration.

Cold Weather Information

In cold weather, diesel fuel may thicken enough to clog the fuel filter. This is usually caused by naturally-occurring paraffin in diesel fuel turning to wax

as it gets colder. If the engine starts but stalls after a short time and will not restart, the fuel filter may be clogged. For best results in cold weather use winter diesel fuel.

WARNING

Starting fluids such as ether are explosive and may cause severe injury. Do not use starting fluids containing ether in the air intake system.

NOTICE

Do not add gasoline, gasohol, alcohol or aftermarket cetane improver additives to diesel fuel. Damage to the fuel injection system may result.

NOTICE

Wax flakes in the fuel tank could damage the fuel level sensor. At temperatures below -10°C (14°F), use winter diesel fuel to prevent the diesel fuel from turning to wax.

Using Biodiesel Fuel

Biodiesel fuels blended with diesel fuel may be used in this vehicle only if the blended fuel meets the following conditions:

90 GENERAL INFORMATION

- (1) Biodiesel fuel concentration must not exceed 7% by volume (B7).
- (2) The petroleum diesel fuel base must meet the European EN590 specification. The pure biodiesel base must meet the European Standard EN14214. Raw pressed vegetable oils are NOT acceptable for use in any concentration.

Precautions when Using Biodiesel Fuels

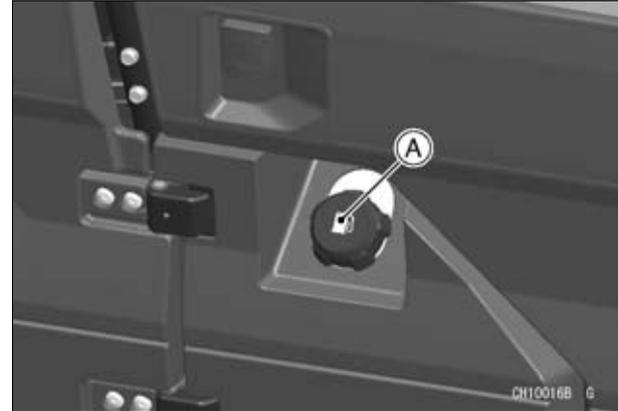
- (1) Cranking time when engine starting in cold weather will be prolonged.
- (2) Biodiesel blended fuel attracts moisture and may contain higher water content than conventional diesel fuels. Keep storage and vehicle tanks as full as possible and ensure all caps and covers are installed properly to prevent water from entering and collecting in the fuel system.
- (3) Clean up any spilled fuel immediately to prevent damage to painted surfaces.
- (4) To avoid damage caused by fuel degradation, biodiesel blended fuel should not be used if it has been stored for more than 3 months. If an engine is going to be placed in storage, the biodiesel blended fuel should be flushed out by operating the engine for at least 30 minutes on conventional diesel fuel after replacing biodiesel fuel in the vehicle fuel tank with petroleum-based diesel fuel.

Filling the Fuel tank

The fuel tank is mounted under the right side of the seat. Use only fresh diesel fuel with the

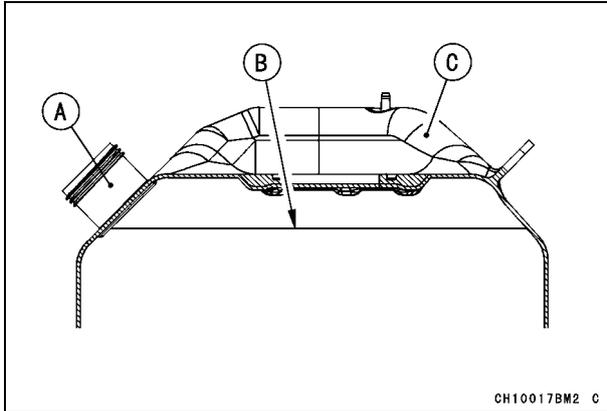
recommended cetane number from an uncontaminated source to ensure proper running of your vehicle.

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



A. Fuel Tank Cap

Never fill the tank completely to the top. After refueling, make sure the fuel tank cap is closed securely.



- A. Filler Neck
- B. Fuel Top Level (Bottom of Filler Neck)
- C. Fuel Tank

NOTICE

Always clean dirt/mud/debris/water from the fuel tank cap and surrounding area prior to filling the tank to prevent dirt/mud/debris/water from entering the fuel tank. Accumulation of moisture or sediment in the fuel system can restrict the flow of fuel and cause fuel system and/or engine damage.

⚠ WARNING

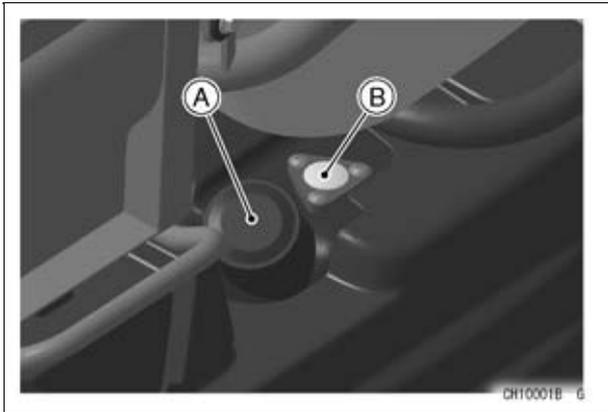
Diesel fuel is extremely flammable and can ignite under certain conditions. To avoid the potential for burns or other injuries when refueling, turn the main switch key off. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light. Never fill the tank completely to the top. After refueling, make sure the fuel tank cap is closed securely. If diesel fuel is spilled on the fuel tank, wipe it off immediately.

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Fuel Gauge (KAF400A/B)

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/Tool Kit

(KAF400A/B)

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.

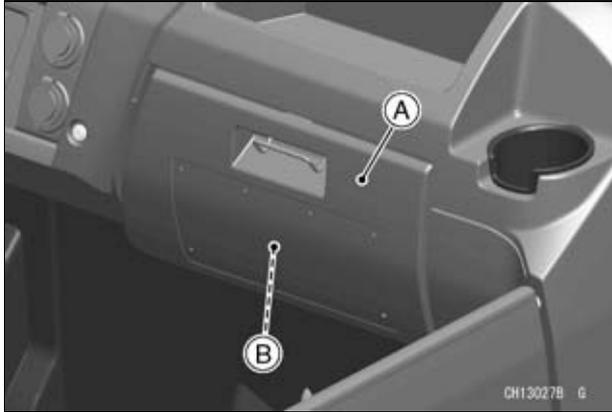
(KAF1000B/E)

A glove compartment is provided at the right side of the dashboard. Store only light items to avoid damage to the inside of the compartment. Do not store items which must not get wet or dirty.

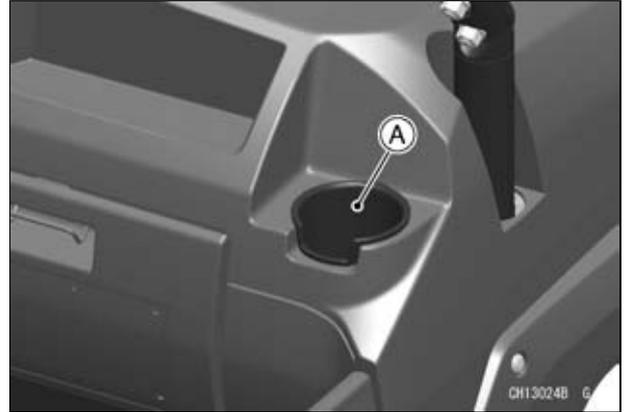
The tool kit is located at the inside of the glove compartment.

Cupholders (KAF1000B/E)

Cupholders are provided at the left and right sides of the dashboard.



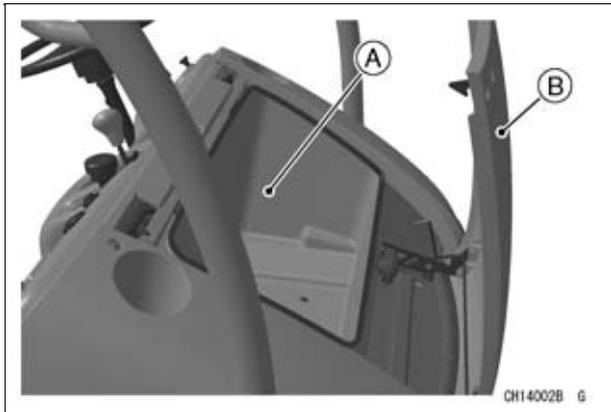
- A. Glove Compartment
- B. Tool Kit



- A. Cupholder (Both Sides)

Front Cargo Compartment (KA-F400A/B)

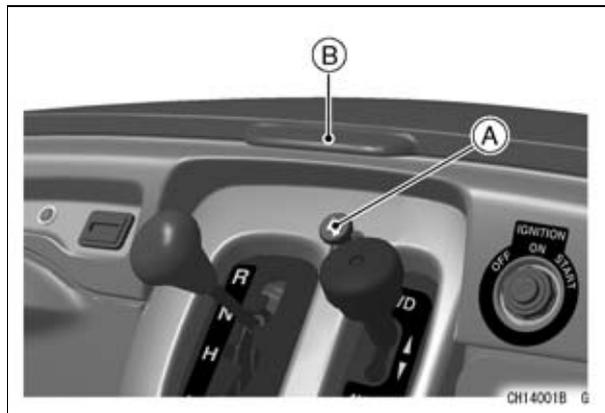
The front cargo compartment is located under the front cargo hood. Store only light-weight items in it to avoid damage to the inside of the compartment. Do not put items which must not get wet or dirty in it.



A. Front Cargo Compartment
B. Hood

Hood Opening

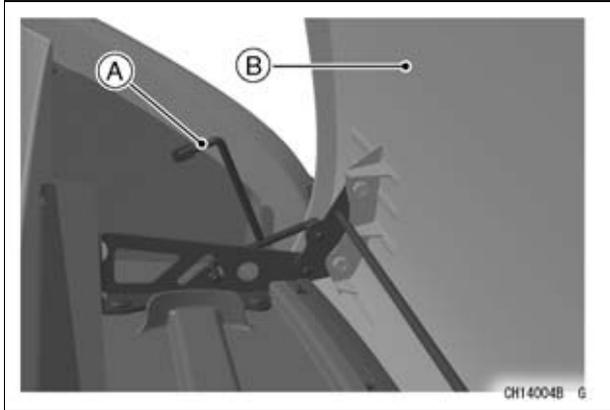
Pull the hood latch release button and raise the hood until it locks.



A. Latch Release Button
B. Hood

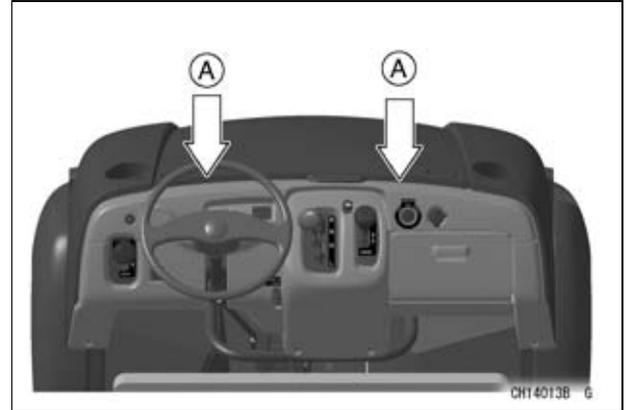
Hood Closing

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.

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Front Access Cover (KAF1000B/E)

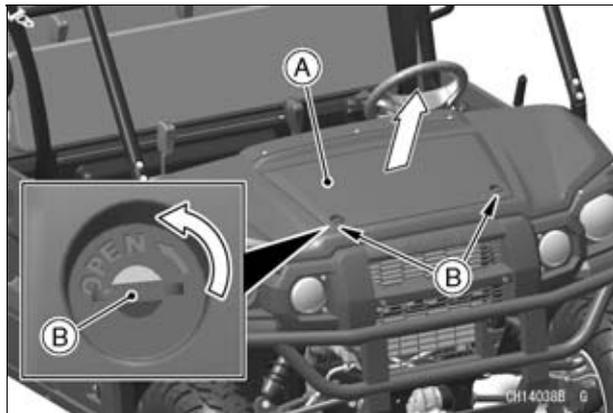
The front access cover can be removed for maintenance such as a coolant level inspection.

NOTICE

Do not store items under the front access cover. This area is not designed for storage.

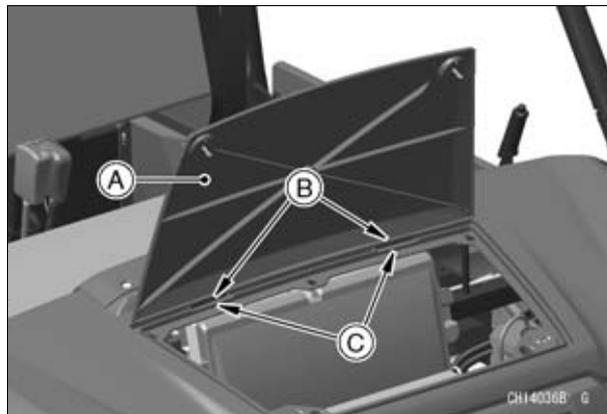
Cover Opening

- Turn the knobs counterclockwise 90° to release the locks.
- Pull the front of the front access cover up and open the cover.



A. Front Access Cover
B. Knobs

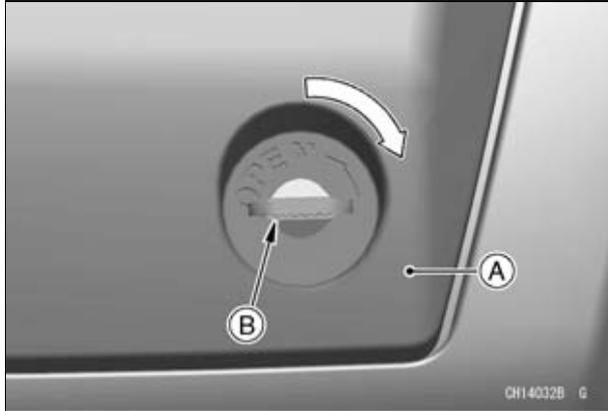
- Pull the front access cover forward to disengage the tabs from the slits of the front hood.



A. Front Access Cover
B. Tabs
C. Slits

Cover Closing

- Insert the tabs on the front access cover to the slits of the front hood.
- Lower the front access cover and turn the knobs clockwise until they stop to lock the front access cover.



- A. Front Access Cover
- B. Knob (Both Sides)

- Pull up the front ends of the front access cover to make sure the cover is locked securely.

⚠ WARNING

An open front access cover can distract or impair visibility of the operator, causing loss of vehicle control and potential serious injury or death.

Lock the front access cover securely before operating the vehicle.

Horn Switch (KAF1000B/E)

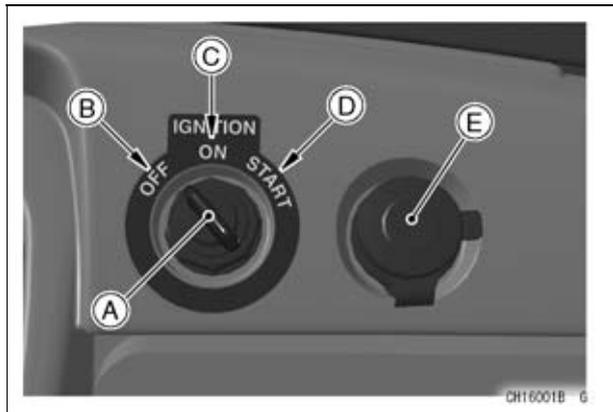
Push the horn switch to sound the horn.



A. Horn Switch

Ignition Switch (KAF400A/B)

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

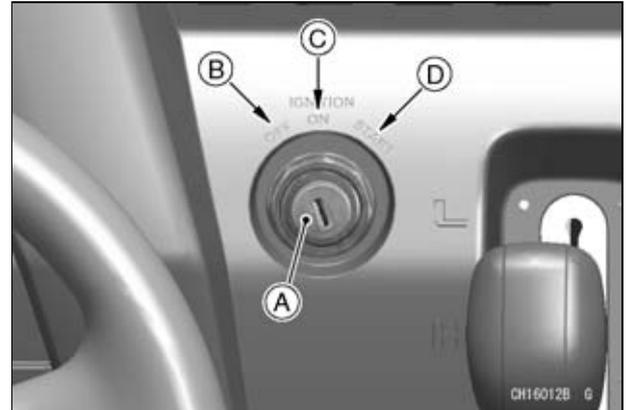
- *The vehicle is equipped with a starter lockout switch. This switch prevents the electric starter from operating when the gear shift lever is in the “H” (High) and “L” (Low) for KAF400A or “F” (Forward) for KAF400B or “R” (Reverse) position.*

Blank keys are available at your Kawasaki dealer. Ask your dealer to make any additional spare keys

you need, using your original key as a master or using the key code on the tag with your keys.

Main Switch (KAF1000B/E)

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. Main Switch
- B. "OFF" Position
- C. "ON" Position
- D. "START" Position

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OFF	Engine off. All electrical circuits off.
ON	All electrical equipment can be used. Hour meter works.
START	Electric starter is engaged by holding main switch key in this position, only when gear shift lever is in "N" (neutral) position or applying brake pedal. 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 main 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 system. This system prevents the electric starter from operating when the gear shift lever is in the "H" (High), "L" (Low) or "R" (Reverse) position, unless the brake is applied.*

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

Hour Meter (KAF400A/B)

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

Shift Levers (KAF400A/B)

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

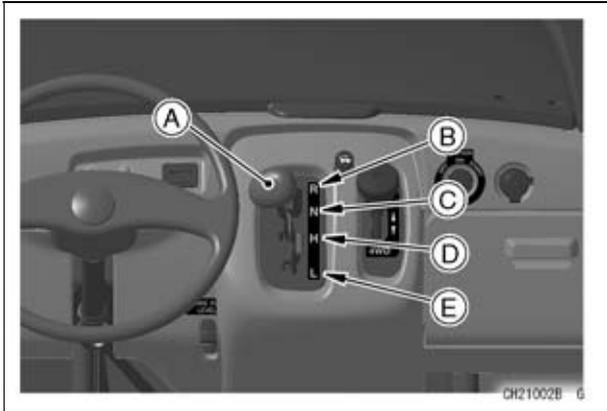
The gear shift lever is located on the dashboard, to the right of the steering shaft. The gear shift lever has four (KAF400A) or three (KAF400B) positions: “H” (High) and “L” (Low) for KAF400A or “F” (Forward) for KAF400B, “N” (Neutral), and “R” (Reverse).

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.

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- 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.

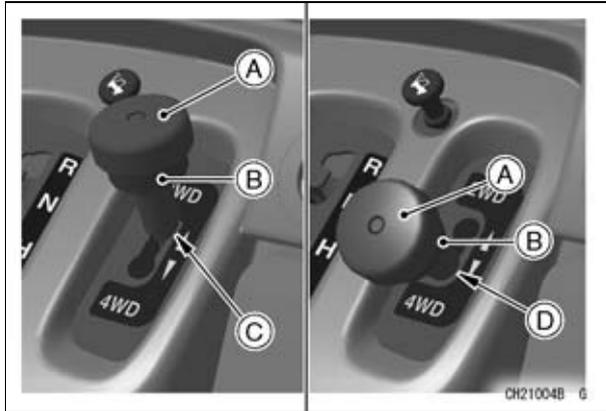
Refer to the “Hi-Lo Shifting” section in the “HOW TO OPERATE” chapter.

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.

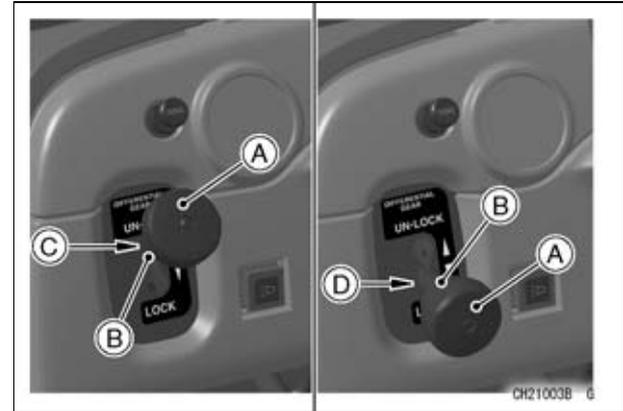


- A. 2WD-4WD Shift Lever
- B. Stopper
- C. "2WD" Position
- D. "4WD" Position

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.



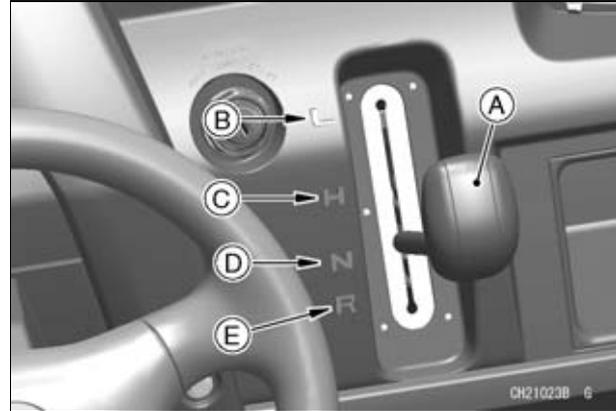
- A. Differential Shift Lever
- B. Stopper
- C. Differential (Unlocked-Axle) Mode Position (UN-LOCK)
- D. Locked-Axle Mode Position (LOCK)

Gear Shift Lever (KAF1000B/E)

The gear shift lever is located on the dashboard, to the right side of the steering wheel. The gear shift lever has four positions: “L” (Low), “H” (High), “N” (Neutral), and “R” (Reverse).

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

Refer to the “Shifting Gears” section in the “HOW TO OPERATE” chapter.



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

NOTICE

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

This vehicle 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 gear shift lever.

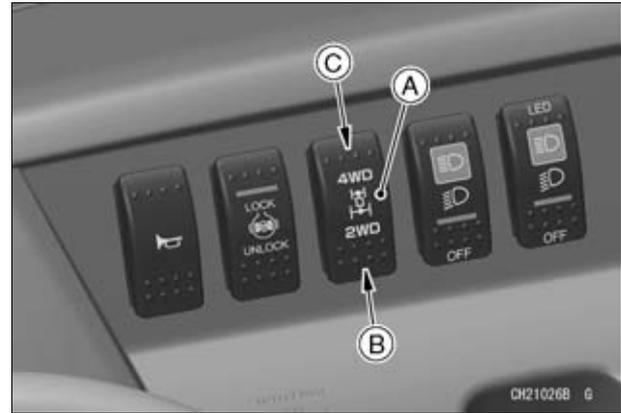
NOTICE

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

Refer to the “Shifting Gears” section in the “HOW TO OPERATE” chapter.

Selectable 2WD/4WD Shift Switch (KAF1000B/E)

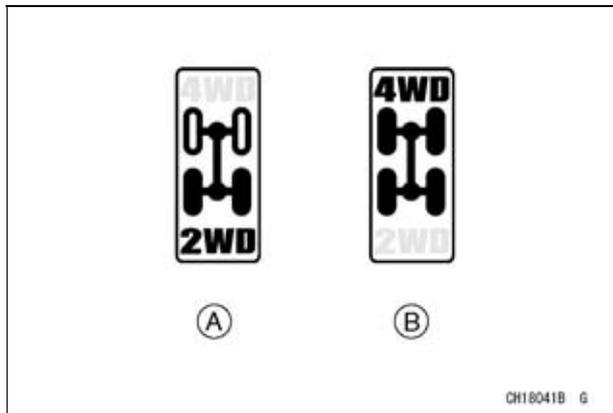
You can select “2WD” or “4WD” to suit various driving conditions. The selectable 2WD/4WD shift switch is located on the dashboard.



- A. Selectable 2WD/4WD Shift Switch**
- B. “2WD” Position**
- C. “4WD” Position**

The current operating condition is indicated with the 2WD/4WD indicator symbols in the multifunction meter.

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A. “2WD” Indicator Symbol

B. “4WD” Indicator Symbol

Refer to the “Multifunction Meter” section in this chapter, together with the “2WD/4WD Shifting” section in the “HOW TO OPERATE” chapter.

WARNING

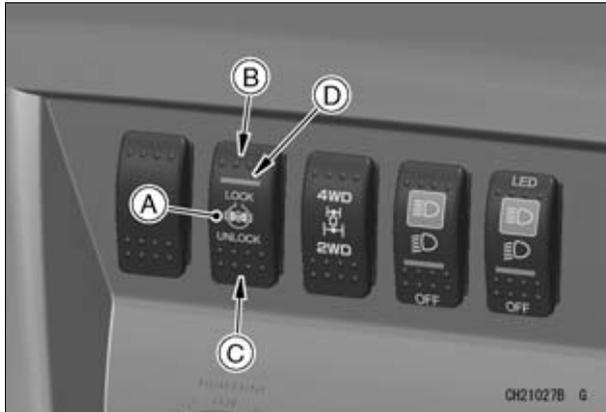
The handling characteristics of this vehicle differs between “2WD” and “4WD” according to terrain. Changing the operating mode while moving can cause sudden changes in handling performance which can cause the operator to lose control and have an accident. Always stop the vehicle before changing from “2WD” to “4WD” and vice versa.

NOTICE

Shifting from “2WD” to “4WD” (or “4WD” to “2WD”) when the vehicle is in motion could cause drive train damage.

Selectable DIFF-LOCK Shift Switch (KAF1000B/E)

You can select differential “LOCK” (locked-rear axle) or “UNLOCK” (unlocked-rear axle) modes to suit various driving conditions. The selectable DIFF-LOCK shift switch is located on the dashboard.



- A. Selectable DIFF-LOCK Shift Switch**
- B. “LOCK” Position (Locked-Rear Axle Mode)**
- C. “UNLOCK” Position (Unlocked-Rear Axle Mode)**
- D. DIFF-LOCK Indicator Light**

The “LOCK” (locked-rear axle) condition is indicated by a light in the switch as a reminder. Refer to the “Shifting the Differential” section in the “HOW TO OPERATE” chapter.

Belt Drive Transmission (KAF1000B/E)

This vehicle is equipped with a belt-driven Continuously Variable Transmission (CVT). This automatic drive system, although simple to operate, does require periodic inspection. Refer to the “MAINTENANCE AND ADJUSTMENT” chapter.

Parking Brake Lever

(KAF400A/B)

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.

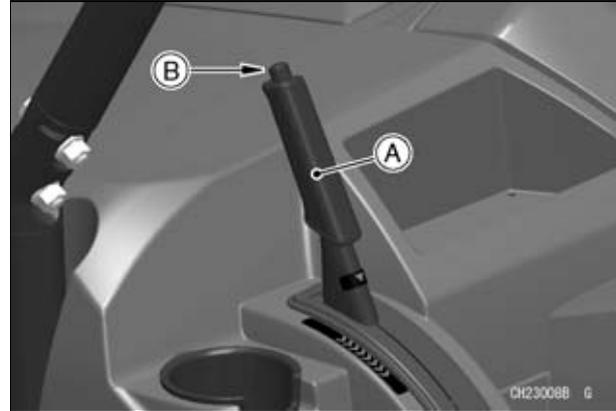
(KAF1000B/E)

The parking brake lever is located at the left side of the steering wheel. Pull the lever rearward 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 forward. 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.

The alarm buzzer will sound if the vehicle is running with the parking brake applied. Stop the vehicle and release the parking brake.



A. Parking Brake Lever
B. Knob

⚠ 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 (KA-F400A/B)

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.*

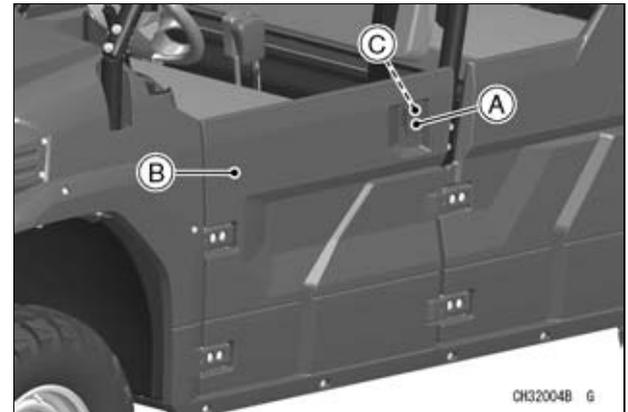


A. Parking Brake Warning Light

Doors (KAF1000B/E)

Pull the door handle outward to open the door.

Push or pull the door inward until the latch clicks to close the door. After closing the door, be sure to check that the latch is securely locked. If a door is damaged or does not close securely, contact an authorized Kawasaki dealer for repair or replacement.



- A. Door Handle**
- B. Door**
- C. Latch**

NOTE

- *Make sure that the all doors are properly closed before starting the vehicle.*

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NOTICE

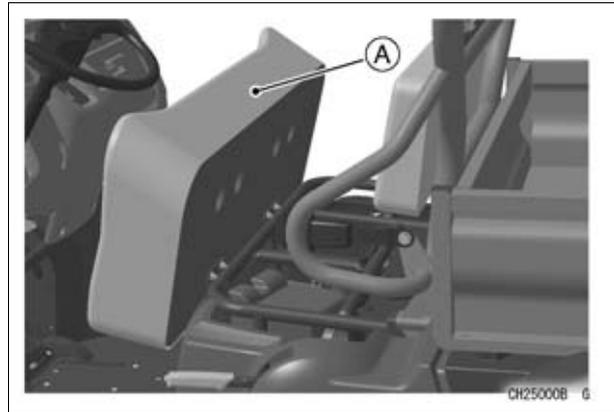
The doors are not designed to bear weight. Never lean on or place excessive weight on the doors or they will be damaged.

Seats

(KAF400A/B)

The seat can be raised for vehicle maintenance and adjustment.

- Pull up on the rear edge of the seat.



A. Seat (Raised Position)

(KAF1000B)

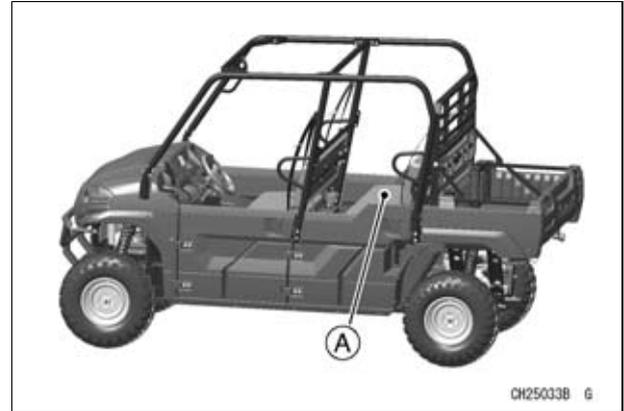
There are front and rear seats on this vehicle. It can be transformed from 2-persons to 4-persons by unfolding the rear seat.

2-Persons Mode



A. Rear Seat (Folded Position)

4-Persons Mode



A. Rear Seat

NOTE

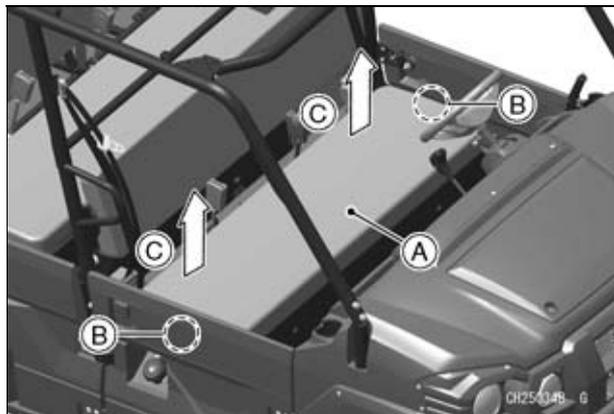
○ *Converting the rear seat must be made in combination with cargo bed conversion. Refer to the “Converting Rear Seat and Cargo Bed” section in this chapter.*

The front seat can be removed for vehicle maintenance and adjustment.

Front Seat Removal

- Pull up the right and left ends of the front seat to clear the projections.
- Remove the front seat.

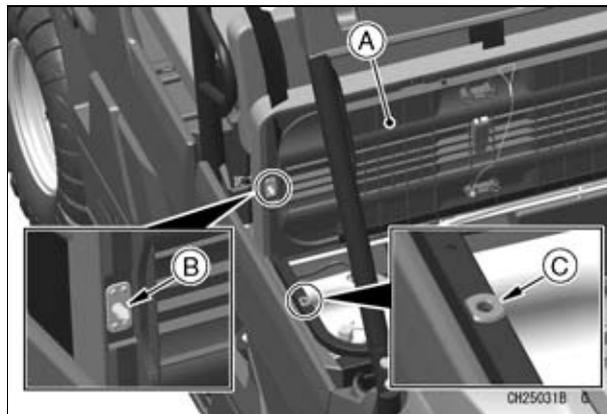
112 GENERAL INFORMATION



- A. Front Seat
- B. Projections
- C. Pull up.

Front Seat Installation

- Make sure that grommets are in position.
- Insert the projections of the front seat into the grommets.



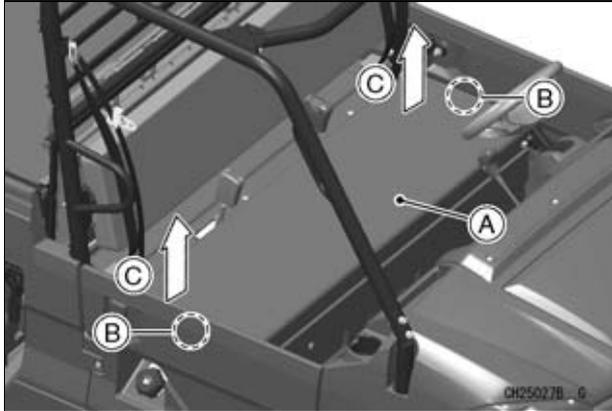
- A. Front Seat
- B. Projection (Both Sides)
- C. Grommet (Both Sides)

(KAF1000E)

The seat can be removed for vehicle maintenance and adjustment.

Seat Removal

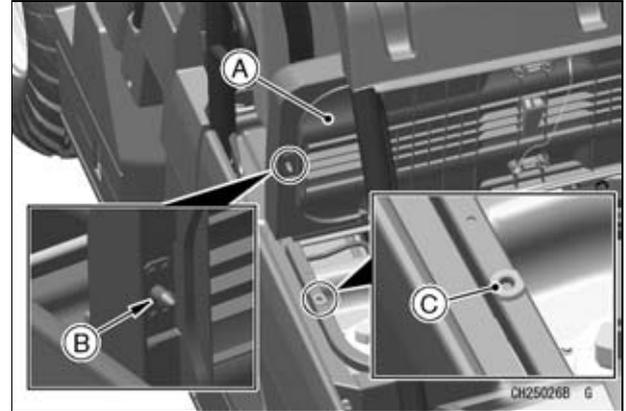
- Pull up the right and left ends of the seat to clear the projections.
- Remove the seat.



- A. Seat
- B. Projections
- C. Pull up.

Seat Installation

- Make sure that grommets are in position.
- Insert the projections of the seat into the grommets.

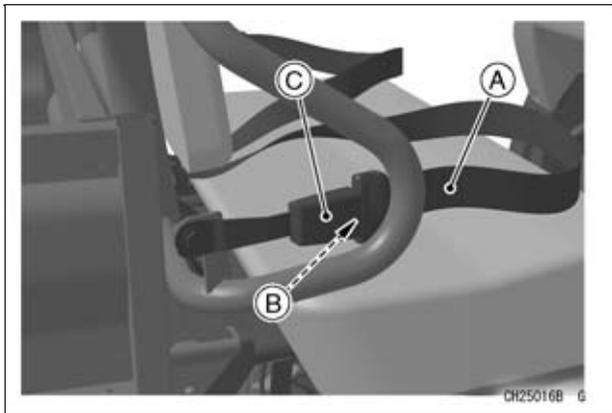


- A. Seat
- B. Projection (Both Sides)
- C. Grommet (Both Sides)

Seat Belts

(KAF400A/B)

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



- A. Seat Belt
- B. Red Button
- C. Buckle

⚠ WARNING

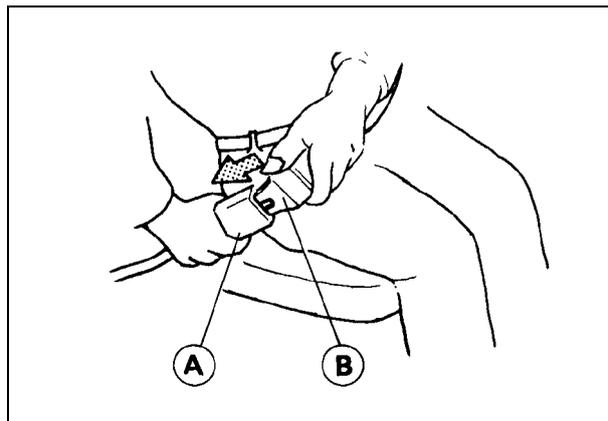
Not wearing a seat belt, or wearing one improperly can result in serious injury or death in the event of an accident. Make certain the operator and passenger always wear their seat belts properly.

⚠ WARNING

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

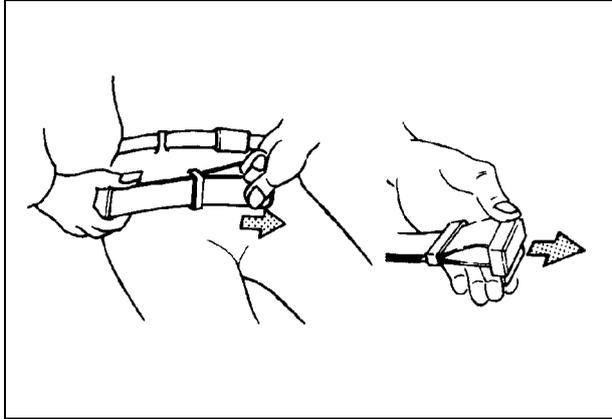
To wear the seat belt properly, follow this procedure:

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

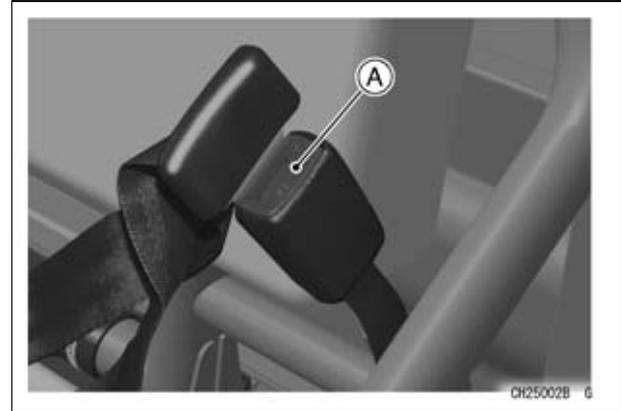
To tighten the belt, pull on the end of the belt coming from the latch plate. To loosen the belt, pull the latch plate at a right angle to the belt.



⚠ WARNING

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

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



A. Red Button

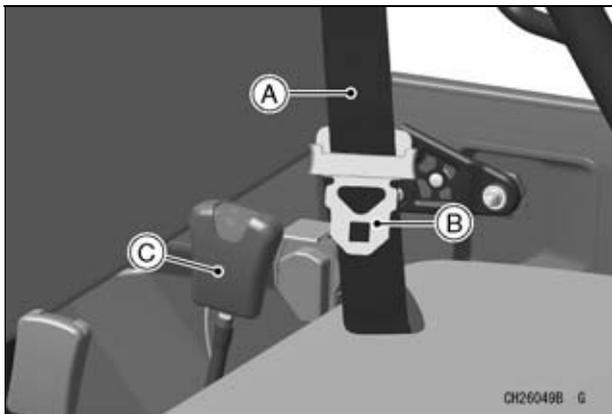
(KAF1000B)

The vehicle is equipped with retractable three-point seat belts for all occupants - operator and passenger for the front seat and two passengers for the rear seat. Always wear the seat belts when operating and riding in the vehicle.

(KAF1000E)

The vehicle is equipped with retractable three-point seat belts for all occupants - operator and passenger. Always wear the seat belts when operating and riding in the vehicle.

116 GENERAL INFORMATION



- A. Seat Belt
- B. Latch Plate
- C. Buckle

WARNING

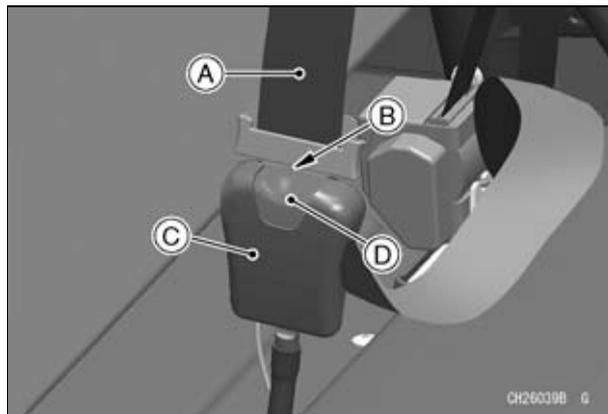
Not wearing a seat belt, or wearing one improperly can result in serious injury or death in the event of an accident. Make certain the operator and all passengers always wear their seat belts properly.

WARNING

Operator and all passengers 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:

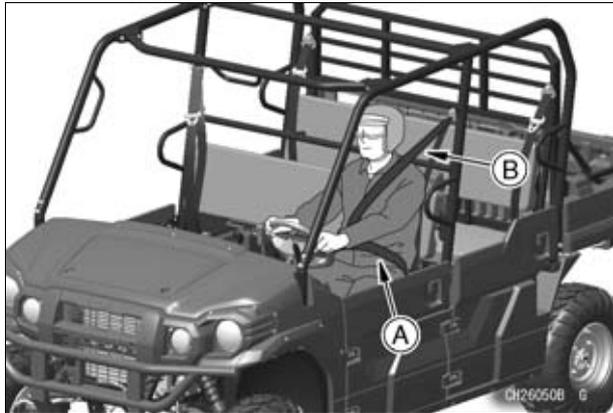
1. Place the belt across your lap and chest taking care that the belt is not twisted.
2. Push the latch plate into the buckle until it clicks. Pull up on the latch plate to make sure it is secure.



- A. Seat Belt
- B. Latch Plate
- C. Buckle
- D. Red Button

3. Put the lap portion of the belt low on your hips. Push down on the buckle end of the belt as you pull up on the shoulder part so the belt is snug across your hips.
4. Place the shoulder belt over your shoulder and across your chest. The shoulder belt should fit

against your chest. If it is loose, pull the belt out all the way and then let it retract.



A. Lap Portion of Belt
B. Shoulder Belt

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

⚠ WARNING

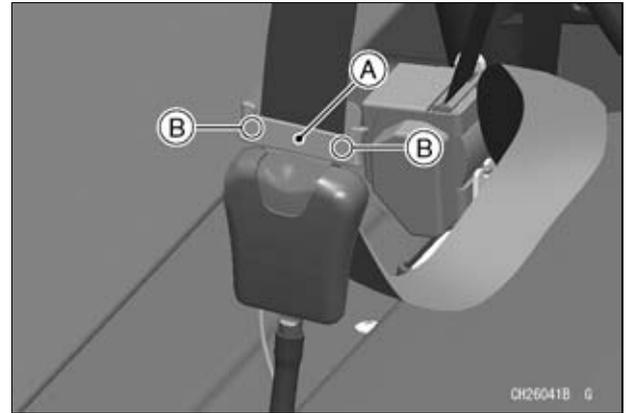
Too much seat belt slack could reduce its protection effectiveness in an accident. Always verify that the belt is at a SNUG FIT.

The seat belt is equipped with a dual mode latch plate. Under normal driving conditions the belt will self adjust to the seat occupant so that it is snug around both the occupant's waist and shoulder.

Under rough driving situations the dual mode latch plate will lock the seat belt in place.

To release the lock:

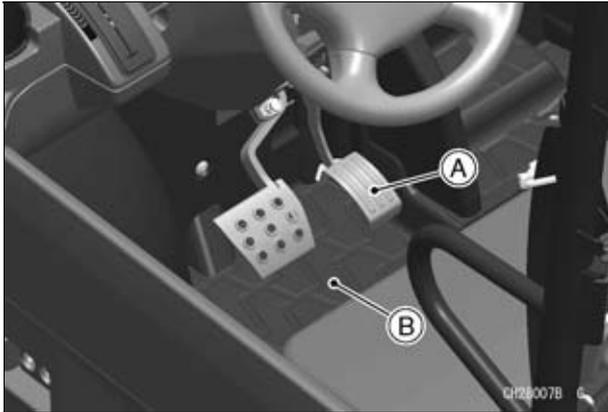
- Move the slider in the direction of the arrow mark.



A. Slider
B. Arrow Marks

Throttle Pedal

The throttle pedal is the right pedal on the floorboard. 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
B. Floorboard

Trailer Hitch Bracket

(KAF400A/B)

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:

(KAF1000B/E)

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

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

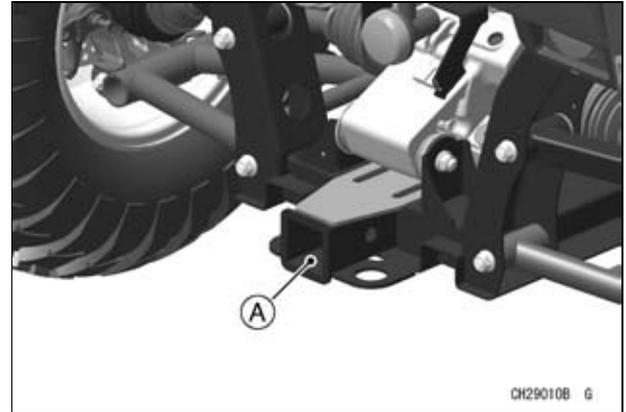
⚠ WARNING

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 kg (lb) tongue weight on the towing bracket.
- Do not operate the vehicle faster than km/h (mph) when towing. Remember that towing a trailer increases braking distance.
- Do not tow more than kg (lb) 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.

NOTE

- *Tongue weight and trailer weight values are show in your English OM titled "Trailer Hitch Bracket" section of "GENERAL INFORMATION" chapter. Refer to the relevant page and copy the data value into the space provided in this page.*



A. Trailer Hitch Bracket

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Winch Installation (KAF400A/B)

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

BREAK-IN

(KAF1000B/E)

The first 20 hours or 200 km (120 mile) of vehicle operation is designated as the break-in period. Do not exceed 1/2 throttle during the break-in period. If the vehicle is not used carefully during this period, you may end up with a “broken down” instead of “broken in” vehicle.

Break-in period	Maximum throttle position
First 20 hours or 200 km (120 mile)	1/2 throttle

NOTE

- *Do not start moving or race the engine immediately after starting it, even if the engine is already warm.*
- *Do not race the engine while the transmission is in neutral.*
- *It is important to perform the initial service after the first 20 hours or 200 km (120 mile) of operation as described in this manual and the service manual for this vehicle. See the “Periodic Maintenance Chart” in the “MAINTENANCE AND ADJUSTMENT” chapter.*

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. |
| Fuel Filter (KAF1000B/E) | Check filter element for contamination. |
| Water Separator (KAF1000B/E) | Check for water accumulation and filter element contamination. |
| Engine Oil | (KAF400A/B) Oil level between “H” and “L” lines (when engine is cold), no leaks.
(KAF1000B/E) Oil level between Full and Low holes on the dipstick (when engine is cold), no leaks. |
| Tires | Air pressure (when cold): |

Tire	Load	Cold Tire Pressure
Front		
Rear		

- Front Final Gear Case Oil (KAF400A) No oil leads
(KAF1000B/E) Oil level come to the bottom of the filler opening, no leaks.
- Transmission Case Oil (KAF400A/B) Oil level between H and L lines, no leaks.
(KAF1000B/E) Oil level between high and low levels on the rib in the oil filler opening, no leaks.
- Coolant (KAF1000B/E) Coolant level between level lines (when engine is cold), no leaks.
- Air Cleaner Element (KAF1000B/E) . Check for dirt; clean or replace as required.
- Screen at Belt Drive Transmission (CVT) Air Duct (KAF1000B/E) Check and clean the screen for obstruction by insects, mud or foreign object.
- Throttle Throttle pedal free play ~ mm (~ in.). Throttle pedal operates smoothly and returns to rest position when released.
- Steering Steering wheel free play ~ mm (~ in.). Action smooth without excessive play, rough spots, or strange noises.
- Brakes Check for braking effectiveness (while test running). Brake pedal free play ~ mm (~ in.). Brake fluid level between level lines, no leaks. Parking brake: Stops vehicle completely. Visually check the return springs for damage.
- Parking Brake Indicator (KAF1000B/E) Make sure the parking brake indicator light illuminates when the parking brake is applied with the main switch in the "ON" position.
- Electrical Equipment All lights work. Check for dirt on or damage to lights.
- Battery (KAF400A/B) Electrolyte level between level lines in each cell.
- Engine Cooling Fan Screen (KAF400A/B) Check for mud and other debris.

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ROPS (KAF1000B/E)	Make sure there is no damage to the structure or loose bolts.
Seat Belts (KAF1000B/E)	Make sure that all seat belts are in good condition and operate properly. The belt should pull smoothly and retract when released. The latch plate should click securely with the buckle and release when the release button is pushed firmly.
Doors (KAF1000B/E)	Make sure there is no damage to the structure or loose bolts and all doors are latched securely they are closed.

NOTE

○ *Information for the various values shown here such as tire pressures, free plays are described in your English OM, titled "Daily Checks" section of "HOW TO OPERATE" chapter. Refer to the relevant page and copy those data values into the spaces provided in this page.*

Starting the Engine

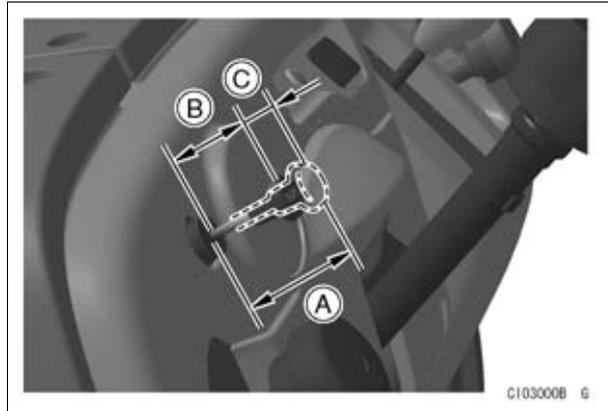
(KAF400A/B)

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.

(KAF1000B/E)

⚠ 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.

- Close all doors.
- Wear the seat belts (for an operator and passenger (s)).
- Make sure the parking brake is applied.
- Put the gear shift lever in the "N" (neutral) position.
- Put the main switch key in the main switch.
- Turn the main switch key to the "ON" position. The glow plug system is designed so that the glow plug indicator light goes on at that time, and turn off after 4 seconds.
- After the glow plug indicator light turns off, turn the main switch key to the "START" position to activate the electric starter. Repeat until the 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

- *The vehicle is equipped with a starter lockout system. This system prevents the electric starter from operating when the gear shift lever is in the “H” (High) , “L” (Low) or “R” (Reverse) position, unless the brake is applied.*

High-Altitude Injection Control Device

This vehicle has a high-altitude injection control device installed. It suppresses black smoke when operating at high altitudes and at the same time aims to control particulate matter.

The control device measures the atmospheric pressure just after the engine has started. If at this time the control device determines that the altitude is 800 m (2 600 ft) or more, it reduces the fuel injection amount and thus controls the occurrence of black smoke.

Because of this reduction in the injection amount, the engine output decreases.

NOTE

- *The high-altitude injection control device does not actuate during engine operation. Therefore, when the machine is moved to a high altitude or to a low altitude during operation, turn the main switch key to the “OFF” position. This resets the control device. After re-starting the engine, the necessity for injection control is again determined.*

Cold Weather Starting (KAF1000B/E)

Idling speed may not be stable and/or the engine could stall when it is started in cold weather. However this is not engine failure.

If the ambient temperature is 0°C (32°F) or lower, use the following starting procedure to make idling speed steady.

- Close all doors.
- Wear the seat belts (for an operator and passenger (s)).
- Make sure the parking brake is applied.
- Put the gear shift lever in the “N” (neutral) position.
- Put the main switch key in the main switch.
- Turn the main switch key to the “ON” position.
- The glow plug indicator goes on for 4 seconds.
- When the glow plug indicator goes off, push down the throttle pedal partially, and turn the main switch key to the “START” position. The glow plug indicator goes on again, and the engine starts running.
- Return the main switch key to the “ON” position. The glow plug indicator goes off.
- After the engine is started, keep the throttle pedal partially pushed down for one minute maximum until idling speed becomes steady.
- After idling speed is steady, release the throttle pedal.

Jump Starting

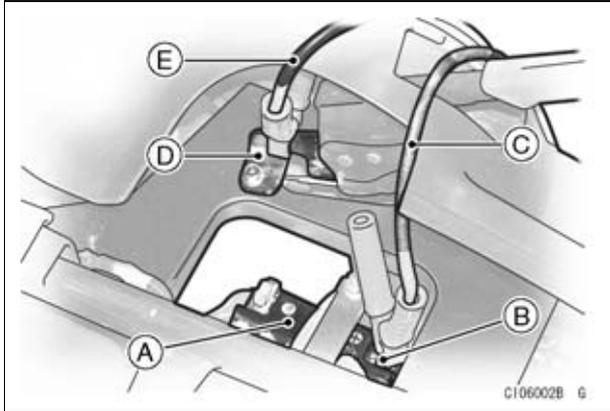
If your vehicle's battery is “run down,” it should be removed and charged. If this is not practical, a 12 volt booster battery and jumper cables may be used to start the engine.

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 (KAF400A/B)

- 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.

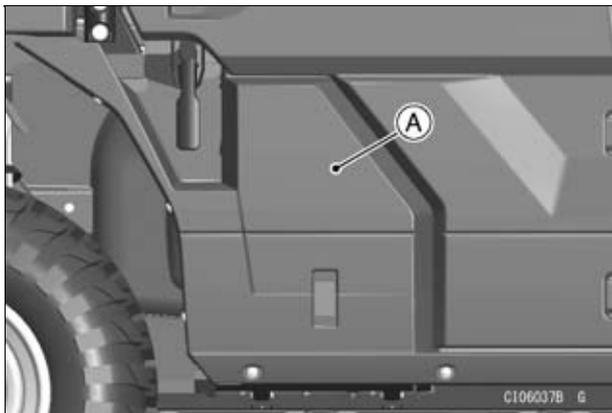
- After the engine starts, disconnect the jumper cables. Disconnect the negative (-) cable from the vehicle first.

Connecting Jumper Cables (KAF1000B/E)

- Make sure the main switch is turned off.

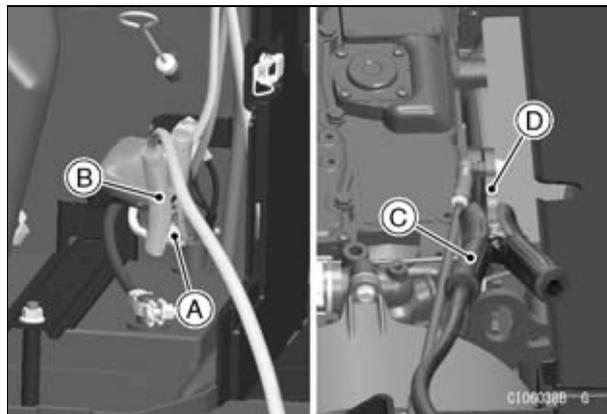
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- Remove the battery cover located at the right side of the rear seat. Refer to the “Battery” section in the “MAINTENANCE AND ADJUSTMENT” chapter.



A. Battery Cover

- Lift the cargo bed and support it with the supporting rod. Refer to the “Cargo Bed” section in the “GENERAL INFORMATION” chapter.
- Connect a jumper cable from the positive (+) terminal of the booster battery to the positive (+) terminal of the vehicle battery.



- A. Vehicle Battery Positive (+) Terminal
- B. From Booster Battery Positive (+) Terminal
- C. From Booster Battery Negative (-) Terminal
- D. Bracket

- Connect another jumper cable from the negative (-) terminal of the booster battery to the bracket.

NOTICE

Do not connect the booster battery to the following portions as a ground.

- Battery negative (-) terminal
- Electrical components or leads
- Fuel line or fuel relative components

⚠ 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 fuel system 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.

- Reinstall the battery cover. Refer to the “Battery” section in the “MAINTENANCE AND ADJUSTMENT” chapter.
- Lower the cargo bed and secure it with the latches. Refer to the “Cargo Bed” section in the “GENERAL INFORMATION” chapter.

Moving Off

- **(KAF1000B/E)** Make sure that all doors are properly closed.
- Depress the brake pedal.
- **(KAF400A/B)** Put the gear shift lever into the “H” (High) and “L” (Low) position for KAF400A or “F” (Forward) position for KAF400B.
- **(KAF1000B/E)** Put the gear shift lever into the “H” (High) or “L” (Low) position.
- 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

<p>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.</p>

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 or main 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.

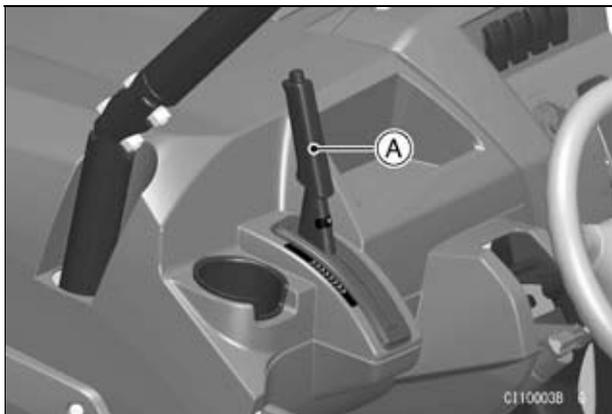
- Stop the vehicle on a level surface.

NOTICE

Avoid parking on steeply inclined surfaces.

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

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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 or main 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.

(KAF400A/B)

⚠ WARNING

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

(KAF1000B/E)

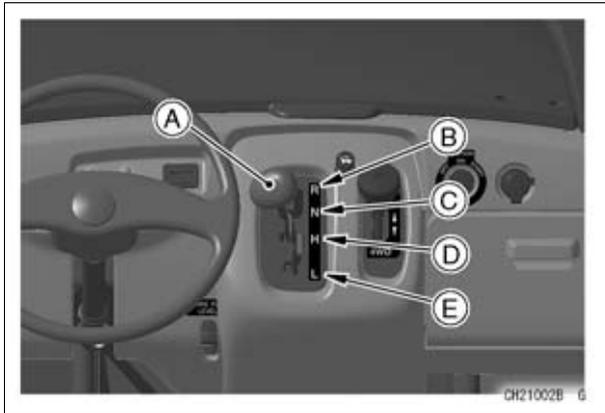
⚠ WARNING

Diesel fuel is extremely flammable and can be explosive under certain conditions, creating the potential for serious burns. 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.

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 (KAF400A/B)

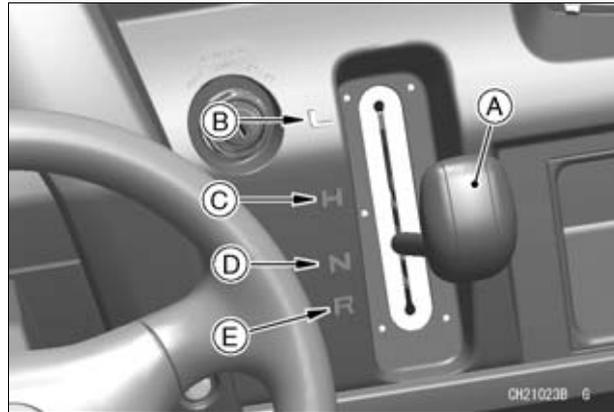
- Release the throttle pedal, and stop the vehicle.
- When you want to operate the vehicle in reverse, stop the vehicle completely, allowing the engine to slow to idling speed, and move the gear shift lever to the “R” (Reverse) position.

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.

Shifting Gears (KAF1000B/E)

- Stop the vehicle completely.
- Move the gear shift lever into the “H” (High) or “L” (Low) position.
- If you intend to operate the vehicle in reverse, move the gear shift lever into the “R” (Reverse) position. Refer to the “Driving in Reverse” section in the “SAFE OPERATION” chapter.
- Gradually increase engine speed by depressing the throttle pedal.



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

⚠ WARNING

Shifting the transmission while the vehicle is moving can cause abrupt changes in speed and direction resulting in loss of control and accident with severe personal injury or death. Do not shift the transmission while the vehicle is moving. Stop the vehicle to shift the transmission.

NOTICE

Shifting to high or low range when the vehicle is in motion could cause engine damage. Do not shift from “H” (High) or “L” (Low) to “R” (Reverse) and vice versa when the vehicle is moving or with the engine running above idling speed, or the transmission could be damaged.

NOTICE

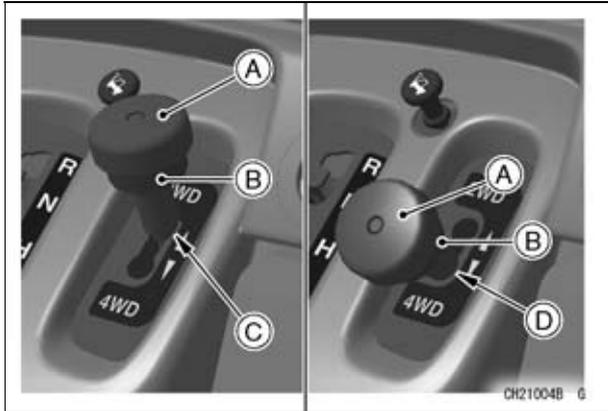
Use of the high range for heavy loads, climbing hills, pulling a trailer, and sustained low-speed riding can lead to premature wear of the torque converter belt and pulleys. Use the low range for these condition.

**2WD/4WD Shifting (KAF400A,
KAF1000B/E)****(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

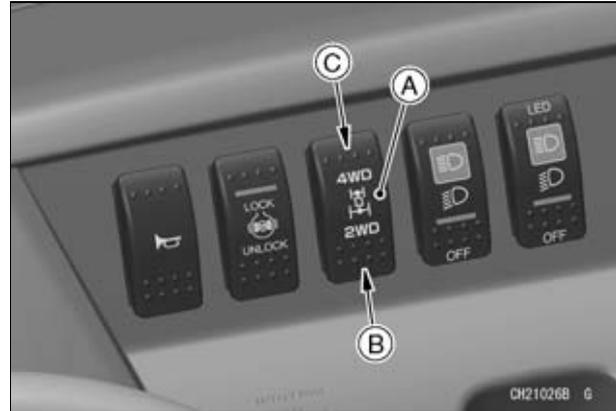
- *When the shift lever is moved from “2WD” to “4WD”, the transmission shifts immediately. When the shift lever is moved from “4WD” to “2WD”, the transmission may not shift all the way into “2WD” until the vehicle has rolled a short distance.*



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

(KAF1000B/E)

- Stop the vehicle completely.
- Push the selectable 2WD/4WD shift switch to select the drive modes.



- A. Selectable 2WD/4WD Shift Switch
- B. "2WD" Position
- C. "4WD" Position

NOTE

- *The "4WD" operating mode is indicated with the "4WD" indicator symbol. Refer to the "Multifunction Meter" section in the "GENERAL INFORMATION" chapter.*
- *When the shift switch is changed from "4WD" to "2WD" and vice versa, the transmission shifts when the vehicle has rolled a short distance. Drive off slowly to allow "4WD" to engage or disengage. As it engages, the "4WD" indicator symbol will appear.*
- *It is normal to hear a small clanking noise when "4WD" engages or disengages while rolling on hard surfaces, such as hard-packed dirt.*

⚠ WARNING

The handling characteristics of this vehicle differs between “2WD” and “4WD” according to terrain. Changing the operating mode while moving can cause sudden changes in handling performance which can cause the operator to lose control and have an accident. Always stop the vehicle before changing from “2WD” to “4WD” and vice versa.

NOTICE

Shifting from “2WD” to “4WD” (or “4WD” to “2WD”) when the vehicle is in motion could cause drive train damage.

Shifting the Differential

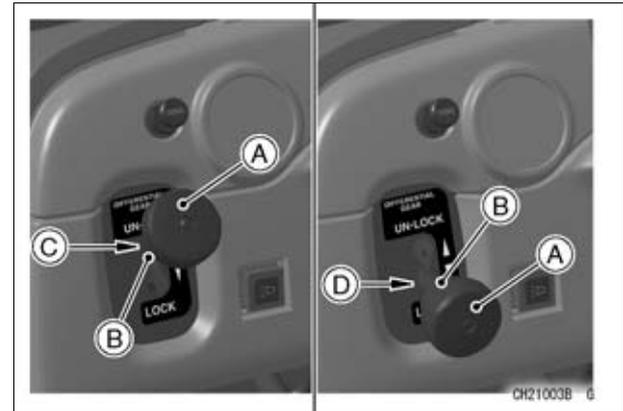
(KAF400A/B)

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)

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Shifting to Differential (Unlocked-Axle) Model

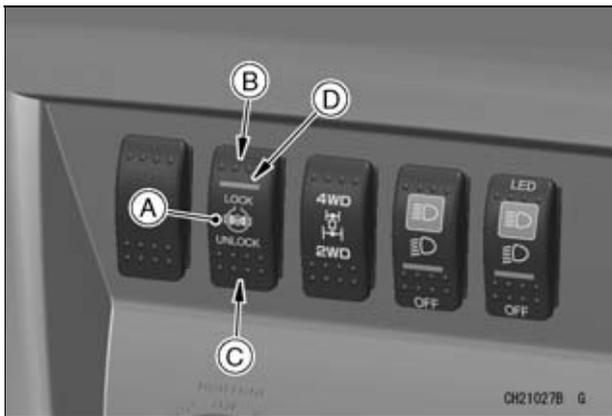
- Pull and hold the stopper, then move the shift lever all the way up (UN-LOCK).

NOTE

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

(KAF1000B/E)

- Stop the vehicle completely.
- Push the selectable DIFF-LOCK shift switch to “LOCK” position.



- A. Selectable DIFF-LOCK Shift Switch
- B. “LOCK” Position (Locked-Rear Axle Mode)
- C. “UNLOCK” Position (Unlocked-Rear Axle Mode)
- D. DIFF-LOCK Indicator Light

- After crossing the obstacle, push the shift switch to “UNLOCK” (Unlocked-Rear Axle) position.

⚠ WARNING

Shifting to Locked-Axle Mode while turning or before entering a turn can reduce steering response, increasing the effort to turn. An unexpected change in direction can cause the operator to lose control, resulting in an accident and injury. Do not shift to Locked-Axle Mode while turning or before entering a turn.

NOTE

- By pushing the shift switch to “LOCK” position, rotational speed of both wheels is equalized thereby increasing traction.

Shifting to Differential (Unlocked-Rear Axle) Mode

- Stop the vehicle completely.
- Turn the selectable DIFF-LOCK shift switch to “UNLOCK” position.

NOTICE

Shifting from “UNLOCK” to “LOCK” (or “LOCK” to “UNLOCK”) when the vehicle is in motion could cause drive train damage.

When Stuck (KAF1000B/E)

Release the throttle pedal immediately to protect the drive belt and take the following actions to escape from the stuck condition.

- Change the gear shift lever to the “L” (Low) position, push the selectable DIFF-LOCK shift switch to “LOCK” position, push the selectable 2WD/4WD shift switch to “4WD” position, and try to escape by slowly revving up the engine. Refer to the “Shifting the Differential” section in this chapter.
- If the above method is not successful, you can use a winch installed at the front of the vehicle (Winch is an optional part.) or seek help from another vehicle for towing.

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.

(KAF400A/B and KAF1000E) This vehicle is designed for an operator and passenger. Never carry persons in the cargo bed. Refer to the “LOADING INFORMATION” chapter before operating this vehicle.

(KAF1000B) This vehicle is designed for an operator and passenger (for 2-persons mode) or an operator and three passengers (for 4-persons mode). 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

(KAF400A/B) 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.

(KAF1000B/E) 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 “GENERAL INFORMATION” chapter and “Shifting Gears” section in the “HOW TO OPERATE” chapter.

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.

<i>NOTICE</i>

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.

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Driving in “4WD” (KAF400A, KAF1000B/E)

(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.

(KAF1000B/E) “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 “L” (Low) position with the gear shift lever. Refer to the “Shifting Gears” section, “2WD/4WD Shifting” and “Shifting the Differential” sections in the “HOW TO OPERATE” chapter.

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.

(KAF400A/B) 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.

(KAF1000B/E) Leave the gear shift lever in the “H” (High) or “L” (Low) position 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.
- **(KAF400A/B)** 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.
- **(KAF1000B/E)** 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) or “L” (Low) position.

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” and low range gearing efficiently (KAF400A, KAF1000B/E). 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

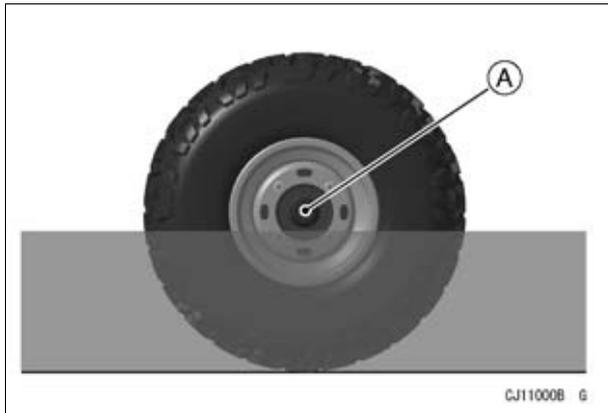
- Be especially careful on very slippery surfaces.
- Don't drive on public streets, roads, or highways.

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.

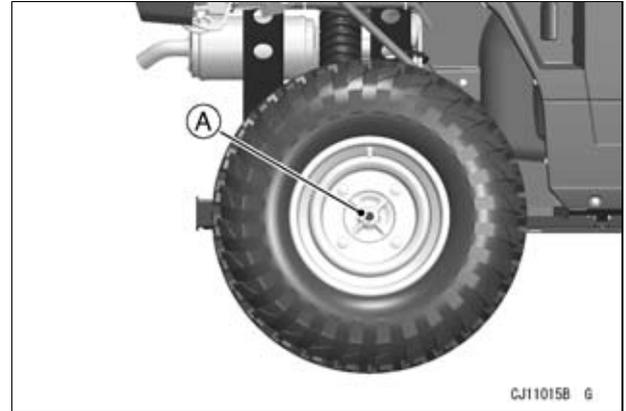
Observe the following rules for operating the vehicle in water.

(KAF400A/B)



A. Axle Cap

(KAF1000B/E)



A. Axle Nut

(KAF400A/B)

⚠ 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.

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(KAF1000B/E)

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 nuts.

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.

Operator and Passenger Requirements (KAF1000B/E)

All operators of this vehicle should possess a valid driver's license.

The operator and passenger(s) must be able to place both feet flat on the floorboards while seated upright with their backs against the seatbacks when firmly holding the steering wheel, handgrip or handhold (KAF1000B).

WARNING

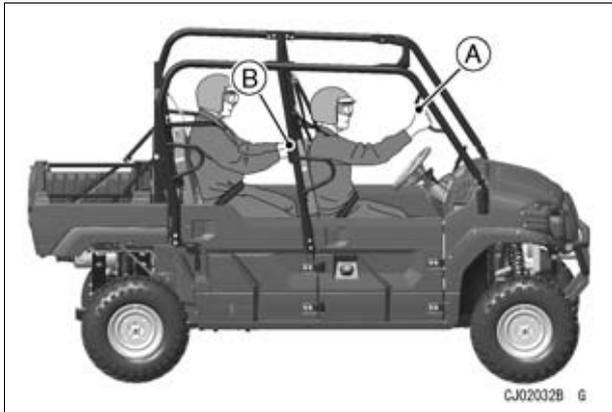
To avoid injury in the event of a roll-over, keep arms and legs inside the vehicle at all times. The operator should firmly grip the steering wheel at all times, and the front passenger should hold onto the handgrips. The rear passengers should hold the handhold firmly with both hands.

Close all the doors. Wear the seat belts (for an operator and passenger(s)). The doors, handgrip, and handhold are not a substitute for the seat belts.

SAFE OPERATION 151

This vehicle is designed for an operator and up to three passengers.

Never carry persons in the cargo bed. Refer to the "LOADING INFORMATION" chapter before operating this vehicle.



- A. Front Right Handgrip
- B. Rear Handhold (KAF1000B)

NOISE AND VIBRATION CONTROL INFORMATION

Control Information

Noise Level

Acceleration	dB (A)
Stationary	dB (A)
Driver's Ear	dB (A)

Vibration Level

Steering Wheel	m/s ²
Seat	m/s ²
Seat Back	m/s ²

systems, or alter them in any way which results in an increase in noise level.

NOTE

○ *Noise and vibration levels of your MULE are shown in your English OM, titled "NOISE AND VIBRATION CONTROL INFORMATION". Refer to the relevant page and copy those data values into the space provided in this page.*

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

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.

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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 driving conditions.

(KAF400A/B)

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

MAINTENANCE AND ADJUSTMENT 155

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 oil-change*	1 year	●	●	
Oil filter-replace*		●		●
Throttle pedal play-inspect		●		●
Idle speed-adjust		●	●	
Spark arrester-clean			●	
Fuel hose-replace	5 years (D)			
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			●	

156 MAINTENANCE AND ADJUSTMENT

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
General lubrication-perform*			D	
Bolts, nuts, and fasteners tightness-inspect		D	D	
Wheel nuts tightness-inspect		•	•	
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-re- place	2 years (D)			
Brake wheel cylinder assembly-replace	2 years (D)			
Brake hose-replace	4 years (D)			

MAINTENANCE AND ADJUSTMENT 157

(KAF1000B/E)

OPERATION	First Service		Regular Service			
	After 20 h, or 200 km (120 mile) of use	After 50 h, or 1 000 km (600 mile) of use	Every 50 h, or 1 000 km (600 mile) of use	Every 100 h, or 2 000 km (1 200 mile) of use	Every 200 h, or 4 000 km (2 500 mile) of use	Every year of use
ENGINE						
Throttle pedal play - inspect		●				●
Fuel hose and connections - inspect				D		
Fuel hose - replace	2 years (D)					
Idle speed - inspect	D			D		
Air cleaner - clean and inspect*	●		●			
Valve clearance - inspect*	D			D		
Spark arrester - clean and inspect				●		
Engine oil - change*	●			● or every 6 months whichever comes first		
Oil filter - replace*	D			D or every 6 months whichever comes first		

158 MAINTENANCE AND ADJUSTMENT

OPERATION	FREQUENCY		Regular Service			
	First Service		Every 50 h, or 1 000 km (600 mile) of use	Every 100 h, or 2 000 km (1 200 mile) of use	Every 200 h, or 4 000 km (2 500 mile) of use	Every year of use
Front final gear case oil and transmission case oil - change	●					●
Radiator - clean*	●			●		
Radiator hoses and connections - check*						D
Coolant - change*						D
Cooling fan belt - inspect*		D		D		
Converter drive belt wear - inspect*		D		D		
Converter drive belt deflection - inspect *		D		D		
Converter drive pulley shoe - inspect*		D		D		
Drive pulley coupling - apply grease		D		D		
Fuel filter element - change*					D	
Water separator water - drain*			D			
Water separator water - clean*					D	
CHASSIS						
Brake pad wear - inspect*		D	D			
Brake light switch - inspect		●			●	
Brake fluid - change	2 years (D)					

MAINTENANCE AND ADJUSTMENT 159

OPERATION	First Service		Regular Service			
	After 20 h, or 200 km (120 mile) of use	After 50 h, or 1 000 km (600 mile) of use	Every 50 h, or 1 000 km (600 mile) of use	Every 100 h, or 2 000 km (1 200 mile) of use	Every 200 h, or 4 000 km (2 500 mile) of use	Every year of use
Brake caliper piston seal and dust seal - replace	2 years (D)					
Brake hoses - replace	4 years (D)					
Brake fluid level - inspect		●			●	
Brake pedal play - inspect		●			●	
Brake hoses and pipes - inspect		D			D	
Parking brake - inspect*	D		D			
Tire wear - inspect*		●			●	
Wheel nuts tightness - inspect		●			●	
Wheels - inspect					D	
Wheel hub bearings - inspect					D	
Joint boots - inspect		●	●			
Shock absorbers - inspect					D	
Suspension arms - inspect					D	
Steering - inspect		D			D	
Steering joint dust boots - inspect		●			●	
General lubrication - perform*					D	

160 MAINTENANCE AND ADJUSTMENT

OPERATION	FREQUENCY	First Service		Regular Service			
		After 20 h, or 200 km (120 mile) of use	After 50 h, or 1 000 km (600 mile) of use	Every 50 h, or 1 000 km (600 mile) of use	Every 100 h, or 2 000 km (1 200 mile) of use	Every 200 h, or 4 000 km (2 500 mile) of use	Every year of use
Bolts, nuts, and fasteners tightness - inspect			D		D		
Seat belts - inspect						●	
Cables - inspect						D	
Cargo bed latch - inspect						●	

Engine Oil

(KAF400A/B)

⚠ 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.

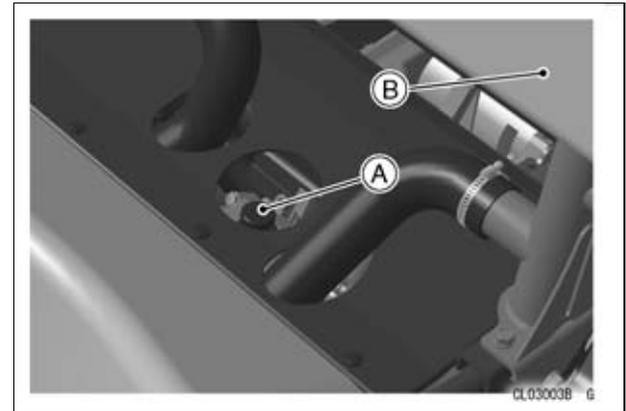
Oil Level Inspection (KAF400A/B)

- 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.



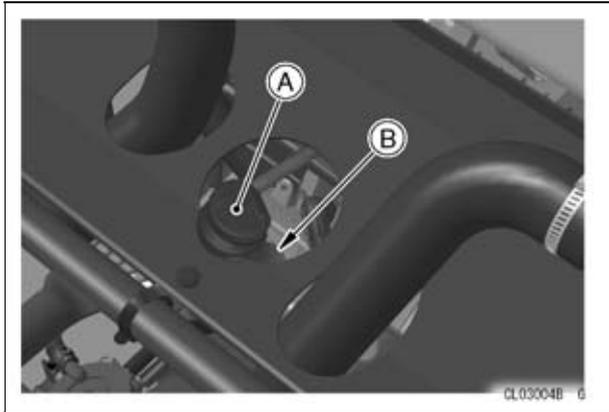
**A. Dipstick & Oil Filler Hole
B. Seatback**

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

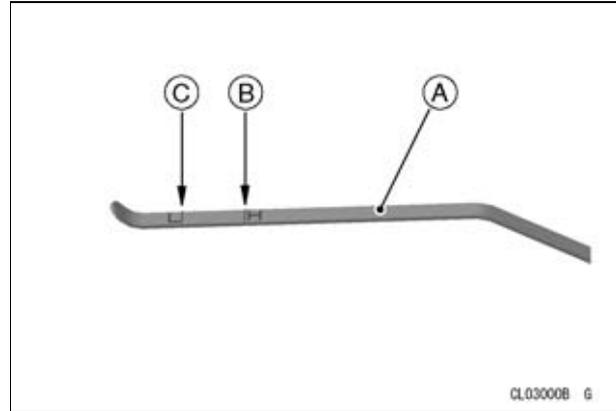
NOTE

- *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 “H” (High) and “L” (Low) lines on the dipstick.



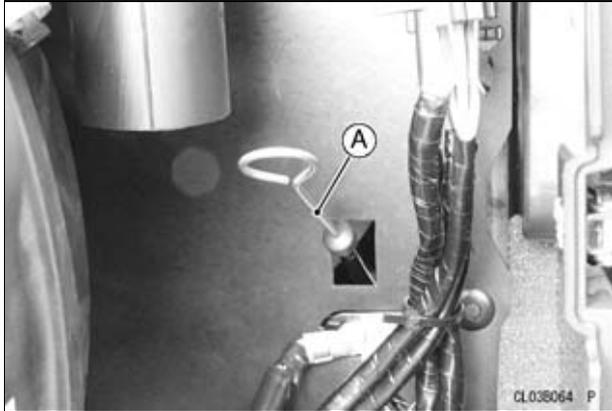
- A. Dipstick**
- B. “H” (High) Line**
- C. “L” (Low) Line**

- 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 Level Inspection (KAF1000B/E)

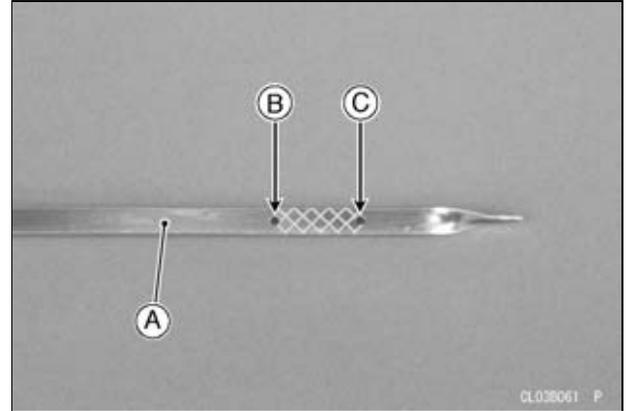
Check the oil level when the engine is cold (room or atmospheric temperature).

- Park the vehicle on level ground.
- Remove the battery cover (see Battery Removal).
- Pull up the dipstick out of the dipstick tube, wipe it dry, and insert the dipstick till it bottoms into the tube securely.



A. Dipstick

- Pull out the dipstick and check the oil level. The oil level should be between the Full and Low holes on the dipstick.



- A. Dipstick**
- B. Full Hole**
- C. Low Hole**

- 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, unscrew the oil filler cap 1 and add slowly the correct amount of oil. Use the same type and brand of oil that is already in the engine.

NOTICE

Never overfill. Overfilling may result in white exhaust smoke, engine overspeed or internal damage.

- Apply engine oil to the rubber portion of the dipstick.

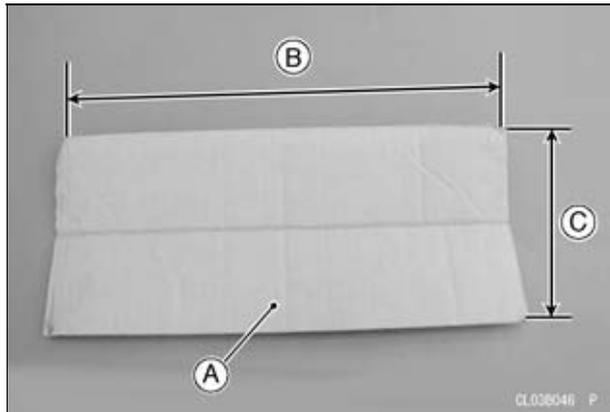
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- Reinsert the dipstick until it bottoms into the tube securely.
- Install the oil filler cap 1.

Oil and/or Oil Filter Change (KAF400A/B)

NOTE

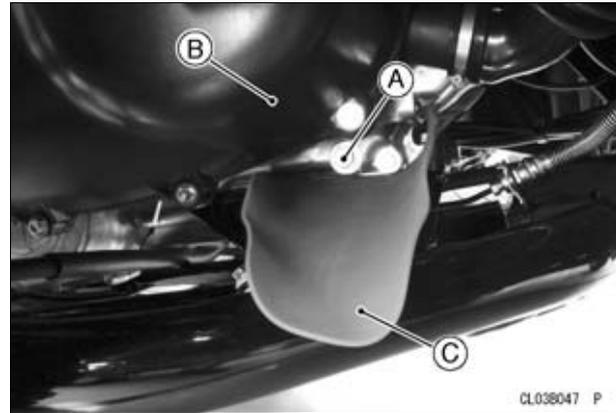
- To avoid dirtying the chassis parts by oil, make a gutter, and using it.
- Prepare the cardboard or thin aluminum board.
- Make the gutter from cardboard or thin aluminum board as shown.



- A. Cardboard
- B. 400 mm (15.7 in.)
- C. 190 mm (7.48 in.)

- Warm up the engine thoroughly, and then stop the engine.

- Place a gutter beneath the drain plug on the right side at the bottom of the engine.
- Place an oil pan beneath the gutter.
- Remove the drain plug.
- Remove the dipstick.



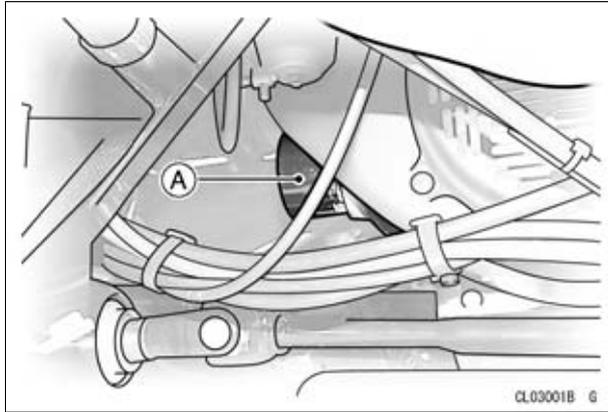
- A. Drain Plug
- B. Torque Converter Case
- C. Commercially Available Gutter

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

⚠ WARNING

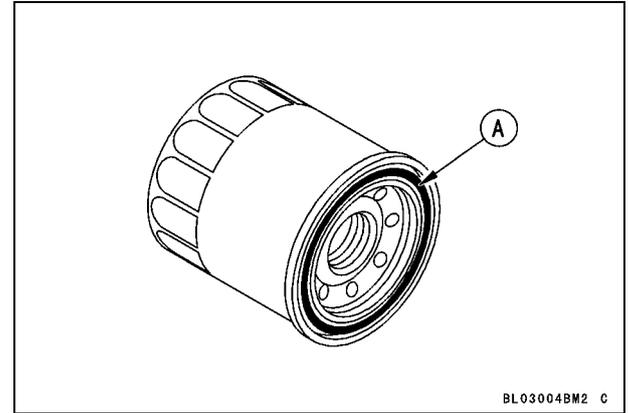
Engine oil is a toxic substance. Dispose of used oil properly. Contact your local authorities for approved disposal methods or possible recycling.

- 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 “H” (High) line on the dipstick with high quality motor 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)

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Recommended Engine Oil

Type: API SG, SH, SJ, SL, or SM with JASO MA, MA1 or MA2

Viscosity: SAE 10W-40

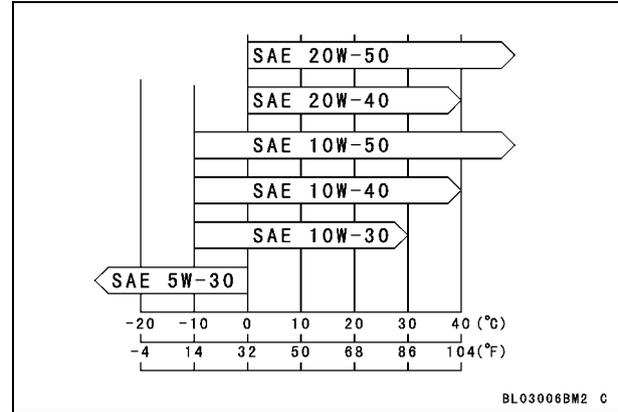
Engine Oil Capacity

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

NOTE

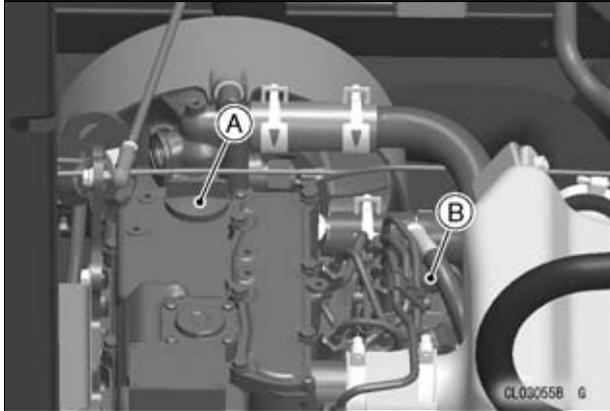
○ Do not add any chemical additive to the oil. Oils fulfilling the above requirements are fully formulated and provide adequate lubrication for both the engine.

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.



Oil and/or Oil Filter Change (KAF1000B/E)

- Lift the cargo bed and support it with the supporting rod.
- Warm up the engine thoroughly, and then stop the engine.
- Remove the oil filler cap 1.



- A. Oil Filler Cap 1
- B. Oil Filler Cap 2

NOTE

○ *There is another oil filler cap 2 on the engine. The cap 2 is not required to be removed.*

- Place an oil pan beneath the engine.
- Remove the drain bolt and gasket.



- A. Engine Oil Drain Bolt and Gasket

- Let the oil completely drain with the vehicle on level ground.

⚠ WARNING

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

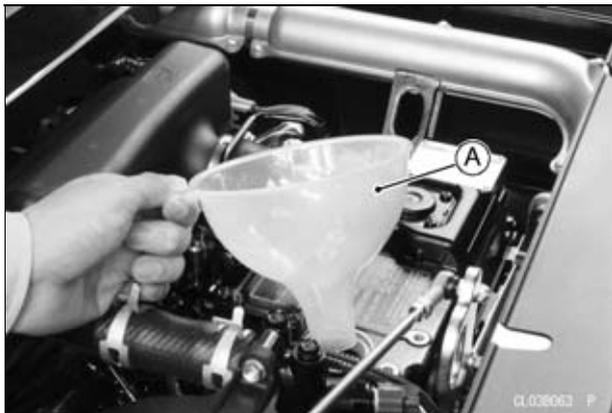
- The oil filter should be replaced periodically by an authorized Kawasaki dealer in accordance with the Periodic Maintenance Chart.
- Replace the gasket with a new one.
- Install the drain bolt with its gasket. Tighten it to the specified torque.

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Tightening Torque

Engine Oil Drain Bolt:
29.4 N·m (3.00 kgf·m, 21.7 ft·lb)

- Raise the filling funnel a little from the cylinder head to allow the air in the crankcase to escape.



A. Funnel

- Fill the engine up to the Full hole on the dipstick with high quality engine oil as specified in the table.

NOTICE

To fill the engine oil, fill slowly after removing the cap. If the oil level in the cylinder head cover gets too high because of filling too fast or filling too much (overfilling), oil may overflow into the intake manifold. Oil in the intake manifold may flow into the combustion chambers and cause hydraulic lock, resulting in severe engine damage.

NOTICE

Never overfill. Overfilling may result in white exhaust smoke, engine overspeed or internal damage.

Engine Oil

Type: API CD, CF, CF-4, CI-4 or CJ-4*
Viscosity: SAE 10W-40
Capacity: 2.1 L (2.2 US qt)
[when filter is not removed]

- *: When using CJ-4 oil (low ash oil) in your engine, use fuel with less than 0.05% sulfur content to avoid engine oil deterioration.

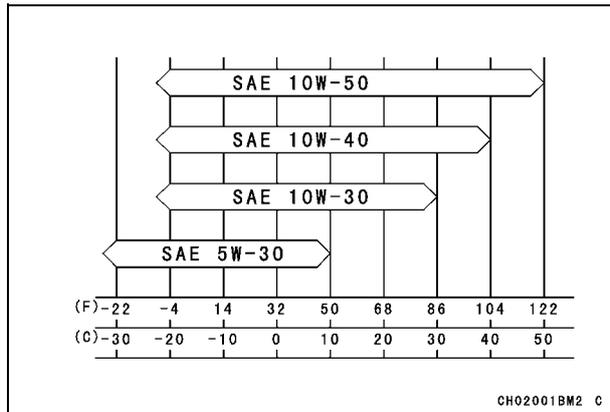
NOTE

○ Do not add any chemical additives to the oil. Oils fulfilling the above requirements are fully

formulated and provide adequate lubrication for the engine.

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 driving area.

STARTING TEMPERATURE RANGE ANTICIPATED BEFORE NEXT OIL CHANGE



- After filling, wait several minutes until the oil settles.
- Reinstall the removed parts as before.
- Check the oil level.
- Start the engine and check for oil leakage.

Front Final Gear Case Oil (KAF400A, KAF1000B/E)

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.

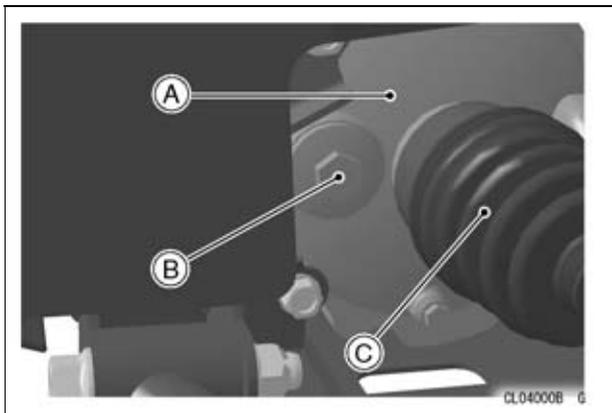
⚠ WARNING

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 wheels and skid the front tires, causing loss of control. To prevent seizure, check the differential oil according to the periodic maintenance chart.

Oil Level Inspection (KAF400A)

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

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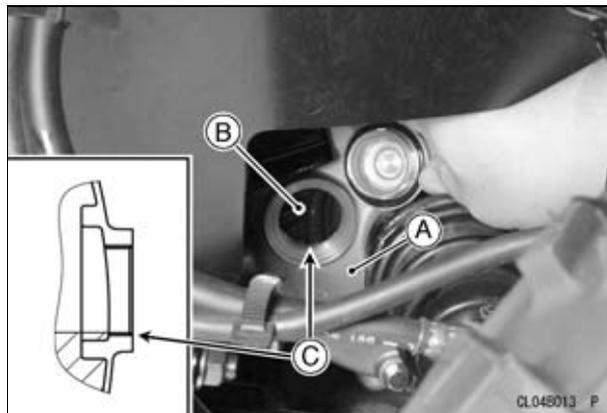


- A. Front Final Gear Case
- B. Filler Cap (on the left side)
- C. Front Axle

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

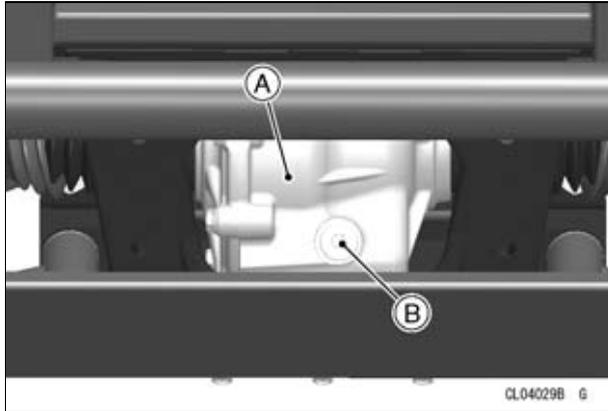
- Install the filler cap.

NOTE

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

Oil Level Inspection (KAF1000B/E)

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

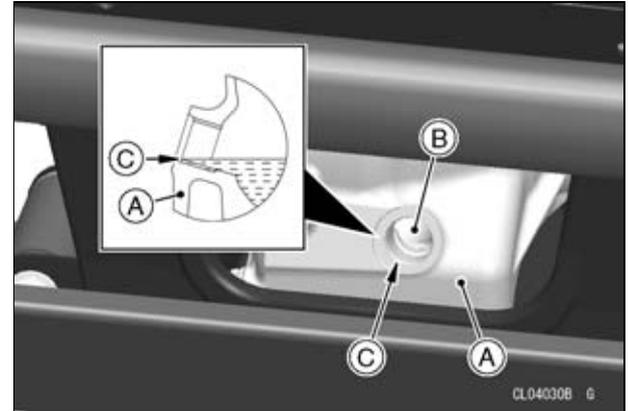


A. Front Final Gear Case
B. Oil Filler Cap and O-ring

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 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 of the Filler Opening

- Replace the O-ring with a new one, and apply grease to it.
- Install the oil filler cap with the new O-ring and tighten it to the specified torque.

Tightening Torque

Front Final Gear Case Oil Filler Cap:
 16 N·m (1.6 kgf·m, 12 ft·lb)

- Clean any oil and grease from the oil filler cap and surrounding area after tightening the oil filler cap.

NOTE

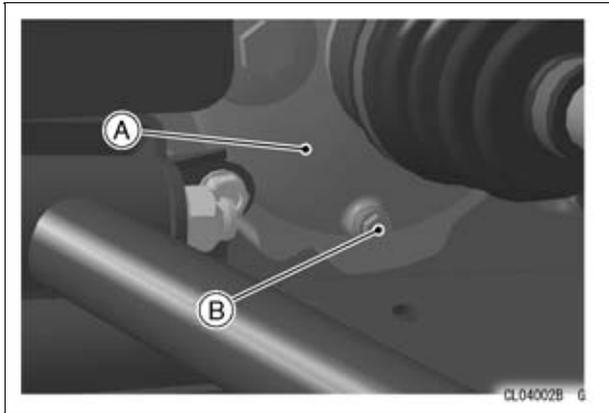
○ *Use the same type and brand of oil that is already in the gear case.*

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Oil Change (KAF400A)

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.

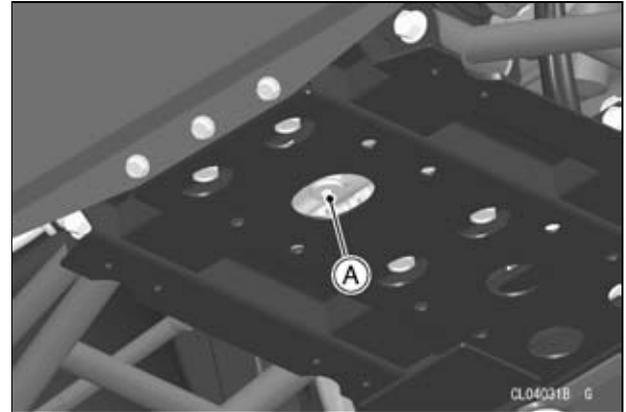
Oil Change (KAF1000B/E)

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, place an oil pan beneath the gear case.
- Remove the oil filler cap, drain plug and O-rings.

⚠ 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.



A. Front Final Gear Case Oil Drain Plug and O-ring

- After the oil has completely drained, replace the O-ring with a new one, and apply grease to it.
- Install the drain plug with the new O-ring and tighten it to the specified torque.

Tightening Torque

Front Final Gear Case Oil Drain Plug: 16 N·m (1.6 kgf·m, 12 ft·lb)

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

Front Final Gear Case Oil

Capacity	0.43 L (0.45 US qt)
Type	API "GL-5" Hypoid gear oil
Viscosity	above 5°C (41°F) SAE 90 below 5°C (41°F) SAE 80

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- Replace the O-ring with a new one, and apply grease to it.
- Install the oil filler cap with the new O-ring and tighten it to the specified torque.

Tightening Torque

Front Final Gear Case Oil Filler Cap: 16 N·m (1.6 kgf·m, 12 ft·lb)

Transmission Case Oil

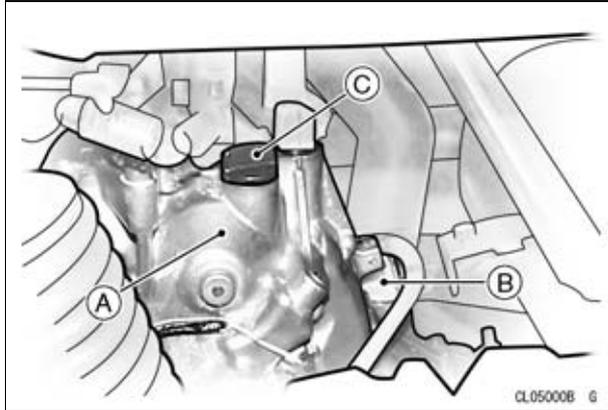
In order for the transmission, differential, pinion, and ring gears to function properly, check the oil level and change the oil in accordance with the Periodic Maintenance Chart.

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, causing loss of control. To prevent seizure, check the transmission case oil according to the periodic maintenance chart.

Oil Level Inspection (KAF400A/B)

- 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.

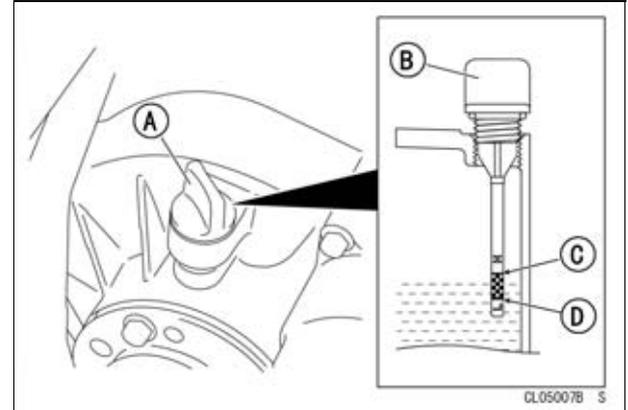


- A. Transmission Case
- B. Dipstick
- C. Oil Filler Plug

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

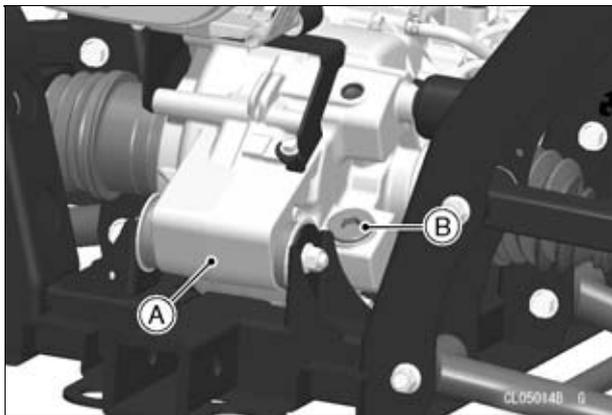
○ Use the same type and brand of oil that is already in the transmission case.

Oil Level Inspection (KAF1000B/E)

- Park the vehicle on level ground.

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- Remove the oil filler cap and O-ring.

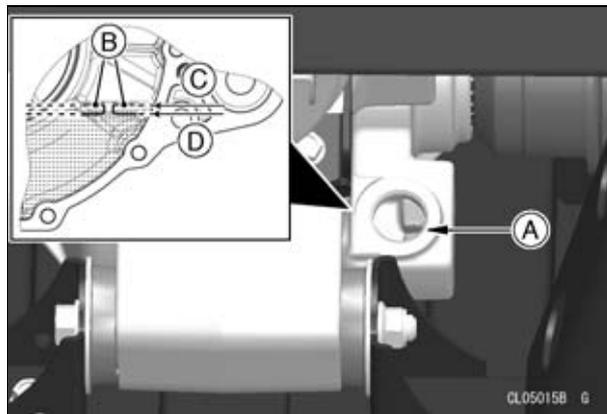


- A. Transmission Case
- B. Oil Filler Cap and O-ring

NOTICE

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

- Check the oil level view from the slit of the rib. The oil level should be between the high and low levels on the rib as shown.



- A. Slit
- B. Rib
- C. High Level
- D. Low Level

- 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.

NOTE

- Use the same type and brand of oil that is already in the transmission case.
- When adding oil, do not exceed the high level of rib.
- Replace the O-ring with a new one, and apply grease to it.

- Install the oil filler cap with the new O-ring and tighten it to the specified torque.

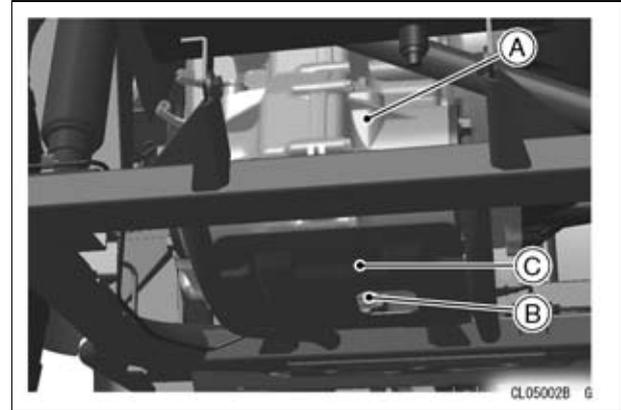
Tightening Torque

Transmission Case Oil Filler Cap:
20 N·m (2.0 kgf·m, 15 ft·lb)

Oil Change (KAF400A/B)

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.

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⚠ 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

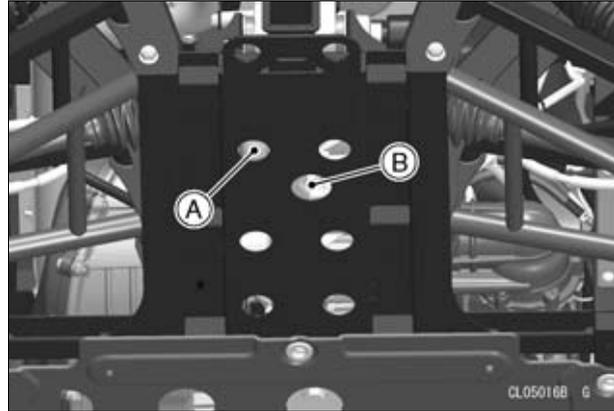
KAF400A:	2.4 L (2.5 US qt)
KAF400B:	2.2 L (2.3 US qt)

- Install the filler plug and dipstick.

Oil Change (KAF1000B/E)

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, place an oil pan beneath the transmission case.
- Remove the drain bolt and gasket.



A. Transmission Case
B. Oil Drain Bolt and Gasket

⚠ 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.

- Remove the oil filler cap and O-ring.

⚠ 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, replace the gasket with a new one.
- Install the drain bolt with the new gasket and tighten it to the specified torque.

Tightening Torque

Transmission Case Oil Drain Bolt:
20 N·m (2.0 kgf·m, 15 ft·lb)

- Fill the transmission case to the high level on the rib with a high quality oil as specified in the table.

Transmission Case Oil

Capacity	2.00 L (2.1 US qt)
Type	API "GL-5" Hypoid gear oil
Viscosity	above 5°C (41°F) SAE 90 below 5°C (41°F) SAE 80

- Replace the O-ring with a new one, and apply grease to it.
- Install the oil filler cap with the new O-ring and tighten it to the specified torque.

Tightening Torque

Transmission Case Oil Filler Cap:
20 N·m (2.0 kgf·m, 15 ft·lb)

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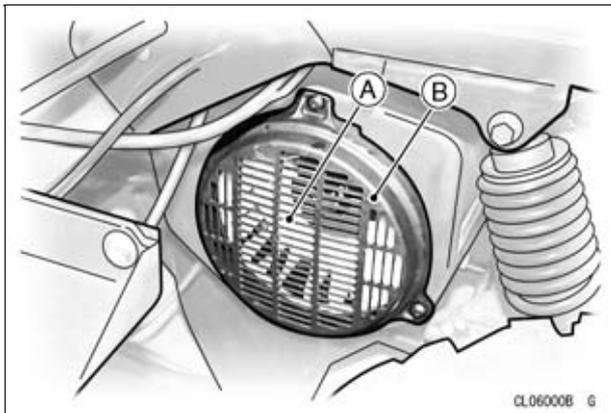
Cooling Fan (KAF400A/B)

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

Cooling System (KAF1000B/E)

⚠ WARNING

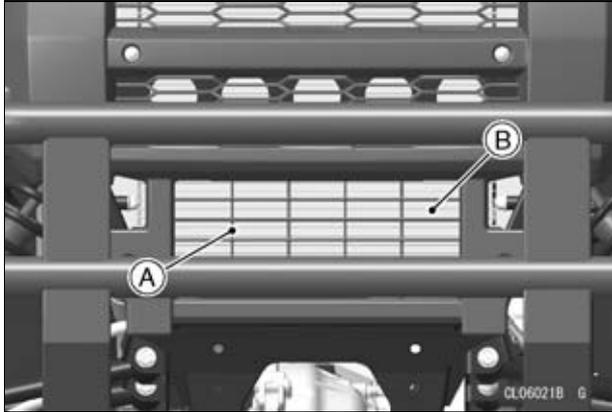
The cooling system is pressurized and can get extremely hot during normal operation and cause serious burns. To prevent burns, do not touch the radiator when it is hot. Do not attempt to open the radiator cap when hot since steam and hot coolant can forcefully erupt when the cap is even loosened slightly.

Radiator and Cooling Fan

Check and clean the screen and radiator fins for obstruction by insects or mud in accordance with the Periodic Maintenance Chart. In dusty areas, the radiator should be cleaned more frequently than the recommended interval.

⚠ WARNING

To avoid injury, keep your hands and clothing away from the fan blades at all times.



A. Screen
B. Radiator

- Clean the screen, and radiator fins of any obstructions with a stream of low-pressure water.
- If insects or mud can not be completely removed, it should be cleaned by an authorized Kawasaki dealer.

NOTICE

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

Coolant

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

NOTE

- A permanent type of antifreeze is installed in the cooling system when shipped. It is colored green and contains ethylene glycol. It is mixed at 50% with water and has a freezing point of -35°C (-31°F).

Coolant Level Inspection

- Situate the vehicle on level ground.
- Remove the front access cover. Refer to the "Front Access Cover" section in the "GENERAL INFORMATION" chapter.
- Check the coolant level through the coolant level gauge on the reserve tank. The coolant level should be between the "F" (Full) and "L" (Low) marks.

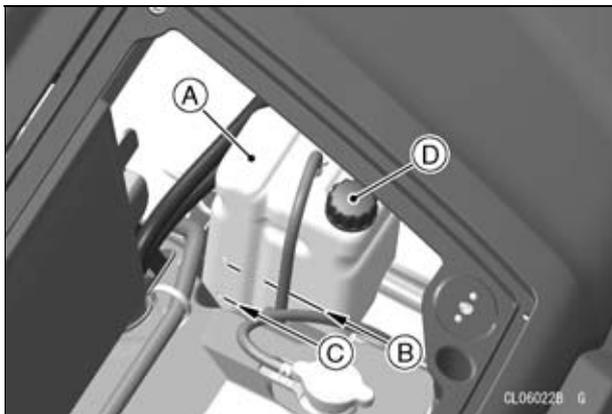
NOTE

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

Coolant Capacity

6.1 L (6.4 US qt)

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- A. Reserve Tank
- B. "F" (Full) Mark
- C. "L" (Low) Mark
- D. Cap

- If the amount of coolant is insufficient, unscrew the cap from the reserve tank and add coolant through the filler opening to the "F" (Full) mark. Install the cap.

Recommended Coolant Solution

Coolant Mixture Ratio:

Water 50% : Antifreeze 50% (1 : 1)

Recommended Antifreeze:

Permanent type antifreeze (ethylene glycol plus corrosion and rust inhibitor chemicals for aluminum engines and radiator).

NOTE

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

NOTICE

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

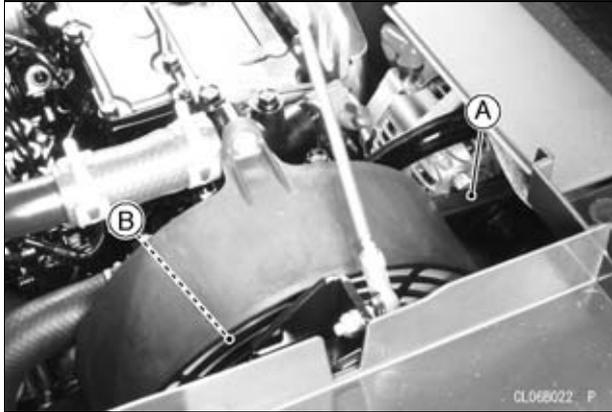
Coolant Change

Have the coolant changed by an authorized Kawasaki dealer.

Cooling Fan Belt

The fan belt becomes loose and may crack after a period of use. Inspect it in accordance with the Periodic Maintenance Chart. It may break if operated without maintenance.

Inspection should be done by an authorized Kawasaki dealer.



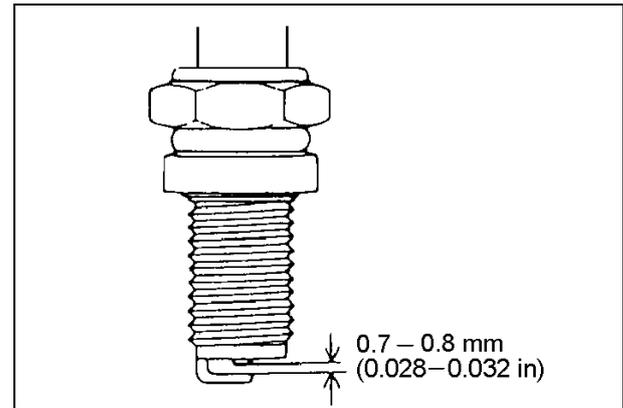
A. Cooling Fan Belt
B. Cooling Fan

Spark Plug (KAF400A/B)

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, clean it. The plug may also be cleaned using a high flash-point solvent and a nonmetal brush (nylon etc.). 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.



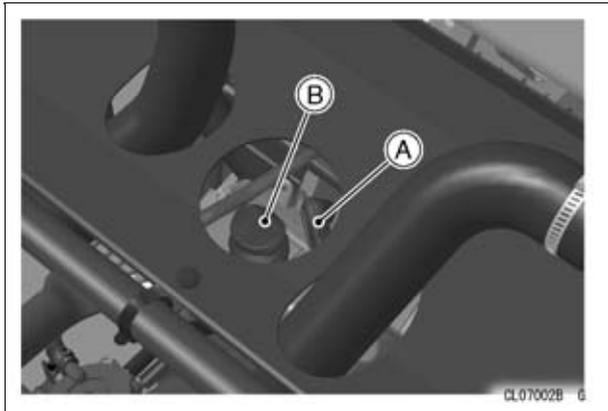
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Spark Plug

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 (Engine Cold)

Intake	mm (in.)
Exhaust	mm (in.)

NOTE

- Valve clearance values are shown in your English OM titled "Valve Clearance" section of "MAINTENANCE AND ADJUSTMENT" chapter. Refer to the relevant page and copy those values into the space provided in this page.

Engine Air Cleaner

(KAF400A/B) A clogged engine air cleaner restricts the engine's air intake, increasing fuel consumption, reducing engine power, and causing spark plug fouling.

(KAF1000B/E) A clogged engine air cleaner restricts the engine's air intake, increasing fuel consumption, reducing engine power.

(KAF400A/B)

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.

(KAF1000B/E)

WARNING

A clogged air cleaner may allow dirt and dust to enter the fuel injection system 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.

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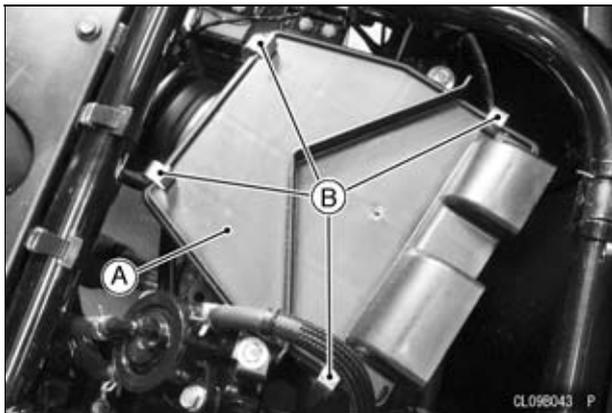
NOTICE

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 element should be cleaned more frequently than the recommended interval.

Element Removal (KAF400A/B)

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



A. Air Cleaner Housing Cover
B. Snaps

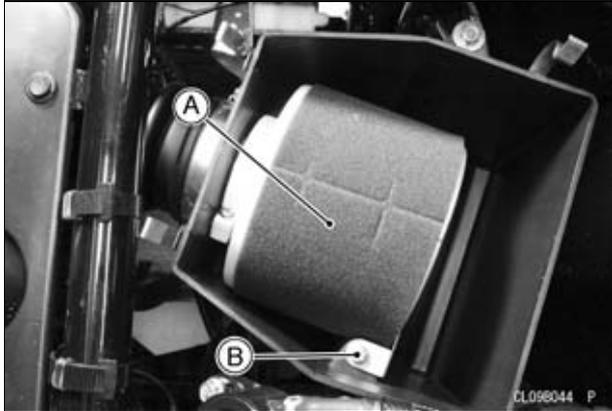
- Remove the screw and pull the air cleaner element out of the housing.
- Push a clean, lint-free towel into the air cleaner housing to keep dirt or other foreign material from entering.

⚠ 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

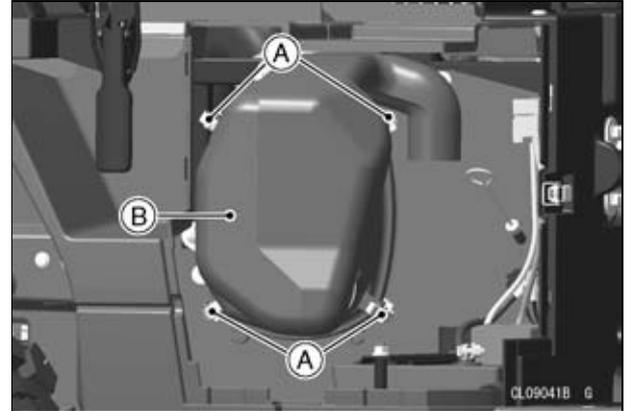
- *Element installation is performed in the reverse order of removal.*
- *Install the housing cover with its snaps.*

Element Removal (KAF1000B/E)

- Remove the battery cover (see Battery Removal).

NOTE

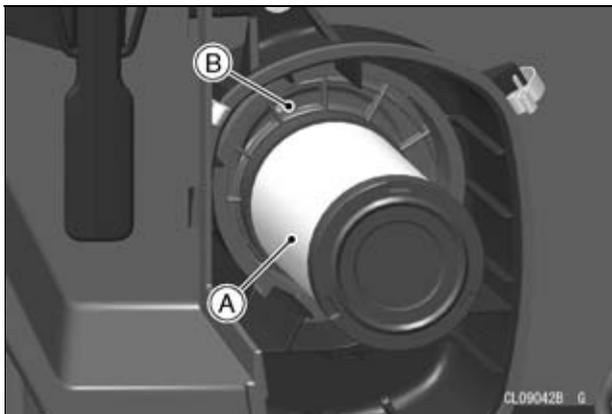
- *If there is dust or mud around the battery and air cleaner housing, clean them using compressed air.*
- Pull up the snaps and remove the air cleaner housing cap.



- A. Snaps
- B. Air Cleaner Housing Cap

- Pull the air cleaner element and adapter out of the housing.
- Remove the element from the adapter.

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A. Element
B. Adapter

- 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 fuel injection system, the throttle may stick or become inoperable resulting in a hazardous operating condition.

NOTICE

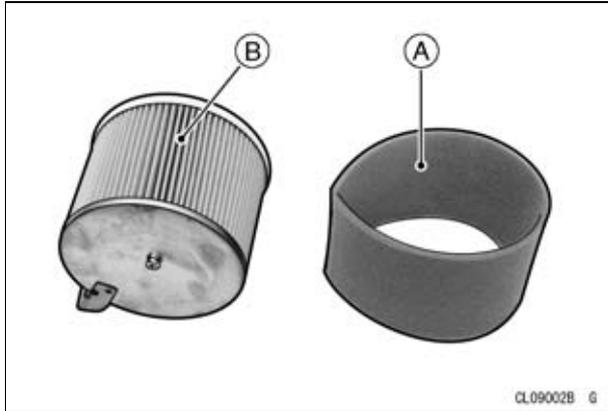
If dirt gets into the engine, excessive engine wear and possible engine damage may occur.

Element Cleaning (KAF400A/B)

- 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

Element Cleaning (KAF1000B/E)

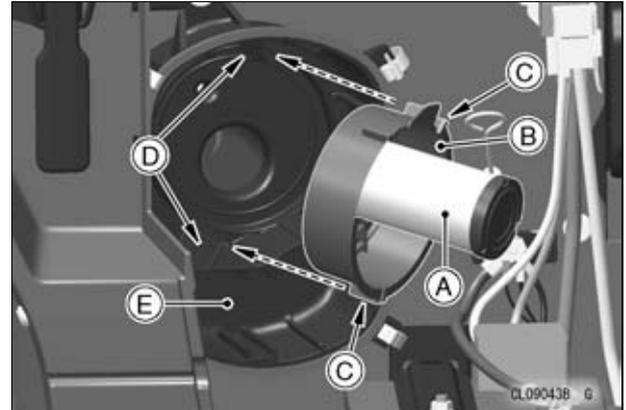
- Remove the element (see Element Removal).
- Clean the paper element by tapping it lightly to loosen dust.
- Blow away the remaining dust by applying compressed air from the inside to the outside (from the clean side to the dirty side).
- Inspect the element material for damage. If any part of the element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

Element Installation (KAF1000B/E)

- If there is dust and mud in the air cleaner housing, blow out the inside of the air cleaner housing with compressed air. Be sure the air intake is

completely sealed with a clean cloth or other plug when air blowing.

- Remove the cloth or plug in the air intake.
- Install the element to the adapter.
- Fit the grooves of the adapter to the tabs of the air cleaner housing.



A. Element
B. Adapter
C. Grooves
D. Tabs
E. Air Cleaner Housing

- Install the air cleaner housing cap.
- Hold the air cleaner housing cap by snaps securely.
- Clean the inside of the battery cover and install it (see Battery Installation).

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Dust and/or Water Inspection (KAF400A/B)

- 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

(KAF400A/B)

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.

(KAF1000B/E)

This vehicle is equipped with a spark arrester. It must be properly maintained to ensure its efficiency. Clean the spark arrester in accordance with the Periodic Maintenance Chart.

 WARNING

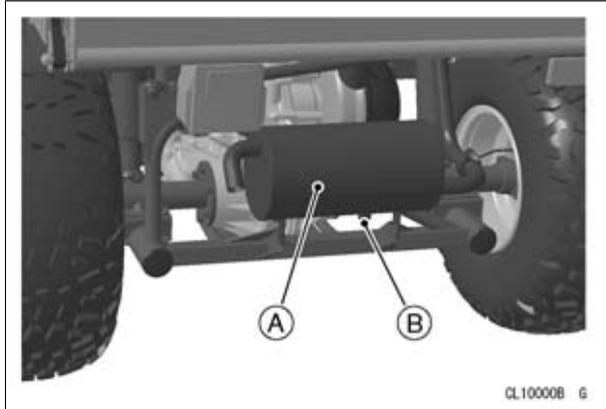
An incorrectly installed spark arrester can emit sparks and cause a fire. Be sure the spark arrester and muffler are installed securely.

Spark Arrester Cleaning (KAF400A/B)

⚠ 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. Spark Arrester (inside the muffler)
- B. Drain Plug

- 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.

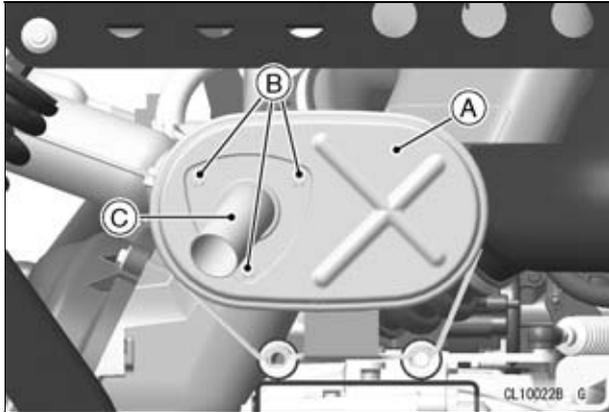
Spark Arrester Cleaning and Inspection (KAF1000B/E)

⚠ 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 spark arrester mounting bolts.
- Remove the spark arrester and gasket.

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- A. Muffler
- B. Spark Arrester Mounting Bolts
- C. Spark Arrester

- Clean the spark arrester in a bath of high flash-point solvent and if necessary use a fine wire brush to gently remove any particles in the screen.



A. Spark Arrester Screen

- Inspect the spark arrester screen. If it is damaged, replace the spark arrester.
- In an open area away from combustible materials, start the engine with the transmission in neutral.

WARNING

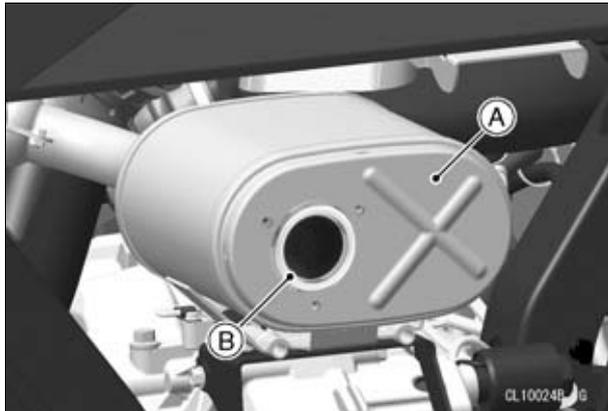
Hot carbon particles are emitted when the spark arrester is cleaned and can cause a fire resulting in severe burns and damage. Do not clean the spark arrester or run the engine with the spark arrester disassembled near combustible materials.

- 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.
- Replace the gasket with a new one.
- Install the new gasket and paste it on the muffler with grease before installing the spark arrester.



A. Muffler
B. Gasket

- Install the spark arrester in place and tighten the spark arrester mounting bolts to the specified torque.

Tightening Torque

Spark Arrester Mounting Bolts:
13 N·m (1.3 kgf·m, 115 in·lb)

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Throttle Pedal

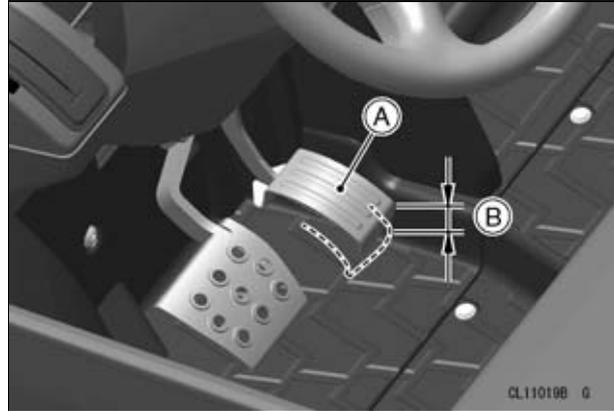
If the throttle pedal has excessive play due to either cable stretch or misadjustment, it will cause a delay in throttle response, especially at low engine speed. Also, the throttle may not open fully. If the throttle pedal has no play, the throttle may be hard to control, and the idle speed may be erratic.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

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 ~ mm (~ in.).

NOTE

○ *Free play values are shown in your English OM titled “Throttle Pedal” section of “MAINTENANCE AND ADJUSTMENT” chapter. Refer to the relevant page and copy those values into the space provided in this page.*

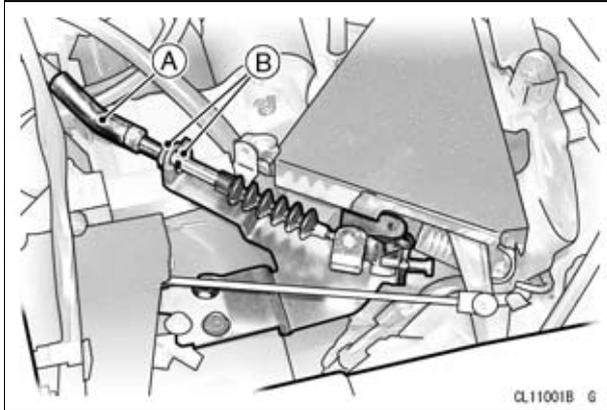


A. Throttle Pedal

B. ~ mm (~ in.)

Throttle Pedal Play Adjustment (KAF400A/B)

- 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.



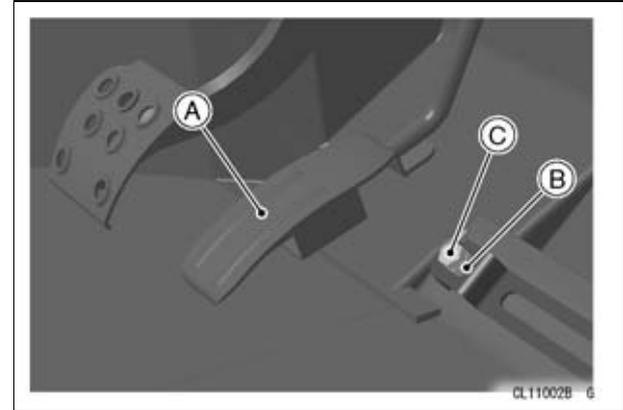
A. Throttle Cable
B. Mounting Nuts

- Tighten the mounting nuts securely.

Throttle Pedal Stop Position Adjustment (KA-F400A/B)

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

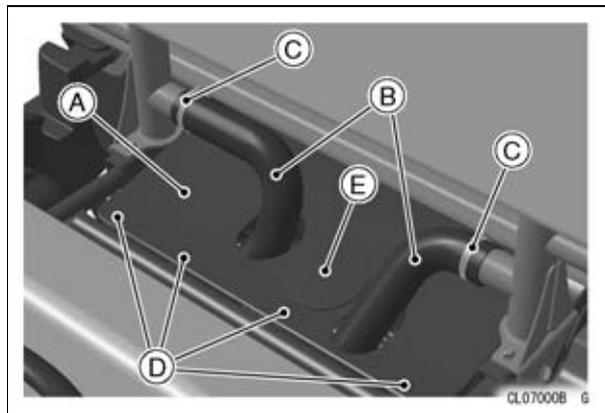
Choke Knob (KAF400A/B)

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.

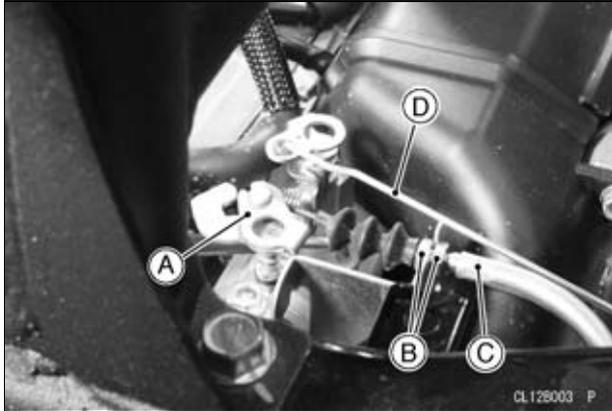
Inspection

- 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.



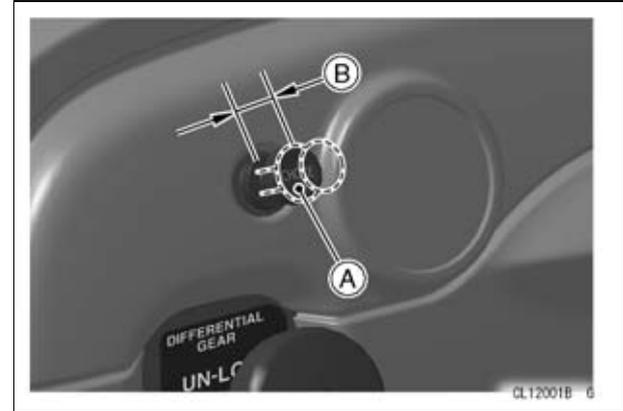
- A. Guard Plate**
- B. Air Intake Ducts (2 p.c.s.)**
- C. Clamps**
- D. Quick Rivets (6 p.c.s.)**
- E. Cap**

- 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.

Idle Adjustment (KAF1000B/E)

Idle speed should be checked and adjusted periodically by an authorized Kawasaki dealer in accordance with the periodic Maintenance Chart.

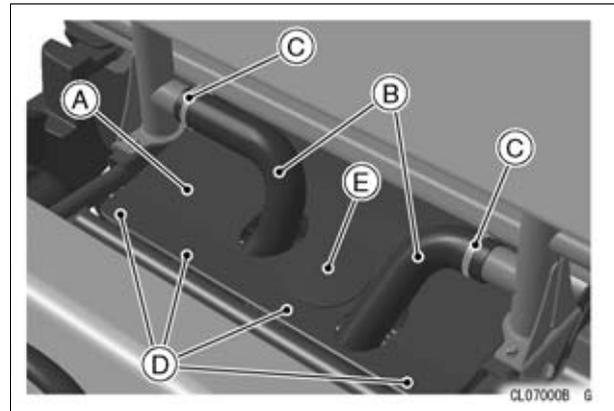
Carburetor (KAF400A/B)

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.



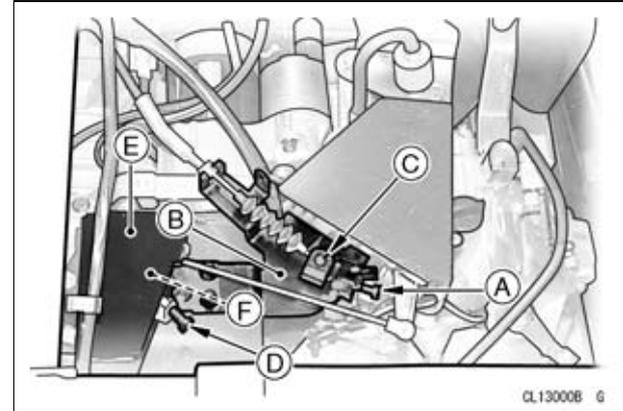
- A. Guard Plate**
- B. Air Intake Ducts (2 p.c.s.)**
- C. Clamps (6 p.c.s.)**
- D. Quick Rivets (6 p.c.s.)**
- E. Cap**

- 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 accel lever stopper screw on the base plate above the transmission case and the idle adjusting screw on the engine.

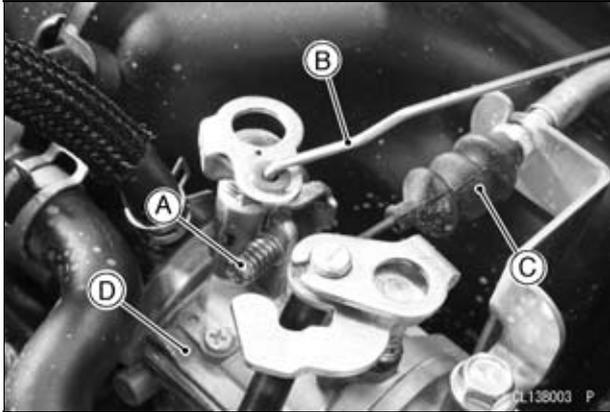


- A. Accel Lever Stopper Screw**
- B. Base Plate**
- C. Accel Lever**
- D. Idle Adjusting Screw**
- E. Cover Plate**
- F. Link Lever**

- 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)

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- 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 accel lever stopper screw until it keeps clearance by 1 mm to the accel 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.

High Altitude Use

The original carburetor settings for this vehicle are best for seal 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. 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.

Fuel System (KAF400A/B)

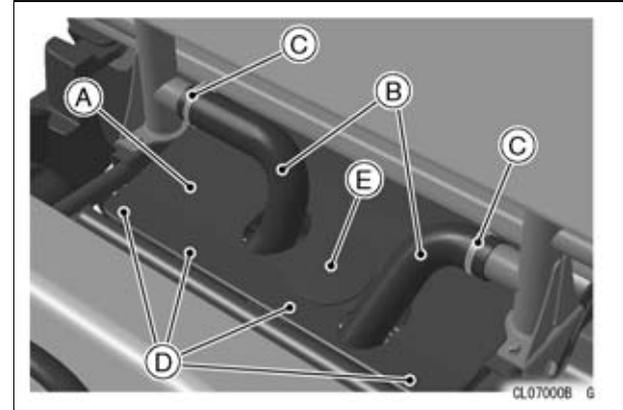
Accumulation of moisture or sediment in the fuel system can restrict the flow of fuel and cause carburetor malfunction. The system should be checked in accordance with the Periodic Maintenance Chart.

⚠ 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

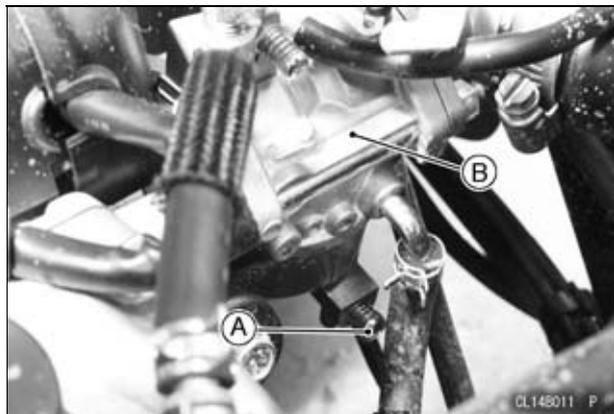
- Lift the cargo bed to support it with the hook.
- Raise the seat.
- Remove the guard plate by releasing the two air intake ducts and the 6 quick rivets.



- 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.

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A. Drain Screw
B. Carburetor

- Tighten the drain screw.

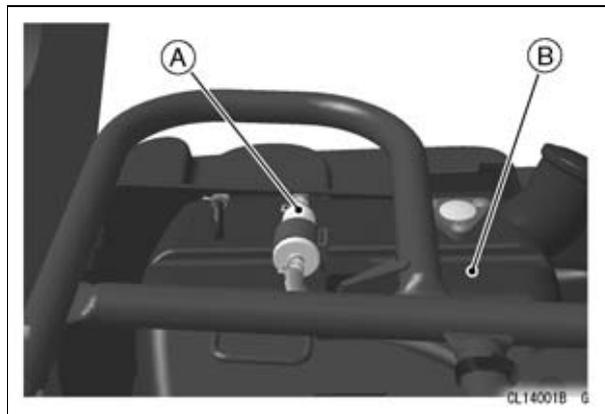
NOTE

○ 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

Fuel Hose (KAF1000B/E)

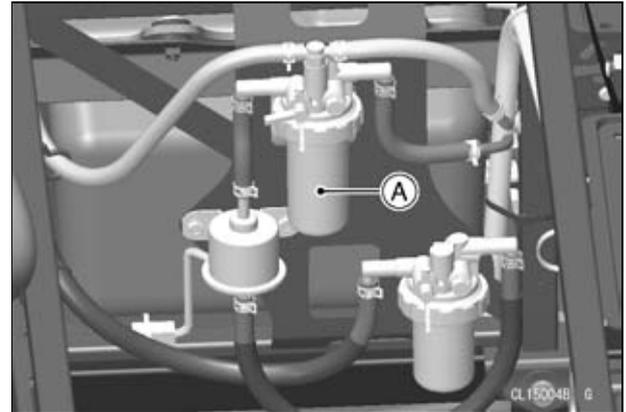
Fuel hose and connections should be checked and replaced periodically by an authorized Kawasaki dealer in accordance with the Periodic Maintenance Chart.

Fuel Filter (KAF1000B/E)

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

Fuel Filter Inspection

- Remove the seat (see Front Seat Removal).
- Inspect the fuel filter element for contamination.



A.Fuel Filter

- If the filter element is contaminated, have the fuel filter cleaned or replaced by an authorized Kawasaki dealer.

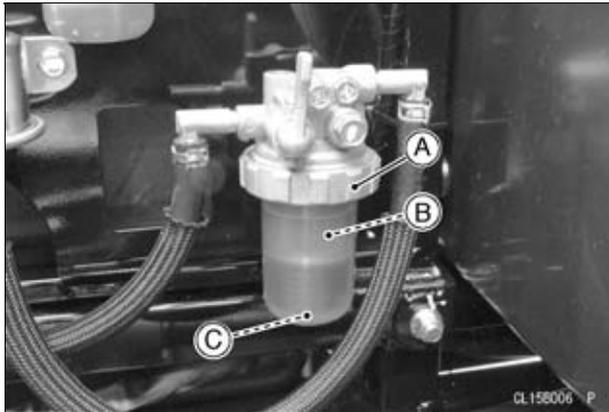
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Water Separator (KAF1000B/E)

Accumulation of moisture or sediment in the fuel system can restrict the flow of fuel and cause injection pump damage. The water separator should be checked in accordance with the Periodic Maintenance Chart.

Water Separator Inspection

- Remove the seat (see Front Seat Removal).
- Inspect the water separator to see if water is accumulated at the bottom of the water separator cup and to see if the filter element is contaminated.



- A. Water Separator**
- B. Filter Element**
- C. Float Ring**

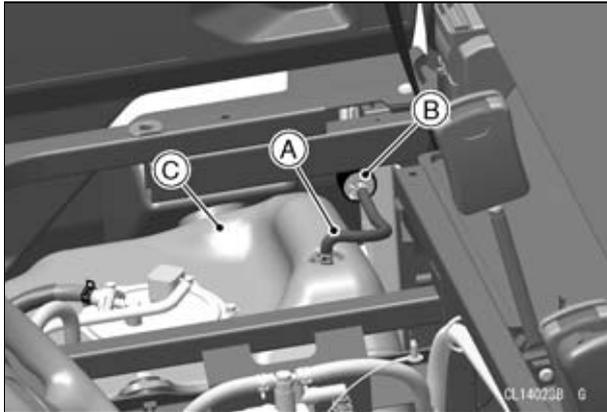
NOTE

- *The red float ring in the cup is at the bottom of the separator cup when there is little water in it. When water accumulates, the float ring floats on the water top level.*
- If there is water in the cup or the filter element is contaminated, have the water separator or the filter element cleaned by an authorized Kawasaki dealer.

Fuel Tank Vent (KAF1000B/E)

The fuel tank vent hoses must be routed as specified.

The engine may stall or lose power if the fuel tank vent is plugged or if the vent hose is pinched. Inspect the vent hose before riding and whenever the engine seems to lose power. If the fuel tank is full but the engine feels as if it is running out of fuel, check the vent and vent hose.

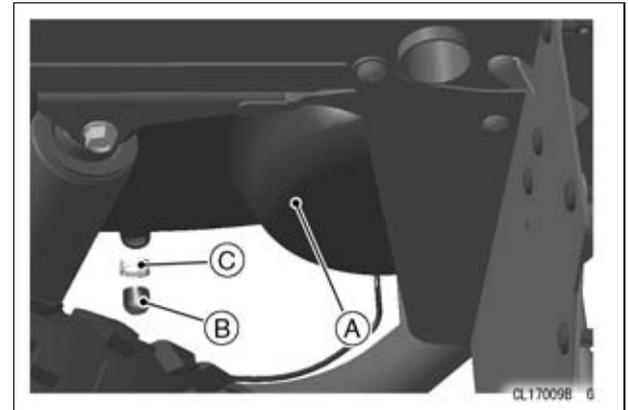


- A. Fuel Tank Vent Hose
- B. Check Valve
- C. Fuel Tank

Belt Drive Torque Converter (KA-F400A/B)

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.

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High Altitude Use

The original belt drive torque converter settings of this vehicle are best for sea 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 this 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 (KAF400A/B)

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

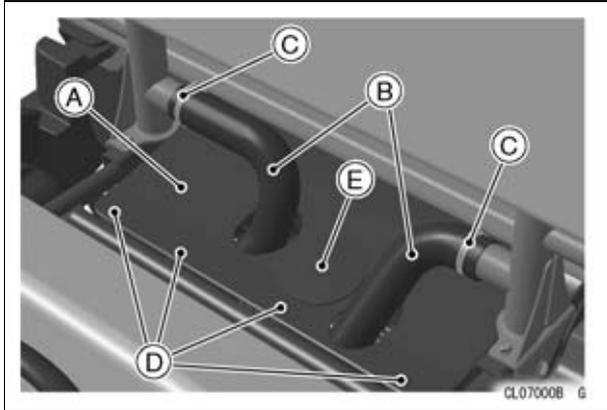
NOTICE

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.

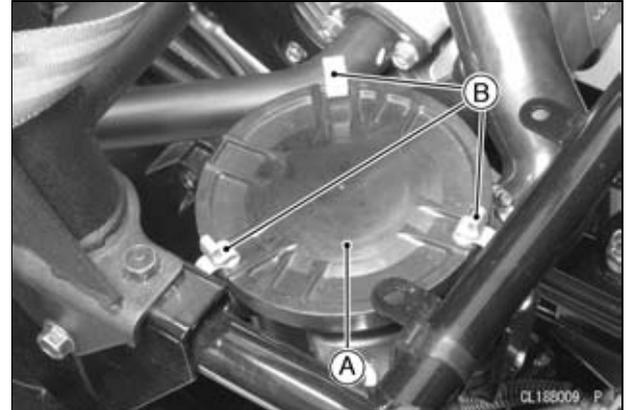
Element Removal

- 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.



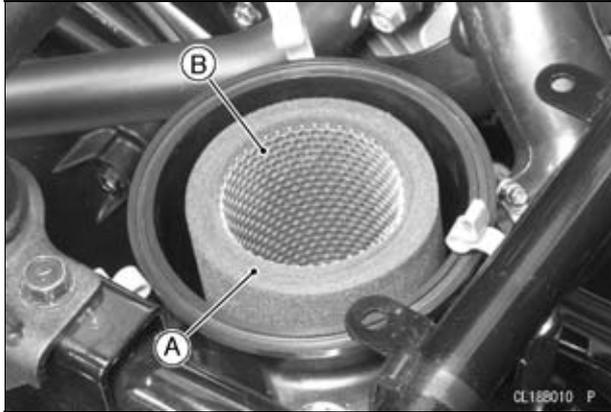
- A. Guard Plate**
- B. Air Intake Ducts (2 p.c.s.)**
- C. Clamps**
- D. Quick Rivets (6 p.c.s.)**
- E. Cap**

- 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**

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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

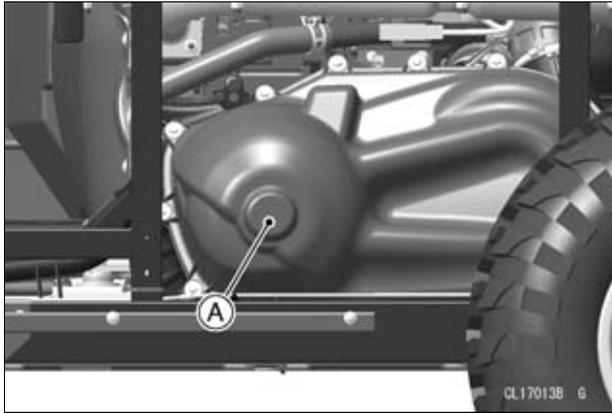
○ *Replace the foam element after cleaning it five times or if it is damaged.*

- 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.

Belt Drive Transmission (CVT) (KAF1000B/E)

This vehicle is equipped with a belt-driven Continuously Variable Transmission (CVT). This automatic drive system, although simple to operate, does require periodic inspection since the drive belt wears with normal use.

Inspection should be done by an authorized Kawasaki dealer.



A. Belt Drive Transmission (CVT)

Periodic Drive Belt Inspection Requirements

Drive belt wears with normal use. Inspection of the drive belt is required at least every 100 hours of vehicle use or 2 000 km (1 200 mile) whichever

comes first. More frequent inspection is necessary if the vehicle is subjected to hard usage.

IMPORTANT INFORMATION

Neglect, abuse, or failure to maintain the transmission can result in a severely worn or damaged drive belt locking up the transmission and wheels. Inspect the drive belt at least every 100 hours of vehicle use or 2 000 km (1 200 mile) whichever comes first, since drive belt wear with normal use. More frequent inspection is necessary if the vehicle is subjected to hard usage such as pulling a trailer, operating in mud or deep water, or in extremely dusty conditions. If excessive belt slippage occurs, do not drive the vehicle until damaged components are repaired.

Causes of accelerated Belt Wear

Avoid these hard usage conditions to obtain maximum belt life and prevent accelerated belt wear and deterioration.

- Operating the vehicle in high range while climbing hills, carrying heavy loads, or pulling a trailer.
- Exceeding maximum vehicle load or trailer weight.
- Operating in mud or water deeper than recommended.
- Operating in extremely dusty conditions.
- Continued operation with excessive belt slippage.
- Failure to apply the brake controls while descending hills.

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Indications of Excessive Belt Slippage

Excessive slippage will accelerate belt wear and lead to failure. Recognize these symptoms of excessive belt slippage. If excessive slippage occurs, do not continue to drive the vehicle until all damaged components are repaired.

- Smell of burning rubber.
- Visible white smoke.
- Sluggish initial acceleration or loss of power.
- Engine rpm is higher for the same vehicle speed.
- Engine vibration.

When Swamped

If a large amount of water accidentally has entered the CVT housing, it will cause drive belt slippage and loss of power. If this occurs, consult an authorized Kawasaki dealer.

Brakes

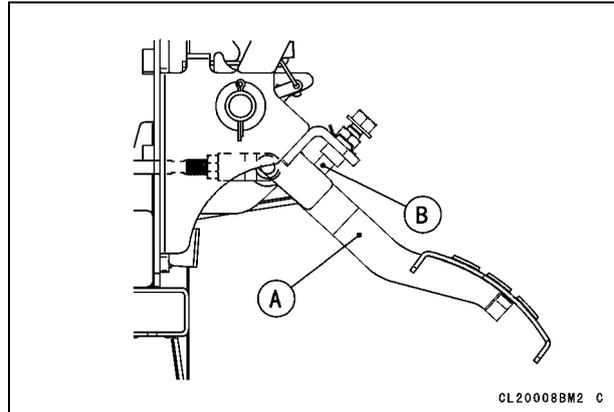
The vehicle is equipped with hydraulically activated disc brakes on all four wheels.

Brake Pedal

Brake Pedal Free Play Inspection

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

- **(KAF1000B/E)** Before the brake pedal free play inspection, check that the brake pedal contacts with the stopper.



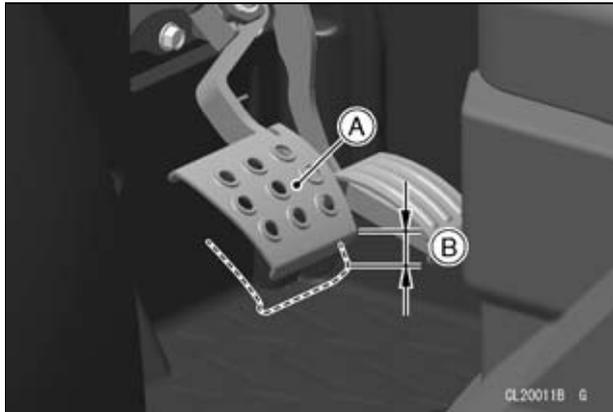
A. Brake Pedal

B. Stopper

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

NOTE

○ Free play values are shown in your English OM titled “Brakes” section of “MAINTENANCE AND ADJUSTMENT” chapter. Refer to the relevant page and copy those values into the space provided in this page.



A. Brake Pedal

B. ~ mm (~ 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 (KAF400A/B)

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 brake fluid reservoir and change the brake fluid. The brake fluid should also be changed if it becomes contaminated with dirt or water.

Fluid Requirement

(KAF400A/B) Use heavy-duty brake fluid only from a fresh, unopened container marked DOT3.

(KAF1000B/E) Use heavy-duty brake fluid only from a fresh, unopened container marked DOT4.

⚠ 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.

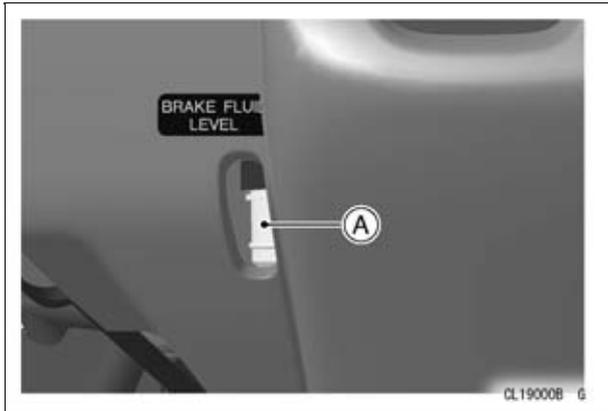
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NOTICE

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

Fluid Level Inspection (KAF400A/B)

- 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.

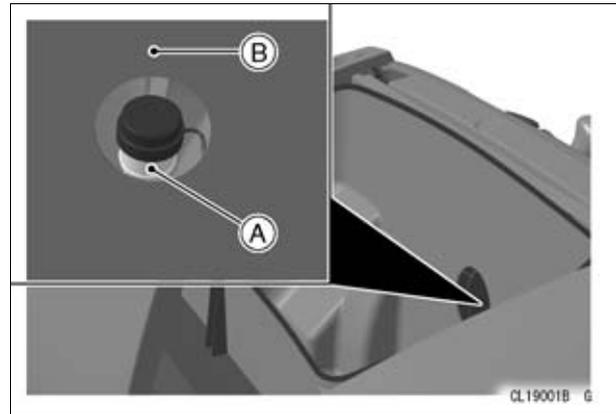


A. Inspection Hole

- 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.

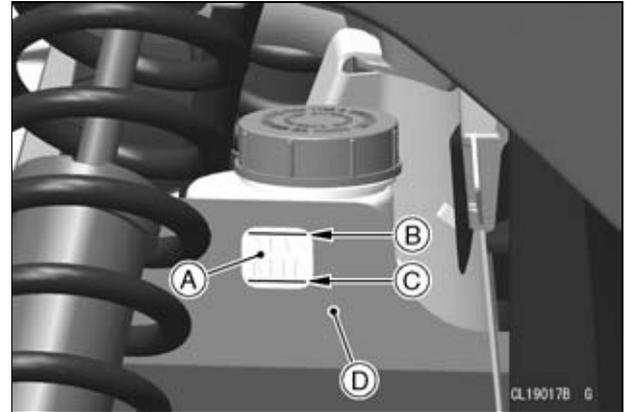
- Apply the brake forcefully for a few seconds and check for fluid leakage around the fittings.

⚠ 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 Level Inspection (KAF1000B/E)

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



- A. Brake Fluid Reservoir**
- B. Upper Level Line (MAX)**
- C. Lower Level Line (MIN)**
- D. Cover**

- If the fluid level is lower than the lower level line, check for fluid leaks in the brake lines and fill the reservoir to the upper level line.

⚠ 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.

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- 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 Disc and Brake Pad (KAF1000B/E)

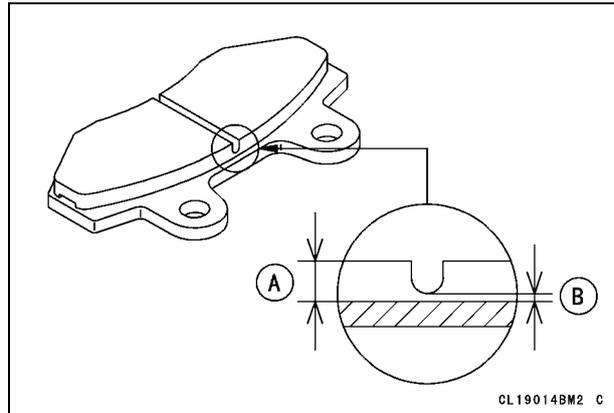
Disc and brake pad wear is automatically compensated for and has no effect on the brake pedal action. There are no parts that require adjustment on the brake.

⚠ 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.

Brake Pad Wear Inspection

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



A. Lining Thickness

B. 1 mm (0.04 in.)

Brake Hoses (KAF1000B/E)

Brake hoses, pipes, and other components should be checked and replaced periodically by an authorized Kawasaki dealer in accordance with the Periodic Maintenance Chart.

Brake Light Switch

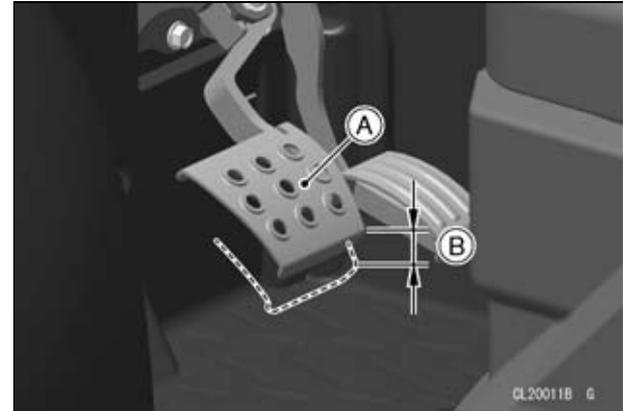
When the brake pedal is depressed, the brake light goes on. The brake light switch should be inspected in accordance with the Periodic Maintenance Chart.

Inspection

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

NOTE

- Value of the pedal traveling is shown in your English OM titled “Brake Light Switch” section of “MAINTENANCE AND ADJUSTMENT” chapter. Refer to the relevant page and copy those values into the space provided in this page.



A. Brake Pedal

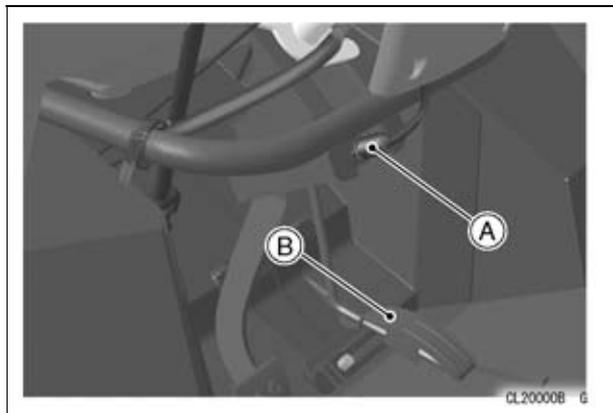
B. mm (in.)

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

Adjustment (KAF400A/B)

- Brake light switch is located above the brake pedal.

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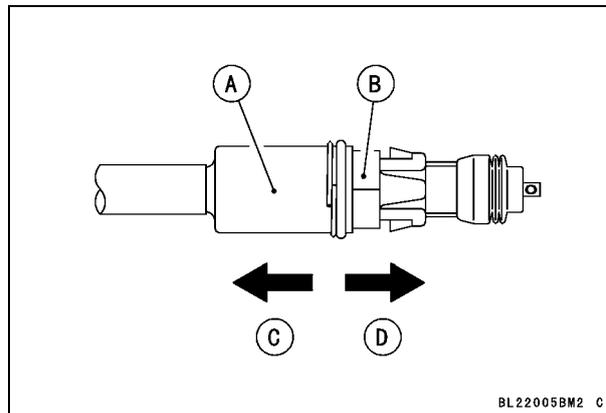


- A. Brake Light Switch
- B. Throttle Pedal

- 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.

Adjustment (KAF1000B/E)

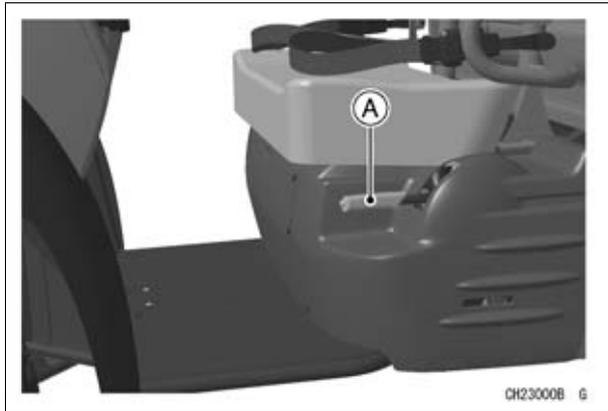
- Adjustment is best performed by an authorized Kawasaki dealer since the brake light switch is hard to adjust.

Parking Brake Lever (KAF400A/B)

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



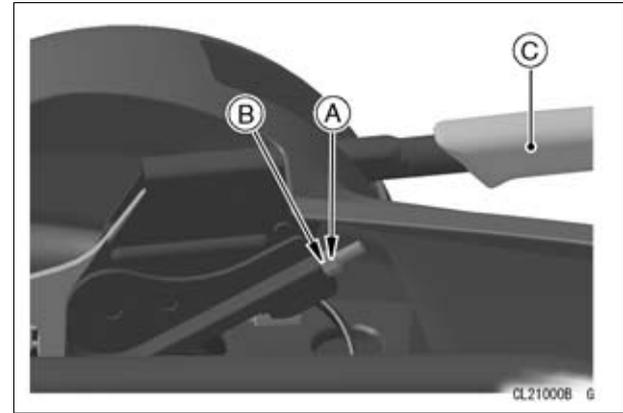
A. Parking Brake Lever

- 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.

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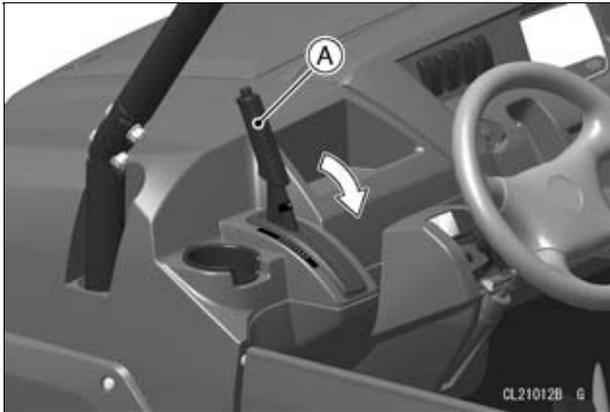
Parking Brake (KAF1000B/E)

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

In accordance with the Periodic Maintenance Chart, check the parking brake as follows.

Parking Brake Lever Inspection

- Pull the parking brake lever to the rear.

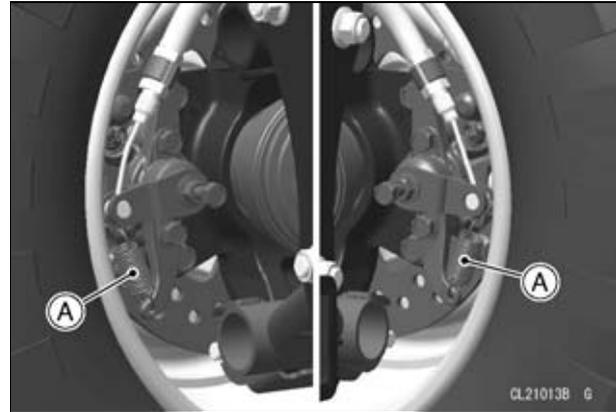


A. Parking Brake Lever

- After 6 to 14 clicks of lever travel, the vehicle should not roll while parked.
- If it does, have the parking brake cable adjusted by an authorized Kawasaki dealer.

Return Spring Inspection

- Visually check the return springs for damage.



A. Parking Brake Lever Return Springs

- If it is damaged, have it replaced with a new one 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.

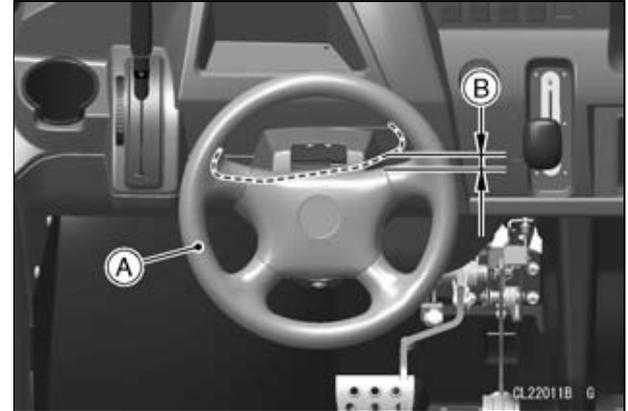
Free Play Inspection

- Park the vehicle on level ground.
- Lightly turn the steering wheel left and right.
- There should be ~ mm (~ in.) of free play.

NOTE

○ Free play values are shown in your English OM titled “Steering Wheel” section of “MAINTENANCE AND ADJUSTMENT” chapter. Refer to the relevant page and copy those values into the space provided in this page.

- 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. Steering Wheel
B. ~ mm (~ in.)

Power Steering System (KAF1000B/E)

Steering may become more difficult than usual for the following reasons:

- The steering wheel was continuously turned or held to the full turn stops with torque applied by operator. In this case the ECU works to protect the system from overheating by stopping the power assisting. Stop turning the steering wheel and wait until the system temperature drops, and the power steering recovers.
- Fuses in the harness may have blown. There are several reasons that the fuses may blow. Refer to the “Fuse” section in this chapter for details.

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- Battery voltage has dropped. Voltage drop can happen when the engine starts; inspect the battery voltage.
- Cables, harness or connectors may have been disconnected. Contact an authorized Kawasaki dealer for service.

NOTE

○ *If the steering becomes irregular or unusual for any reason other than above, have an authorized Kawasaki dealer check the steering and relevant components immediately. In some cases the power steering's neutral position can be affected by an accident or bump.*

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

Wheel Nuts:

N·m (kgf·m, 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 Tire (Tubeless)

Front	
Rear	

Tire Air Pressure (when cold)

Front	
Rear	

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	kPa (kgf/cm ² , 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 vehicle load is kg (lb).

Use a tire pressure gauge to accurately set tire pressure.

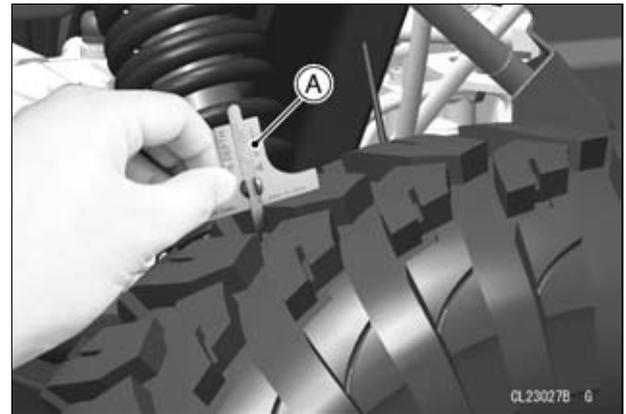
⚠ WARNING

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

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Minimum Tread Depth

mm (in.)

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

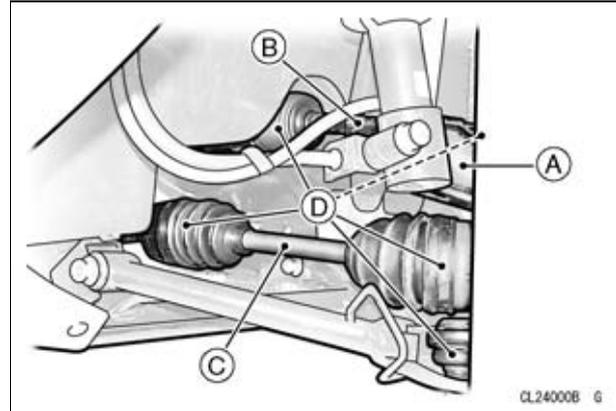
NOTE

○ Information such as wheel nut tightening torque, standard tire names, maximum vehicle load of the MULE, and tire pressures are shown in your English OM titled "Wheels" section of "MAINTENANCE AND ADJUSTMENT" chapter. Refer to the relevant page and copy those values into the space provided in this page.

Joint Boots

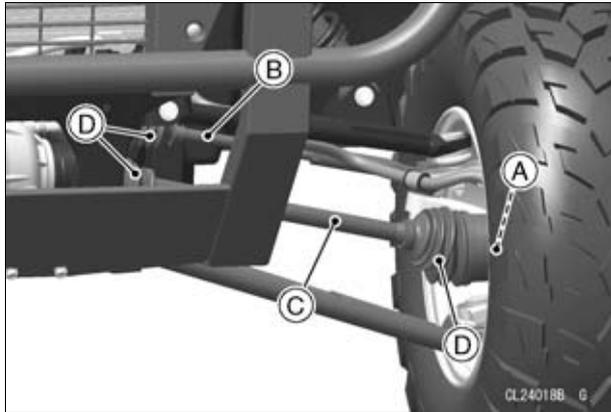
In accordance with the Periodic Maintenance Chart, inspect the joint boots on the front axles (KAF400A, KAF1000B/E), tie-rod ends, steering knuckles, and rear axles (KAF1000B/E) for cracks, holes, damage or deterioration. If there is any one of them, have the joint boot replaced by an authorized Kawasaki dealer.

(KAF400A/B)

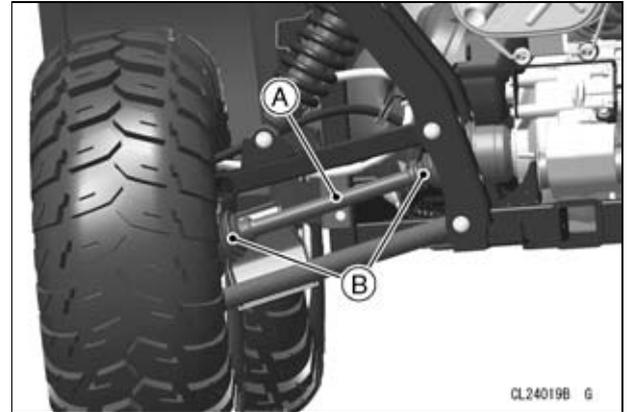


- A. Steering Knuckle**
- B. Tie Rod**
- C. Front Axle (KAF400A)**
- D. Joint Boots**

(KAF1000B/E)



- A. Steering Knuckle
- B. Tie-Rod
- C. Front Axle
- D. Joint Boots



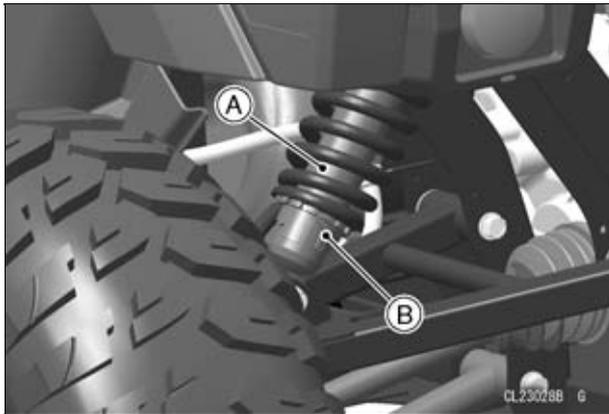
- A. Rear Axle
- B. Joint Boots

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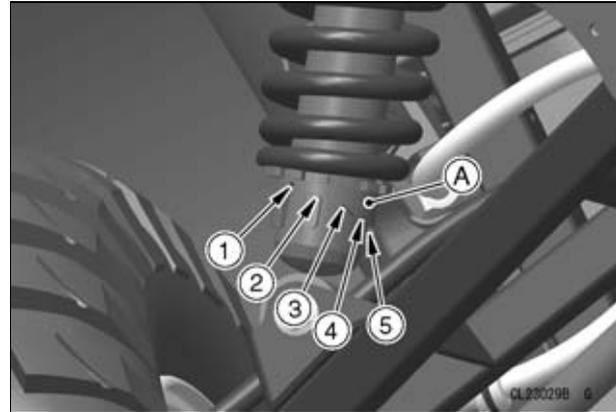
Suspension

Shock Absorber Spring Force Adjustment

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



A. Shock Absorber (Rear)
B. Spring Adjusting Sleeve



A. Spring Adjusting Sleeve (Turn with a hook wrench)

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 spring adjusting sleeves on the shock absorbers to the desired position.

**(KAF400A/B)
Spring Action**

Position	Spring Force	Setting	Load	Sur-face	Speed
1	Weak	Soft	Light	Good	Low
2	↑	↑	↑	↑	↑
3					
4	↓	↓	↓	↓	↓
5	Strong	Hard	Heavy	Bad	High

**(KAF1000B/E)
Spring Action (Front Shock Absorber) Up to 590 kg (1 300 lb) Load**

Position	Spring Force	Setting	Load	Sur-face	Speed
1	Weak	Soft	Light	Good	Low
2 (STD)	↑	↑	↑	↑	↑
3					
4	↓	↓	↓	↓	↓
5	Strong	Hard	Heavy	Bad	High

Spring Action (Front Shock Absorber) 590 ~ 733 kg (1 300 ~ 1 616 lb) Load

Position	Spring Force	Setting	Load	Sur-face	Speed
1	Weak	Soft	Light	Good	Low
2 (STD)	↑	↑	↑	↑	↑
3					
4	↓	↓	↓	↓	↓
5	Strong	Hard	Heavy	Bad	High

Spring Action (Rear Shock Absorber) Up to 590 kg (1 300 lb) Load

Position	Spring Force	Setting	Load	Sur-face	Speed
1	Weak	Soft	Light	Good	Low
2 (STD)	↑	↑	↑	↑	↑
3					
4	↓	↓	↓	↓	↓
5	Strong	Hard	Heavy	Bad	High

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Spring Action (Rear Shock Absorber) 590 ~ 733 kg (1 300 ~ 1 616 lb) Load

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

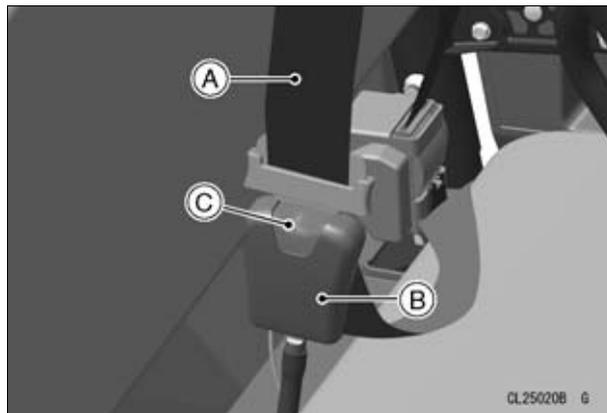
WARNING

Improper 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

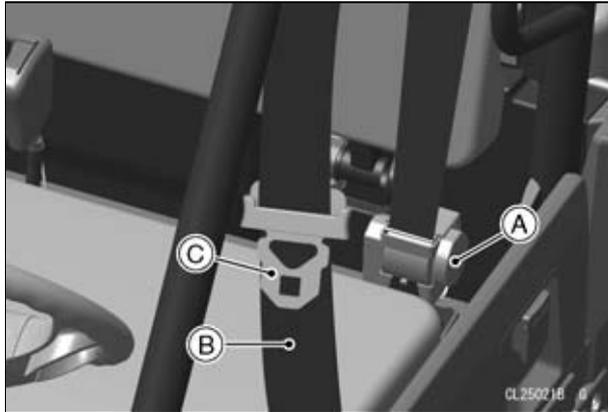
In accordance with the Periodic Maintenance Chart, check that each seat belt functions properly. Push the latch plate into the buckle until it clicks. The latch plate must slide smoothly into the buckle. The click sound indicates it is securely latched. **(KAF1000B/E)** Pull the belt vigorously to make sure the retractor locks the seat belt.



- A. Seat Belt**
- B. Buckle**
- C. Red Button**

(KAF400A/B) 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.

(KAF1000B/E) Push the red button in the buckle to make sure the latch plate is released freely and the belt is wound into the retractor 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.

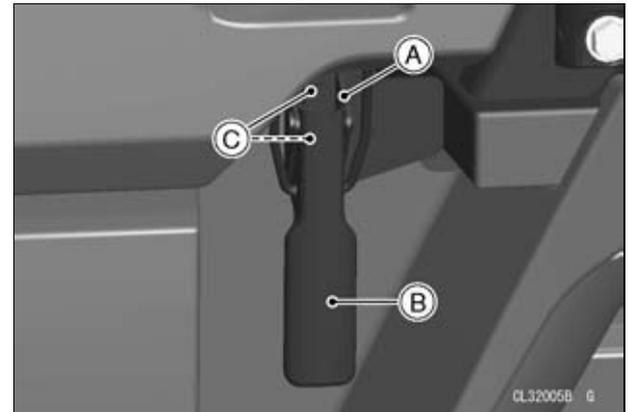


- A. Retractor
- B. Seat Belt
- C. Latch Plate

Cargo Bed Latches (KAF1000B/E)

Depending on the cargo loading and/or passenger riding conditions, latch lever compression needs to be adjusted.

Loosen the latch lever bolts and adjust the position of the latch assembly so that the latch lever will be secured without rattling and tighten the bolts.



- A. Latch Assembly
- B. Latch Lever
- C. Latch Lever Bolts

NOTE

○ Adjustment should be made for both sides.

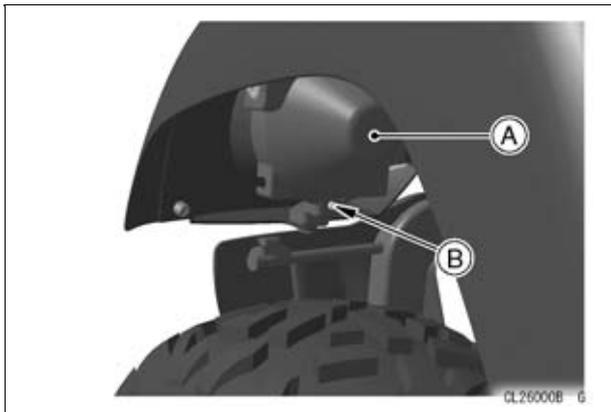
228 MAINTENANCE AND ADJUSTMENT

Headlight Beam

The headlight beams can be adjusted vertically.

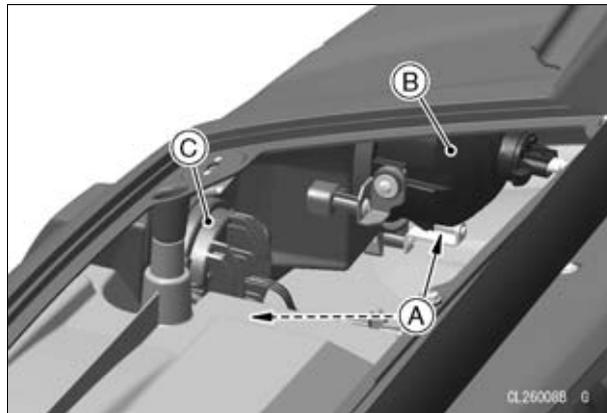
- **(KAF1000B/E)** Remove the front access cover. Refer to the “Front Access Cover” section in the “GENERAL INFORMATION” chapter.
- Turn the adjusting screw on each headlight rim in or out to adjust the headlight vertically.

(KAF400A/B)



- A. Lamp Body (backside)
- B. Adjusting Screws

(KAF1000B/E)



- A. Adjusting Screws
- B. Headlight
- C. LED Sub Headlight

Battery

(KAF400A/B)

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.

⚠ 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. (See Location of Label chapter.)

NOTICE

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

(KAF1000B/E)

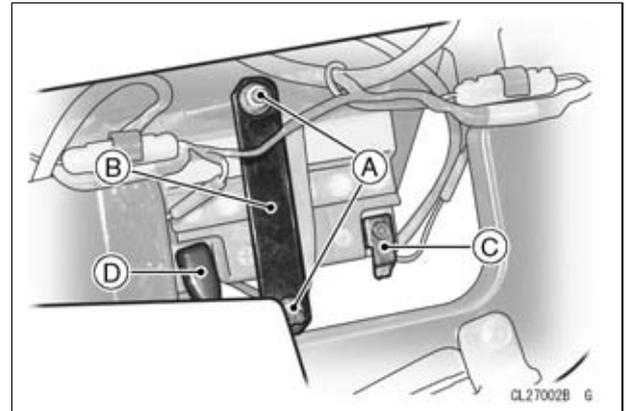
The battery is located under the right end of the rear seat.

⚠ DANGER

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

Battery Removal (KAF400A/B)

- 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

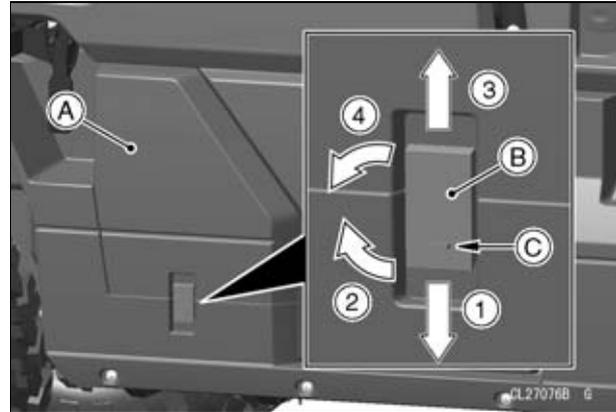
230 MAINTENANCE AND ADJUSTMENT

- 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.

Make	Yuasa Battery
Type	YB14A-A2

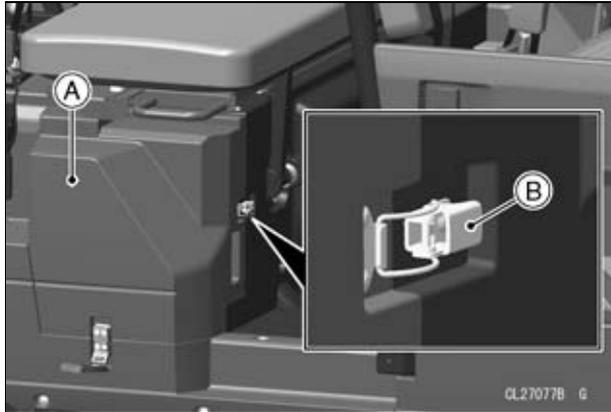
Battery Removal (KAF1000B/E)

- Push the locking tab to clear the hook.
- Unlatch the latch (right side) as shown.



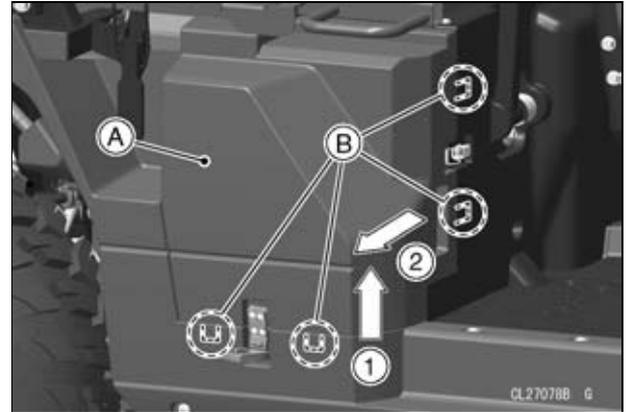
- A. Battery Cover**
- B. Latch**
- C. Locking Tab**
- 1. Push the locking tab.**
- 2. Pull**
- 3. Slide**
- 4. Open**

- Unlatch the latch (front side).



- A. Battery Cover
- B. Latch

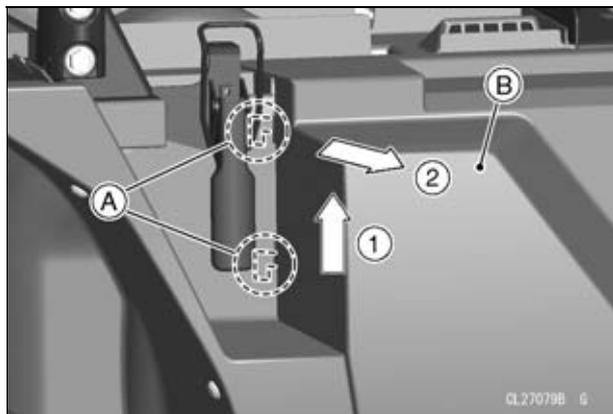
- Clear the tabs of the battery cover as shown.



- A. Battery Cover
- B. Tabs
- 1. Slide
- 2. Pull

- Clear the hooks of the battery cover as shown, and remove the battery cover rightward.

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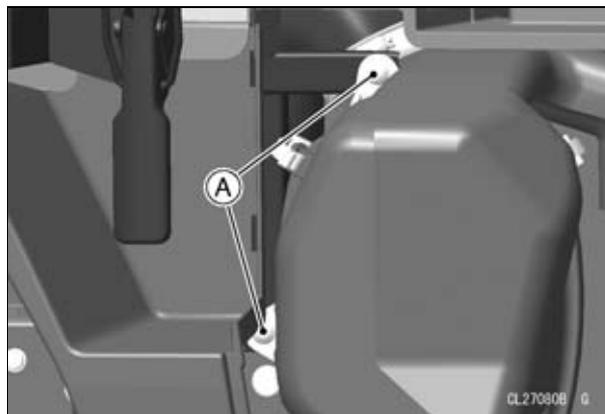


- A. Hooks
- B. Battery Cover
- 1. Slide
- 2. Pull

NOTE

○ If there is dust or mud around the battery and air cleaner housing, clean them using compressed air.

- Remove the screws and washers.

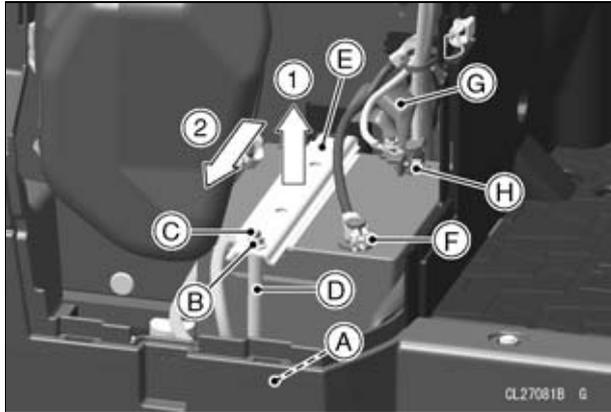


A. Screws and Washers

- Remove the battery holder nut.
- Remove the shaft and collar.
- Remove the battery holder as shown.
- Disconnect the negative (-) cable from the (-) terminal.
- Slide the red cap.
- Disconnect the positive (+) cable from the (+) terminal.

NOTE

○ There is no need to separate the smaller cables clamped with the positive (+) cable.



- A. Band
- B. Battery Holder Nut
- C. Shaft
- D. Collar
- E. Battery Holder
- F. Negative (-) Cable
- G. Red Cap
- H. Positive (+) Cable
- 1. Lift
- 2. Pull

- Take the battery out.
- Clean the battery using a solution of baking soda and water. Be sure that the cable 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 (KAF400A/B)

- 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.

Battery Installation (KAF1000B/E)

- Check that the rubber dampers on the battery holder and the floorboard are properly in place.
- Put the battery in place on the rubber damper.
- Connect the three positive (+) cables to the (+) terminal, and then connect the negative (-) cable to the (-) terminal.
- Put a light coat of grease on the terminals to prevent corrosion.
- Cover the positive (+) terminal with the red cap.

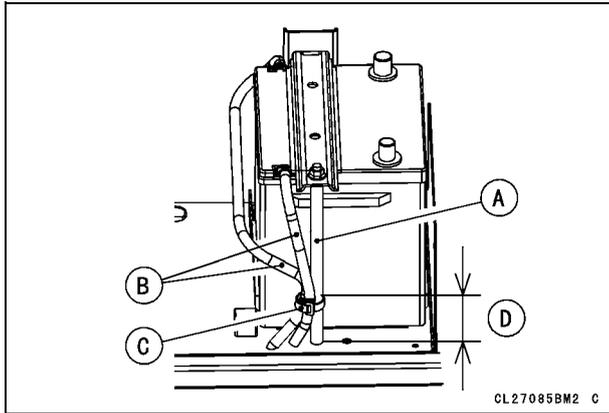
⚠ WARNING

Loose battery cables can create sparks which can cause a fire or explosion resulting in injury or death. Make sure the battery terminal bolts are tightened securely and the cap is installed over the positive (+) terminal.

- Install the battery holder, collar and shaft.
- Tighten the battery holder nut securely.

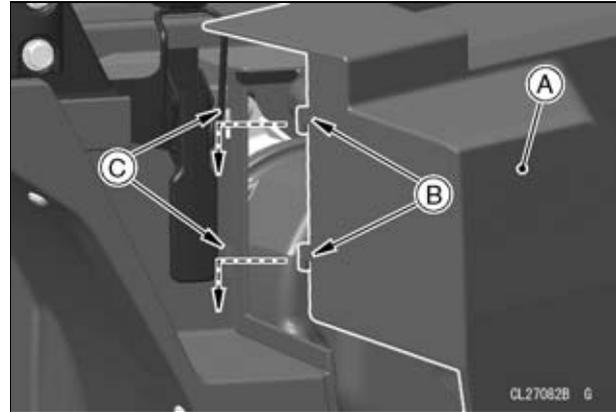
234 MAINTENANCE AND ADJUSTMENT

- Run the breather hoses into the holes of the floor-board.
- Hold the collar and breather hoses at the white painted mark of the breather hoses with a band.



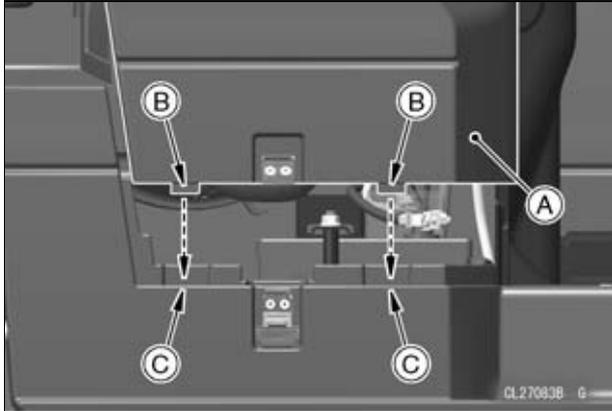
- A. Collar**
- B. Breather Hoses**
- C. Band**
- D. 60 mm (2.4 in.)**

- Tighten the screws with washers securely.
- Insert the hooks of the battery cover into the slots as shown.



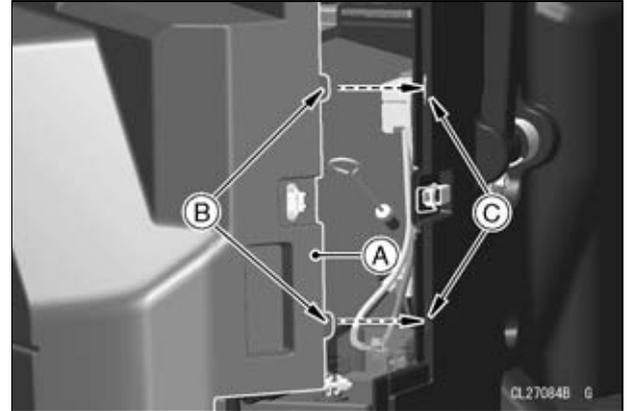
- A. Battery Cover**
- B. Hooks**
- C. Slots**

- Insert the tabs of the battery cover into the slots as shown.



- A. Battery Cover**
- B. Tabs**
- C. Slots**

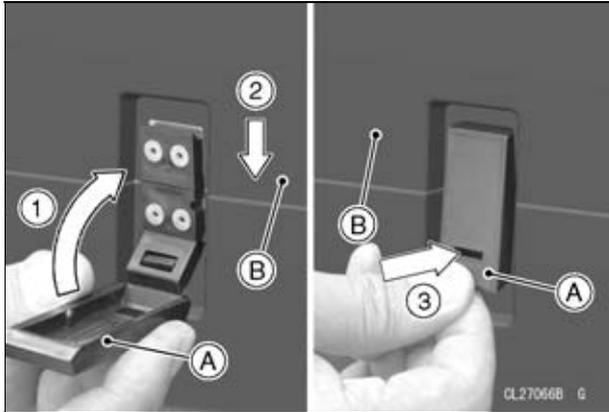
- Insert the tabs of the battery cover into the slots as shown.



- A. Battery Cover**
- B. Tabs**
- C. Slots**

- Lock the latch (front side).
- Lock the latch (right side) as shown.

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- A. Latch
- B. Battery Cover
- 1. Close
- 2. Pull
- 3. Push

Battery Characteristics (KAF400A/B)

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	Lead-Calcium
	Battery	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		
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 Characteristics (KAF1000B/E)

The battery installed in this vehicle is a sealed type, and the sealing strip should not be removed at any time after the specified electrolyte has been installed in the battery for initial service. It is not necessary to check the battery electrolyte level or add distilled water.

However, in order to maximize battery life and ensure that it will provide the power needed to start your vehicle you must properly maintain the battery's charge. When used regularly, the charging system in your vehicle helps keep the battery fully charged. If your vehicle 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 discharge rate. Every 15°C (59°F) doubles the rate.

Electrical accessories, such as digital clocks and computer memory, also draw current from the battery even when the key is switched off. Combine such "key-off" draws with hot temperature, 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

238 MAINTENANCE AND ADJUSTMENT

Current Drain		
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 battery can withstand sub-freezing temperatures with no damage.

Battery Sulfation (KAF400A/B)

A common cause of battery failure is sulfation.

Sulfate is a normal by-product 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 by-product 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 Sulfation (KAF1000B/E)

A common cause of battery failure is sulfation.

Sulfation occurs when the battery is left in a discharged condition for an extended time. Sulfate is a normal by product 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.

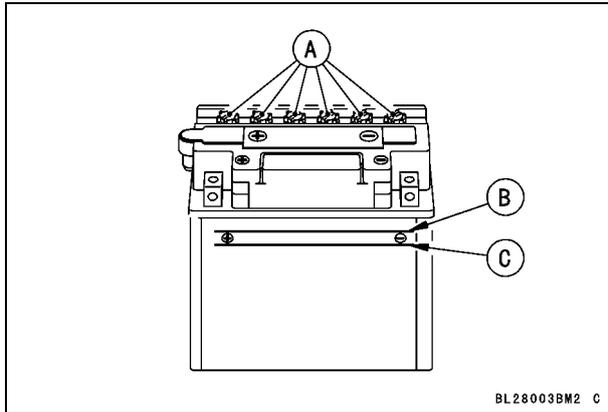
Battery Maintenance (KAF400A/B)

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 [kawasaki.com](http://www.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 Maintenance (KAF1000B/E)

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

If you are driving your vehicle infrequently, inspect the battery voltage weekly using a voltmeter. If it drops below 12.6 volts, the battery should be charged using an appropriate charger (check with your kawasaki dealer or visit [kawasaki.com](http://www.kawasaki.com)). 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 (clock etc) to make the battery*

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discharged, resulting the over discharge of the battery. In this case, the repair or replacement of the battery is not included in the warranty. If you do not drive for four weeks or more, disconnect the battery from the vehicle.

Kawasaki-recommended chargers are:

Battery Mate 150-9

OptiMate 4

Yuasa MB-2040/2060

Christie C10122S

If the above chargers are not available, use equivalent one.

For more details, ask your Kawasaki dealer.

Battery Charging (KAF400A/B)

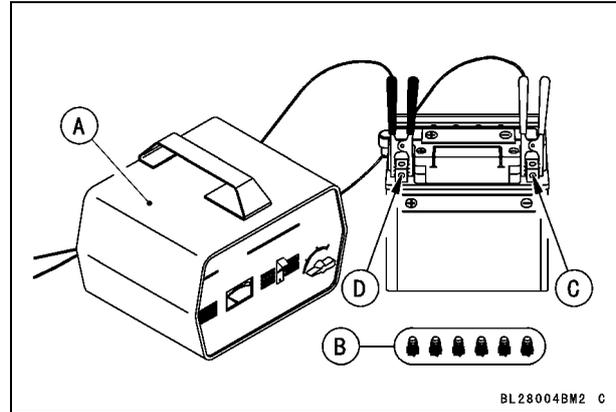
- Remove the battery from the vehicle (see Battery Removal).

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).

Battery Charging (KAF1000B/E)

- Remove the battery from the vehicle (see Battery Removal).
- Attach the leads from the charger and charge the battery at a rate (amperage × hours) that is indicated on the battery. If it is not possible to read the rate, charge the battery at an amperage that is about 1/10th of the battery capacity.

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- The charger will keep the battery fully charged until you are ready to reinstall the battery in the vehicle (see Battery Installation).

NOTICE

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

Make	East Penn Manufacturing
Type	526RMF

NOTE

- *If you charge the sealed battery, never fail to observe the instructions shown on the label on the battery and charger.*

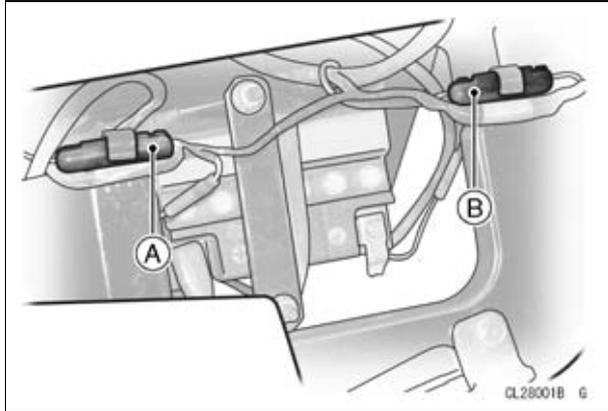
Fuse

(KAF400A/B)

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)

(KAF1000B/E)

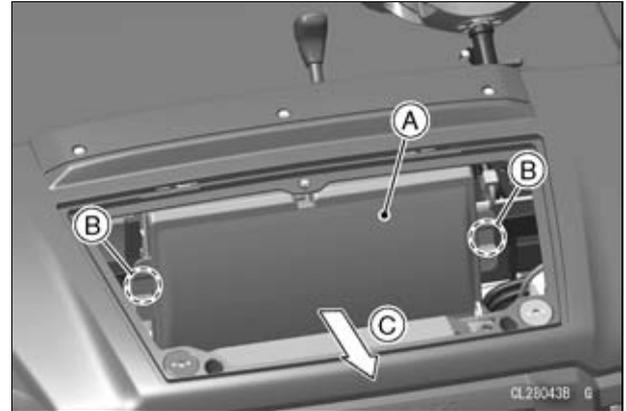
Fuses are arranged in 3 fuse boxes. The fuse box 1 is located under the front access cover. The fuse box 2 and fuse box 3 are located over the battery. If the electrical systems do not function, inspect the fuses. Before replacing a fuse, check the wiring harness and electrical equipment for bare wires or other possible causes for the blown fuse.

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 box lid.

Fuse Box 1

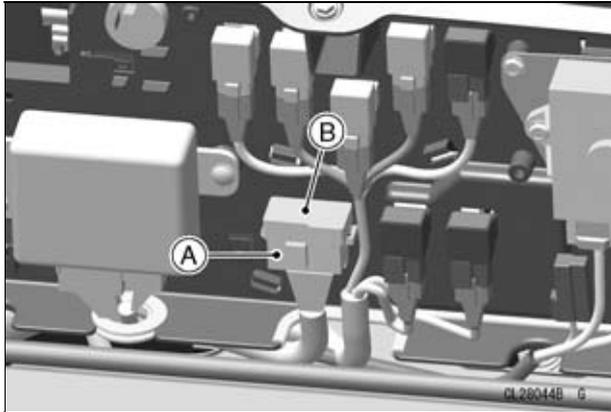
- Remove the front access cover. Refer to the “Front Access Cover” section in the “GENERAL INFORMATION” chapter.
- Pull the cover forward to clear the projections, and remove the cover.



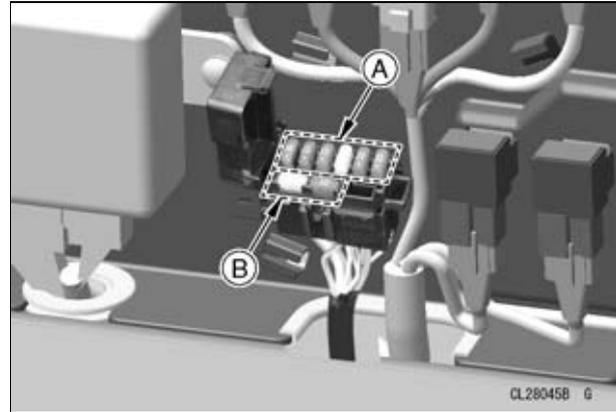
- A. Cover
- B. Projections
- C. Pull forward.

- Open the fuse box 1 lid and check the fuse element. If it is blown out, replace the fuse with a new one.

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A. Fuse Box 1
B. Fuse Box 1 Lid

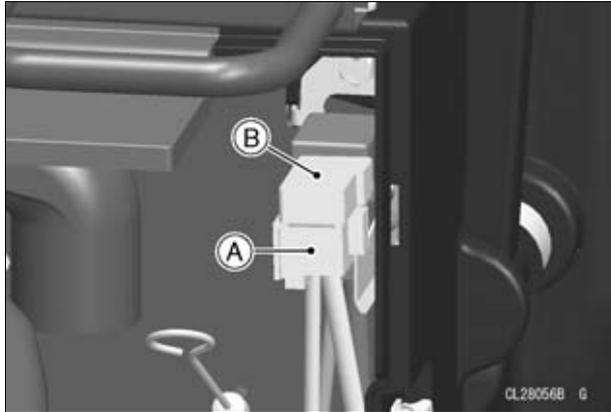


A. Fuses
B. Spare Fuses

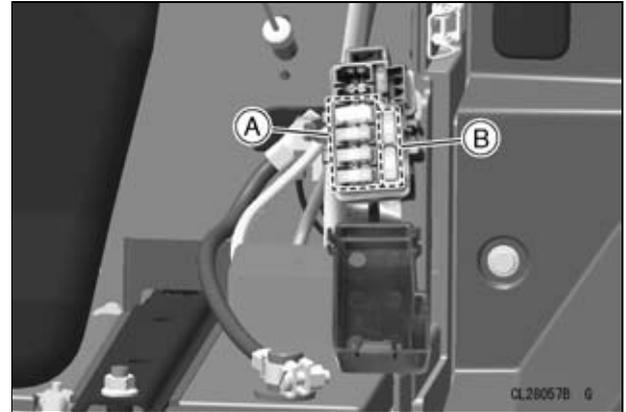
Fuse Box 2

- Remove the battery cover (see Battery Removal).
- **(KAF1000B)** Remove the fuse box 2 from the bracket.
- Open the fuse box 2 lid, and check the fuse element. if it is blown out, replace the fuse with a new one.

(KAF1000B)



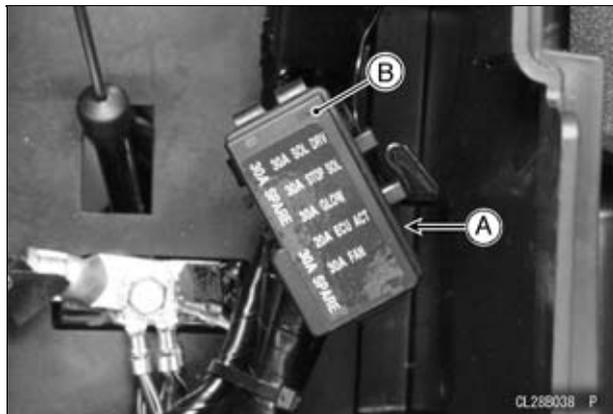
- A. Fuse Box 2
- B. Fuse Box 2 Lid



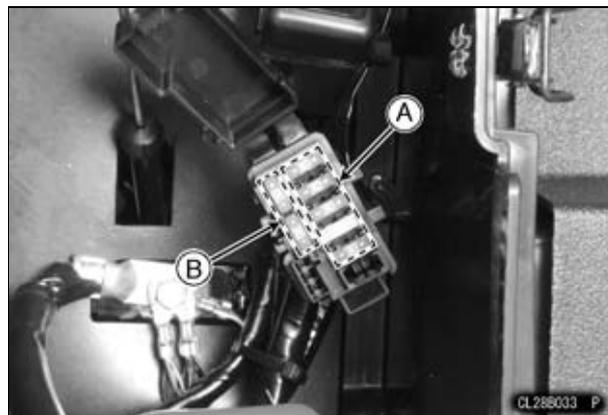
- A. Fuses
- B. Spare Fuses

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(KAF1000E)

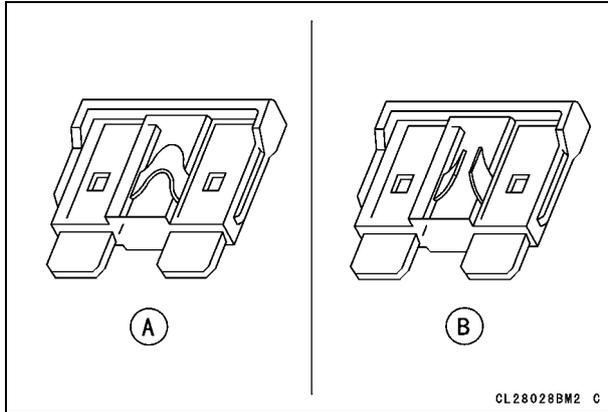


A. Fuse Box 2
B. Fuse Box 2 Lid



A. Fuses
B. Spare Fuses

(KAF1000B)

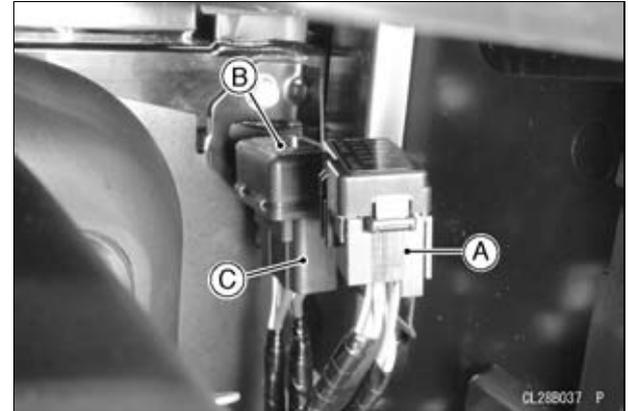


- A. Normal
- B. Failed

Main Power Fuse

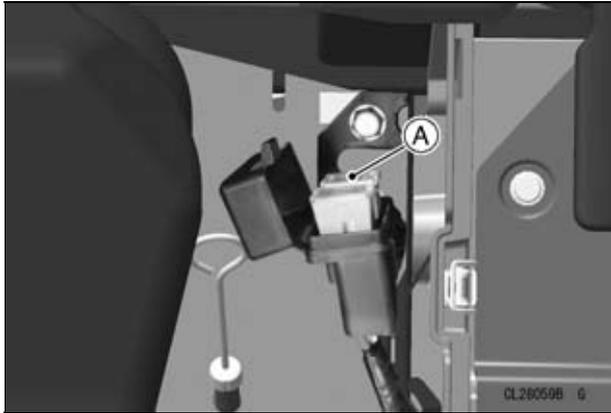
The main power fuse is in the fuse box 3.

- Remove the battery cover (see Battery Removal).
- **(KAF1000B)** Remove the fuse box 2 from the bracket.
- Open the fuse box 3 lid and remove the main power fuse.
- Check the fuse element. If it is blown out, replace the fuse with a new one.



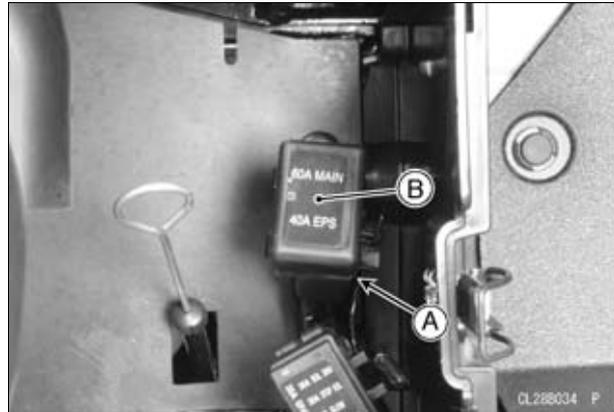
- A. Fuse Box 2
- B. Fuse Box 3 Lid
- C. Fuse Box 3

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A. 60 A Main Power Fuse

(KAF1000E)

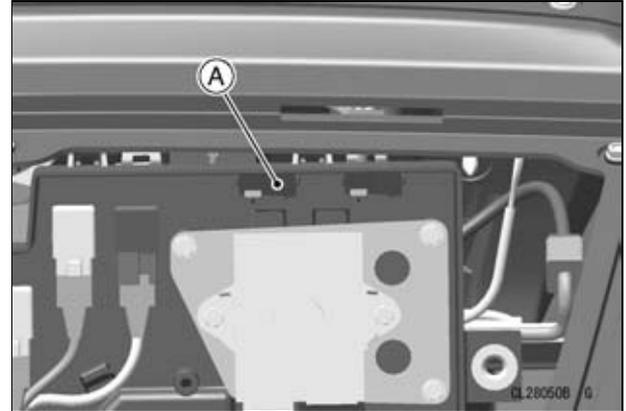


**A. Fuse Box 3
B. Fuse Box 3 Lid**



A. 60 A Main Power Fuse

There is a spare fuse for the main power fuse under the front access cover.



A. 60 A Spare Fuse

Before replacing a fuse, check the wiring harness and electrical equipment for bare wires or other possible causes for the blown fuse.

⚠ WARNING

The electrical system can produce painful electrical shocks. When replacing the 60 A fuse, first remove the cables from the battery terminals to avoid electric shock.

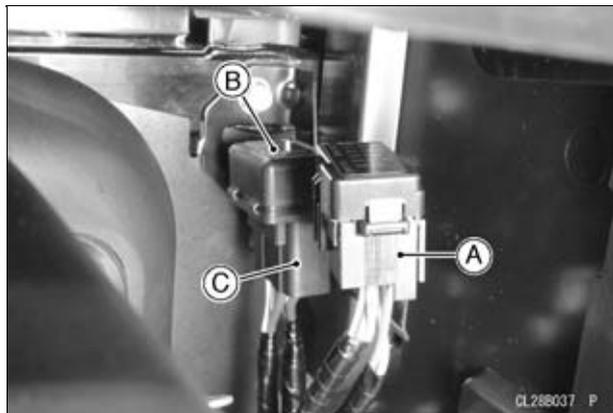
Power Steering System Fuse

The power steering system fuse is in the fuse box 3.

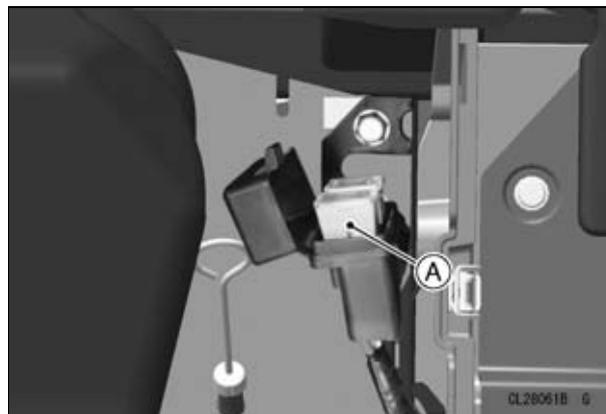
- Remove the battery cover (see Battery Removal).
- **(KAF1000B)** Remove the fuse box 2 from the bracket.

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- Open the fuse box 3 lid and remove the 40 A fuse.
 - Check the fuse element.
- (KAF1000B)**

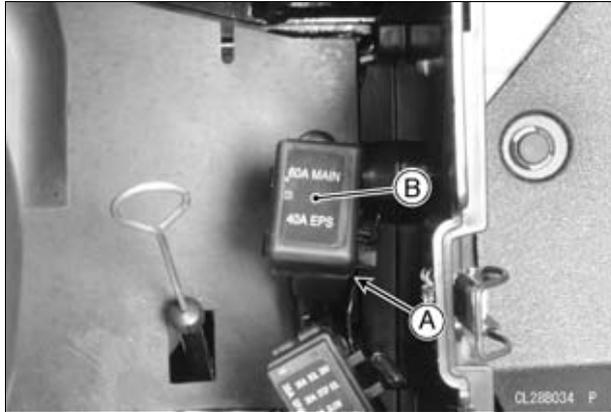


- A. Fuse Box 2
- B. Fuse Box 3 Lid
- C. Fuse Box 3

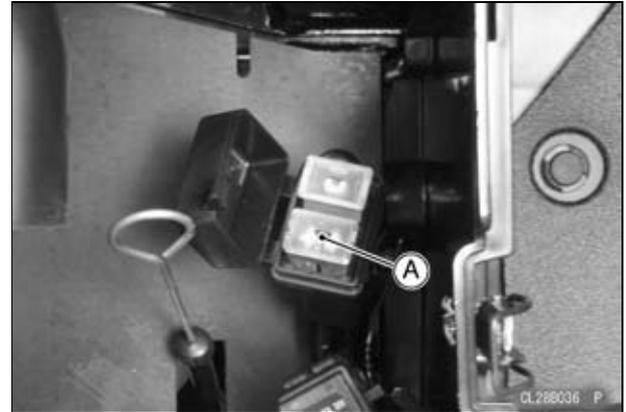


A. 40 A Fuse

(KAF1000E)



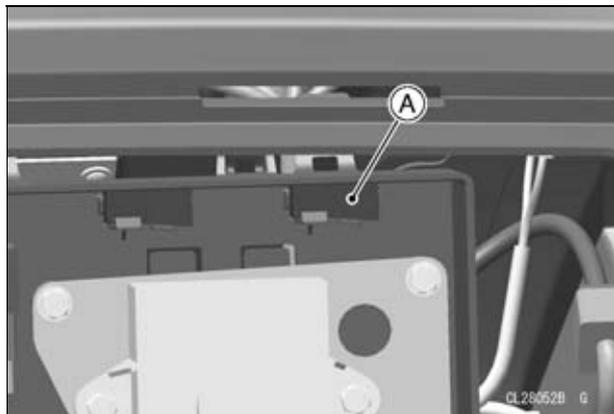
- A. Fuse Box 3
- B. Fuse Box 3 Lid



A. 40 A Fuse

There is a spare fuse for the power steering system under the front access cover.

252 MAINTENANCE AND ADJUSTMENT



A. 40 A Spare Fuse

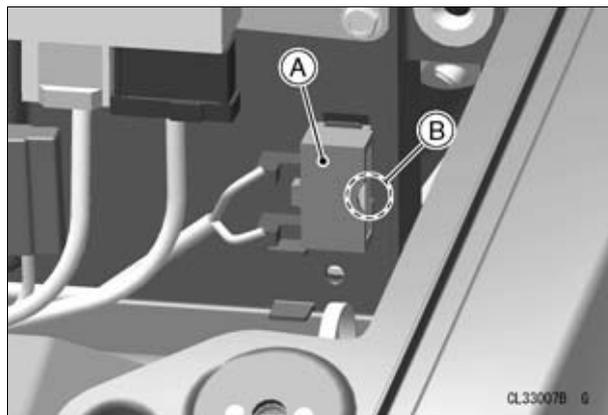
If the fuse is blown, steering becomes heavy. Replace the blown fuse with a fuse of the same specific amperage and type. If a replaced fuse blows again, there can be trouble with the ECU or harness/connectors. Contact an authorized Kawasaki dealer for inspection.

⚠ WARNING

The electrical system can produce painful electrical shocks. When replacing the 40 A fuse, first remove the cables from the battery terminals to avoid electric shock.

Breaker (KAF1000B/E)

The breaker for the radiator fan is located under the front access cover. If the fan does not function, inspect the breaker. In order to reset the breaker, push the reset button at the side of the breaker case. Before resetting, however, check that the radiator fan is free from mud or other obstacle as well as the wiring harness and electrical equipment for bare wires or other possible causes for the tripped breaker.



**A. Breaker
B. Reset Button**

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 (KAF400A/B)

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.

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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.

Cleaning (KAF1000B/E)

General Precautions

Frequent and proper care of your vehicle will enhance its appearance, optimize overall performance, and extend its useful life. Covering your vehicle with a high quality, breathable vehicle cover will help protect its finish from harmful UV rays, pollutants, and reduce the amount of dust reaching its surfaces.

WARNING

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

- Be sure the engine and exhaust are cool before washing.
- When washing the vehicle, always use a mild neutral detergent and water.

- Avoid applying all harsh chemicals, solvents, degreaser, oil remover, electrical contact cleaner, and household cleaning products such as ammonia-based window cleaners. They will damage or deteriorate painted parts, plastic parts, rubber parts and other synthetic parts including covers and LED headlight lens.
- Avoid applying degreaser to seals, brake pads, and tires.
- Diesel fuel, brake fluid, and coolant will damage the finish of painted and plastic surfaces: wash them off immediately.
- Avoid wire brushes, steel wool, and all other abrasive pads or brushes.
- Take care when washing the headlight lens and other plastic parts as they can easily be scratched.

NOTE

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

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Radiator

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

NOTICE

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

Matte Paint Parts

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

Plastic Parts

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

NOTICE

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

Chrome and Aluminum

Chrome and uncoated aluminum parts can be treated with a chrome/aluminum polish. Coated aluminum should be washed with a mild neutral detergent and finished with a spray polish. Aluminum wheels, both painted and unpainted can be cleaned with special non-acid based wheel spray cleaners.

Leather, Vinyl, and Rubber

If your vehicle has leather accessories, special care must be taken. Use a leather cleaner/treatment to clean and care for leather accessories. Washing leather parts with detergent and water will damage them, shortening their life.

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

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

Where to be Careful

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

- Disc brake master cylinder and caliper.
- Under the cargo bed - if water gets into the glow plugs, it can ground out the spark. When this happens the vehicle will not operate properly and the affected parts must be wiped dry.
- Power Steering System - if water gets into the actuator or is sprayed over the ECU, they may cause malfunction.

NOTICE

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

NOTE

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

Washing Your Vehicle

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

Muffler rear opening - cover with a plastic bag.

Main switch - cover the keyhole with tape.

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

258 MAINTENANCE AND ADJUSTMENT

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

(KAF400A/B)

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 directly into each cylinder. Turn the engine over several times with the ignition switch key to coat the cylinder walls. Install the spark plugs.

260 STORAGE

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.

TRANSPORTING AND STORAGE

Transporting the Vehicle (KAF1000B/E)

Note the following points

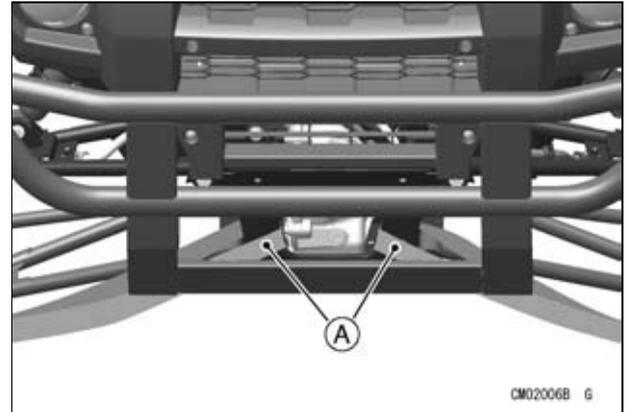
NOTICE

- To avoid damage and the wind adversely affecting the vehicle, transport it in an enclosed truck or trailer.
- If an enclosed transporter is not available, remove the plastic hard top and position the vehicle facing forward.
- Never tow the vehicle or use a car type dolly with the front or rear wheels on the dolly as this could damage the differential and/or transmission.

- Secure the fuel tank cap.
- Make sure that the cargo bed is latched and the tailgate is closed.
- Before loading the vehicle on the transporter, select a firm level surface.
- Secure loading ramps to the transporter when loading and unloading.
- Always position the vehicle level when transporting.
- Set the parking brake.
- Stop the engine and remove the main switch key to prevent loss during transport.

- Fasten the vehicle to the transporter with a heavy-duty strap or rope using tie down points on front [A] and rear [B] of the vehicle. Do not attach tie straps or ropes to the A-arms, other suspension parts, or drive shafts. Straps must be directed downwards and outwards from the vehicle.

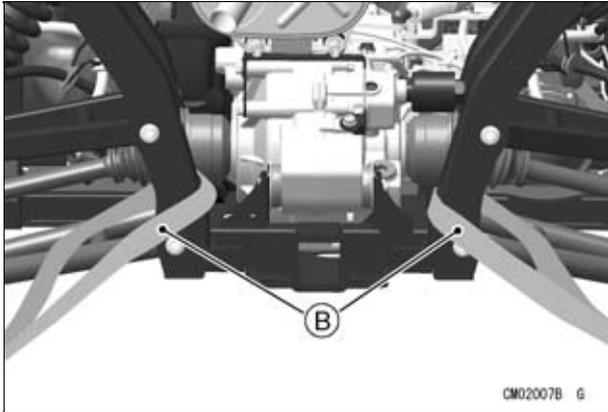
Front Tie Down Points



A. Tie down points on the front of vehicle

262 TRANSPORTING AND STORAGE

Rear Tie Down Points



B. Tie down points on the rear of vehicle

- Equip the transporter with all the necessary lights and signs required by local, state, provincial, or federal laws.

Storage (KAF1000B/E)

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.

⚠ WARNING

Fuel is extremely flammable and can be explosive under certain conditions. Turn the main switch off. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

⚠ WARNING

Fuel 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 designed specifically for diesel fuel may be used. Follow the manufacturer's instructions for use.*

 **WARNING**

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

- 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 in the "MAINTENANCE AND ADJUSTMENT" chapter.
- 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 to prevent moisture or small animals from entering.
- Put a cover over the vehicle to keep dust and dirt from collecting on it.

Engine Care during Long Storage

Kawasaki recommends the engine to be run at idling speed for about 15 minutes every 4 to 6 months during long storage (longer than 4 months) to periodically bathe internal engine parts with engine oil.

 **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.

NOTICE

Engine oil at engine sliding parts such as crankshaft, camshaft, rocker arms, cylinder bores, etc. will coming down to the engine bottom during long storage by gravity. This could cause insufficient lubrication of these parts and cause engine seizure if the engine is started and runs at high speed or under load.

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.

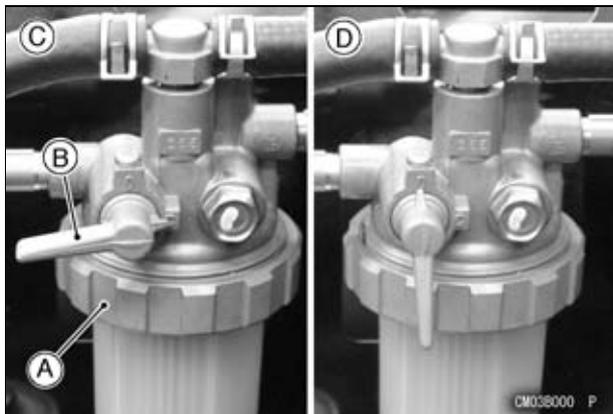
- Remove the plastic bag from the exhaust pipe.
- Clean the terminals of the battery, charge the battery if necessary, and install it in the vehicle.
- Fill the fuel tank with fuel.
- Check all the points listed in the “Daily Checks” section in the “HOW TO OPERATE” chapter.
- Lubricate as indicated in the “General Lubrication” section in the “MAINTENANCE AND ADJUSTMENT” chapter.

Before Starting Engine after Long Storage

Kawasaki recommends following engine preparation to be performed before starting the engine if it is not being run for 1 year or longer to prevent engine seizure.

- (1) Check to see if the coolant level in the reserve tank is between level lines. If the amount of coolant is insufficient, add coolant in the reserve tank.
- (2) Park the vehicle on a firm level surface and set the parking brake.
- (3) Make sure the gear shift lever is in the “N” (neutral) position.
- (4) Turn the fuel filter lever to the “CLOSE” position to prevent engine starting.
- (5) Turn the main switch key to the “START” position for 15 seconds maximum to turn over the engine and release the main switch key. If the engine starts running with the remaining fuel in the fuel line, stop it after 15 seconds running.
- (6) Wait for 30 seconds to let the starter motor cool.
- (7) Repeat procedures (5) and (6) 4 times, and turn the main switch key to the “OFF” position.
- (8) Turn the fuel filter lever to the “OPEN” position.
- (9) Turn the main switch key to the “ON” position and keep it on for 4 seconds. Turn the key to the “OFF” position. Repeat this procedure 5 times at least to replenish the fuel line with the fuel.

After above preparation start the engine and run it for about 15 minutes at idle speed. While the engine is running check for engine oil and coolant leaks, and no warning indicator goes on.



- A. Fuel Filter
- B. Fuel Filter Lever
- C. "CLOSE" Position
- D. "OPEN" Position

TROUBLESHOOTING GUIDE

Starter Motor Won't Turn

- Fuse failed (be sure to check for cause of failure)
- Battery cables 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 (KAF400A/B)
- Air filter clogged or intake blocked
- Engine flooded
- Fuel tank vent clogged
- Spark plug wire not on spark plug (KAF400A/B)
- Spark plug dirty (KAF400A/B)
- Valve clearance incorrect (KAF1000B/E)
- Fuel line clogged (KAF1000B/E)
- Air in fuel system (KAF1000B/E)

Engine Stops

- For cold weather starting, after the engine is started, keep the throttle pedal partially pushed down for one minute maximum until idling speed becomes steady. (KAF1000B/E)
- No fuel in tank
- Water in fuel
- Fuel filter clogged
- Choke left on too long (KAF400A/B)
- Fuel line clogged (KAF1000B/E)
- Air filter clogged or intake blocked
- Fuel tank cap vent clogged (KAF400A/B)
- Fuel tank vent clogged (KAF1000B/E)
- Engine overheated
 - Too much idling or low speed running (not enough air flow)
 - Overloaded
 - Wrong spark plug (KAF400A/B)
 - Cooling fan screen clogged (KAF400A/B)
 - Radiator clogged (KAF1000B/E)
 - Coolant level too low (KAF1000B/E)
 - Coolant deteriorated (KAF1000B/E)
 - Radiator fan breaker functioned (KAF1000B/E)
 - Engine oil level too low

No Power

- Engine overheated
 - Too much idling or low speed running (not enough air flow)
 - Overloaded
 - Wrong spark plug (KAF400A/B)
 - Cooling fan screen clogged (KAF400A/B)
 - Radiator clogged (KAF1000B/E)
 - Coolant level too low (KAF1000B/E)
 - Coolant deteriorated (KAF1000B/E)
 - Radiator fan breaker functioned (KAF1000B/E)
 - Engine oil level too low
- Compression leakage
 - Valve clearance insufficient
- Fuel filter clogged
- Air filter clogged or intake blocked
- Spark plug dirty or worn (KAF400A/B)
- Choke left on (KAF400A/B)
- Engine oil incorrect
- Water in fuel
- Drive belt slipping (KAF1000B/E)
- Water in belt drive torque converter housing (KAF1000B/E)
- The high-altitude injection control may be activated. If engine power is reduced at high altitude more than 800 m (2 600 ft), it is considered normal. (KAF1000B/E)

Gear Shift lever won't move. (KAF400A/B)

- Idling too high.

Power Steering Won't Work (KAF1000B/E)

- ECU functioned to prevent overheating
- Fuse failed
- Battery discharged
- Cables/harness connectors disconnected

Selectable 2WD/4WD or DIFF-LOCK Systems Malfunction (KAF1000B/E)

- Actuators failed
- Vehicle controller failed
- Battery disconnected

ENVIRONMENTAL PROTECTION

To help preserve the environment, properly discard used batteries, tires, oils and fluids, or other vehicle components that you might dispose of in the future. Consult your authorized Kawasaki dealer or local environmental waste agency for their proper disposal procedure. This also applies to disposal of the entire vehicle at the end of its life.

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

Utility Vehicle

