

MULE™ PRO-DXT

Utility Vehicle

OWNER'S MANUAL

 Read this manual carefully. It contains safety information.

Kawasaki

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

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.

NOTICE

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

NOTE

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

 **WARNING**

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

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.

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

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

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

Do not exceed seating capacity: 6 occupants.

Occupants shall only ride in designated seating positions and with maximum 3 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.

EMISSION CONTROL INFORMATION

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

1. Crankcase Emission Control System

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

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

2. Exhaust Emission Control System

The exhaust emission control system applied to this engine family is engine modifications that consist of a modified injection pump and injection timing characteristics.

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

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

Maintenance and Warranty

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

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

You should keep a maintenance record for your vehicle. To assist you in keeping this record, we have provided space at the end of this manual where an authorized Kawasaki dealer, or someone equally competent, can record the maintenance. You should also retain copies of maintenance work orders, bills, etc., as verification of this maintenance.

Tampering with Emission Control System Prohibited

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

Do not tamper with the original emission related parts.

- Injection nozzle
- Air cleaner element
- Stop solenoid
- Fuel injection pump
- Breather system
- Cylinder head cover
- Exhaust manifold
- Air pressure sensor

PLEASE DO NOT TAMPER WITH NOISE CONTROL SYSTEM

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

FOREWORD

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

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

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

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

Keep this Owner's Manual aboard your Mule at all times so that you can refer to it whenever you need information.

This manual should be considered a permanent part of the Mule and should remain with the Mule when it is sold.

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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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12 SPECIFICATIONS

SPECIFICATIONS

PERFORMANCE

Maximum Torque	52 N·m (5.3 kgf·m, 38 ft·lb) @2 400 r/min (rpm)
Minimum Turning Radius Differential Mode:	4.8 m (15.7 ft)
Seating Capacity	Front 3 persons, Rear 3 persons

DIMENSIONS

Overall Length		3 385 mm (133.3 in.)
Overall Width		1 625 mm (63.98 in.)
Overall Height:	KAF1000A/B	1 970 mm (77.56 in.)
	KAF1000C	2 020 mm (79.53 in.)
Wheelbase		2 345 mm (92.32 in.)
Tread:	Front	1 389 mm (54.68 in.)
	Rear	1 321 mm (52.01 in.)
Ground Clearance		260 mm (10.2 in.)
Dry Mass:	KAF1000A	837 kg (1 846 lb)
	KAF1000B	843 kg (1 859 lb)
	KAF1000C	856 kg (1 887 lb)
Curb Mass:	KAF1000A	872 kg (1 923 lb)
	KAF1000B	878 kg (1 936 lb)
	KAF1000C	891 kg (1 965 lb)
Cargo Bed (L x W x H)		(Short Bed Mode) 560 x 1 363 x 279 (22.05 x 53.66 x 10.98 in.)

(Long Bed Mode) 1 085 × 1 363 × 279 mm (42.72 × 53.66 × 10.98 in.)

ENGINE

Type	Diesel, OHV, 3-cylinder, 4-stroke, liquid-cooled
Displacement	993 cm ³ (60.6 cu in.)
Bore × Stroke	74.0 × 77.0 mm (2.91 × 3.03 in.)
Compression Ratio	23.5:1
Starting System	Electric starter
Cylinder Numbering Method	Left to right, 1-2-3
Firing Order	1-3-2
Injection Pump	Bosch in-line type
Lubrication System	Forced lubrication (wet sump)
Engine Oil:	Type
	API CD, CF, CF-4, CI-4 or CJ-4*

*: 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.

Viscosity	SAE 10W-40
Capacity	2.4 L (2.5 US qt)
Coolant Capacity	6.1 L (6.4 US qt)

DRIVE TRAIN

Driving Type:	Primary	Belt drive torque converter (CVT)
	Final	2WD/4WD system with drive shafts
Transmission Type		2-speed & reverse, automatic
Primary Reduction Ratio		3.334 ~ 0.756 (Belt drive torque converter)

14 SPECIFICATIONS

Final Reduction Ratio:	Front	6.382
	Rear	6.245
Overall Drive Ratio:	Forward	12.192 (High)
		24.205 (Low)
Transmission Gear Ratio:	Reverse	18.794
	Forward	1.952 (High)
		3.876 (Low)
	Reverse	3.009
Front Final Gear Case Oil		API GL-5 Hypoid gear oil SAE 90 [above 5°C (41°F)] SAE 80 [below 5°C (41°F)]
Front Final Gear Case Oil Capacity		0.43 L (0.45 US qt)
Transmission Case Oil		API GL-5 Hypoid gear oil SAE 90 [above 5°C (41°F)] SAE 80 [below 5°C (41°F)]
Transmission Case Oil Capacity		2.00 L (2.11 US qt)

FRAME

Type		Steel tube, ladder type
Steering:	KAF1000A	Rack and Pinion
	KAF1000B/C	Rack and Pinion with Electric Power Steering (EPS) System
Caster		4.4°
Tire Size:	Front	26 × 9.00-12 4PR
	Rear	26 × 11.00-12 4PR

Rim Size:	Front	12 x 7.0AT
	Rear	12 x 8.0AT
Fuel Tank Capacity		30 L (7.9 US gal)

ELECTRICAL EQUIPMENT

Battery		12 V 540CCA @0°F RC80
Headlight		
High Beam:	KAF1000A/B	12 V 60 W x 2
	KAF1000C	12 V 60 W x 2, LED x 2
Low Beam:	KAF1000A/B	12 V 55 W x 2
	KAF1000C	12 V 55 W x 2, LED x 2
Brake/Tail Light		12 V 21/5 W x 2

LOAD CAPACITY

Maximum Vehicle Load (Including occupants, cargo and accessories)	717 kg (1 581 lb)
Maximum Cargo Bed Load	(Short Bed Mode) 158 kg (350 lb)
	(Long Bed Mode) 453 kg (1 000 lb)

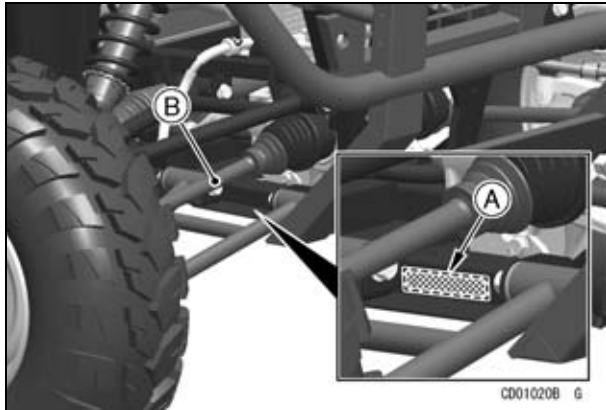
Specifications are subject to change without notice.

16 SERIAL NUMBER LOCATIONS

SERIAL NUMBER LOCATIONS

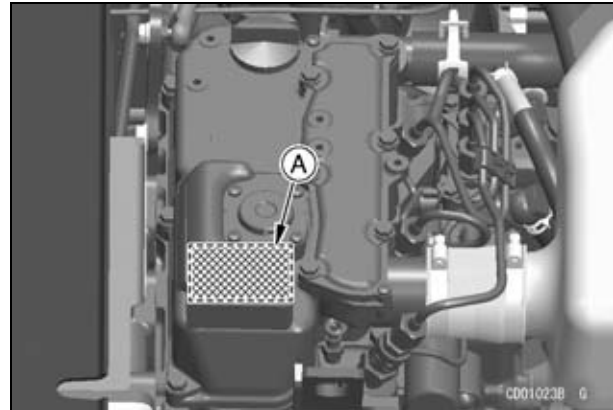
The engine and frame serial numbers are used to register the vehicle. They are the only means of identifying your particular machine from others of the same model type. These serial numbers may be needed by your dealer when ordering parts. In the event of theft, the investigating authorities will require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

Frame No.



- A. Frame Number
- B. Right Front Axle

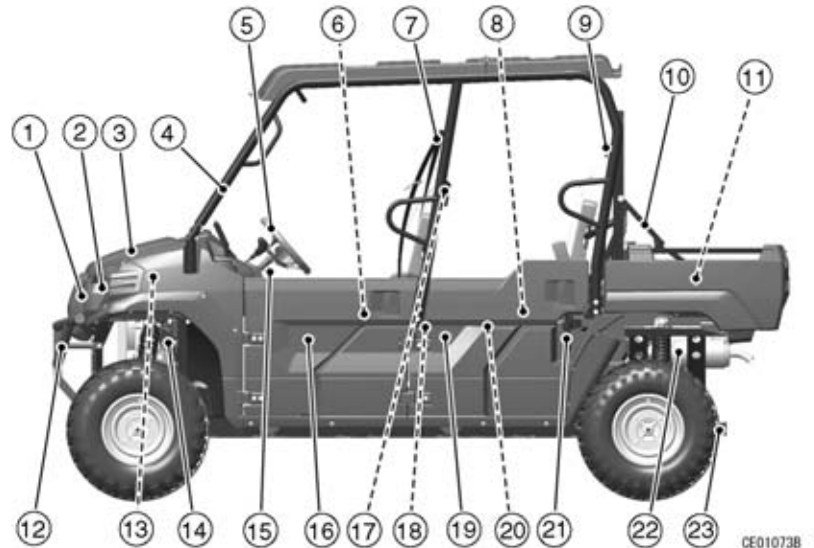
Engine No.



- A. Engine Number

LOCATION OF PARTS

(6-Persons Mode)

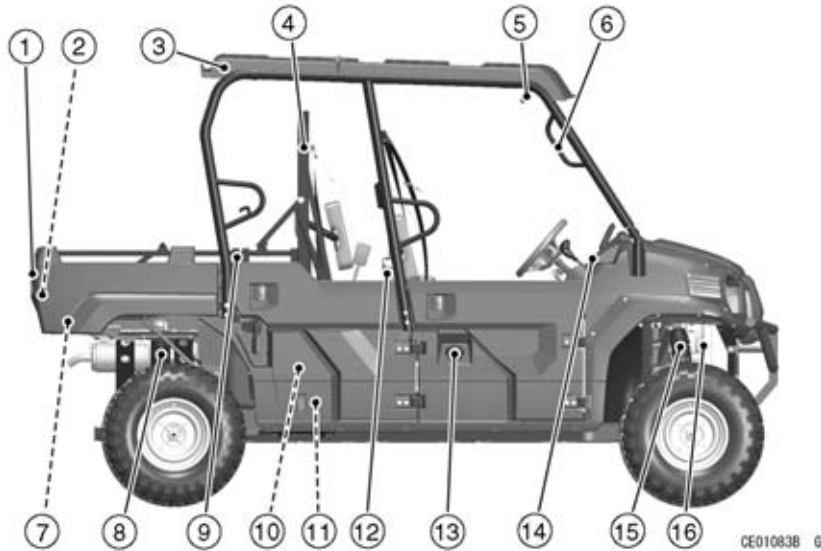


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- | | | |
|--|------------------------------------|--|
| 1. LED Sub Headlights (KAF1000C) | 9. Rear Seat Belts | 17. Handhold for Rear Seat Passengers |
| 2. Headlights | 10. Screen Lock Arm | 18. Rear Power Outlet Sockets (KAF1000C) |
| 3. Front Access Cover | 11. Cargo Bed | 19. Rear Door |
| 4. ROPS (Roll Over Protective Structure) | 12. Front Guard | 20. Cargo Bed Handgrip |
| 5. Steering Wheel | 13. Coolant Reserve Tank | 21. Cargo Bed Latch |
| 6. Front Seat | 14. Brake Fluid Reservoir | 22. Muffler (Spark Arrester) |
| 7. Front Seat Belts | 15. Steering Wheel Tilt Lock Lever | 23. Trailer Hitch Bracket |
| 8. Rear Seat | 16. Front Door | |

18 LOCATION OF PARTS

(3-Persons Mode)



1. Tailgate Latch Handle

2. Tailgate

3. Sun Top (KAF1000C)

4. Screen

5. Handgrip for Front Center
Seat Passenger

6. Handgrip for Front Right
Seat Passenger

7. Tail/Brake Light

8. Rear Shock Absorber

9. Cargo Bed Side Plate

10. Air Cleaner

11. Battery

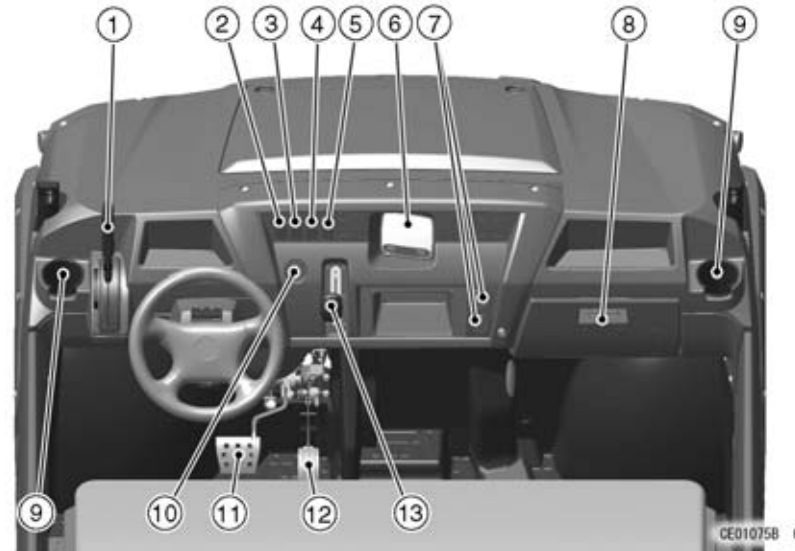
12. Rear Seat (Folded Position)

13. Fuel Tank Cap

14. Dashboard

15. Front Shock Absorber

16. Radiator



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

- 5. LED Sub Headlight Switch (KAF1000C)
- 6. Multifunction Meter
- 7. Front Power Outlet Sockets
- 8. Glove Compartment
- 9. Cupholders

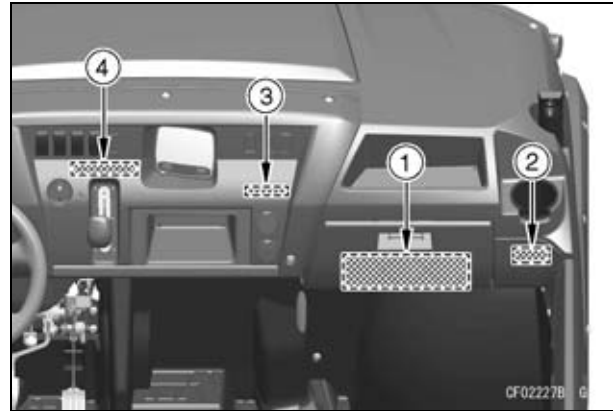
- 10. Main Switch
- 11. Brake Pedal
- 12. Throttle Pedal
- 13. Gear Shift Lever

LOCATION OF LABELS

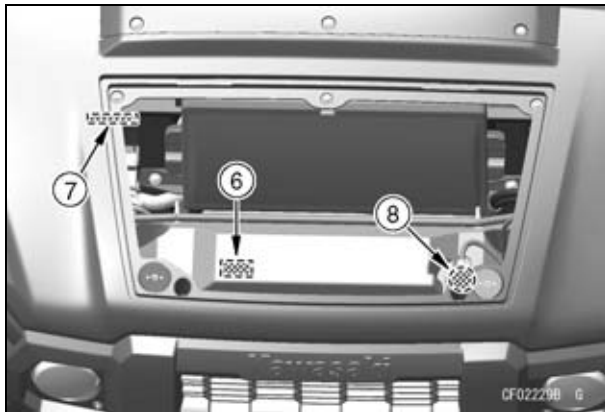
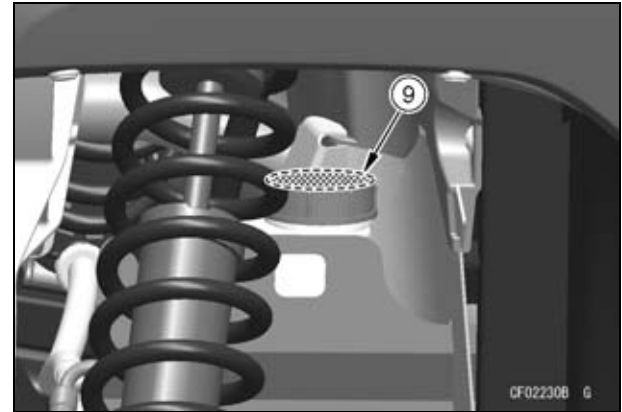
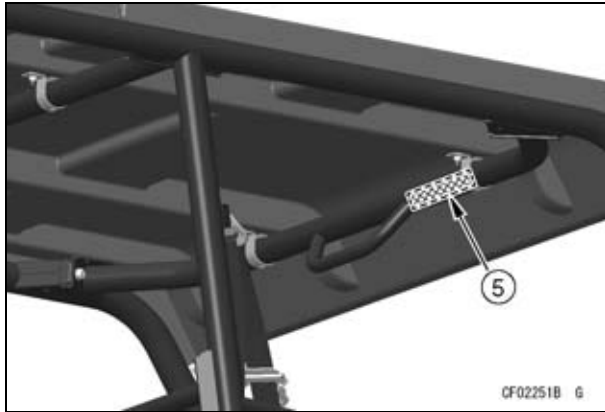
All warning labels which are on your vehicle are repeated here. Read labels on your vehicle and understand them thoroughly. They contain information which is important for your safety and the safety of anyone else who may operate your vehicle. Therefore, it is very important that all warning labels be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

NOTE

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

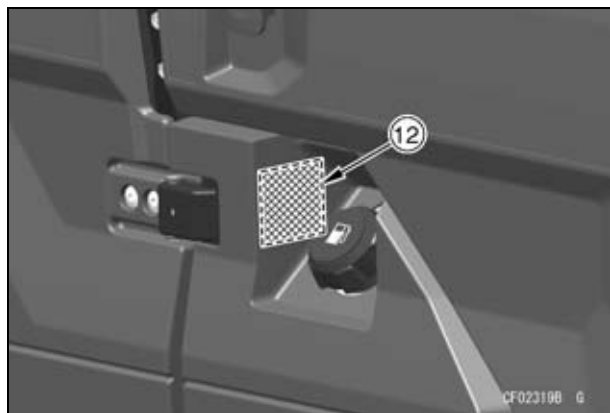
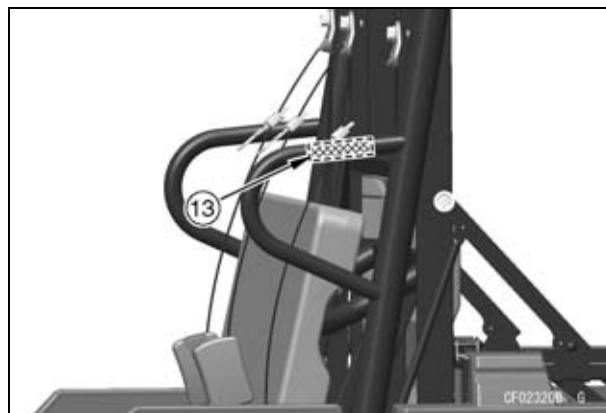
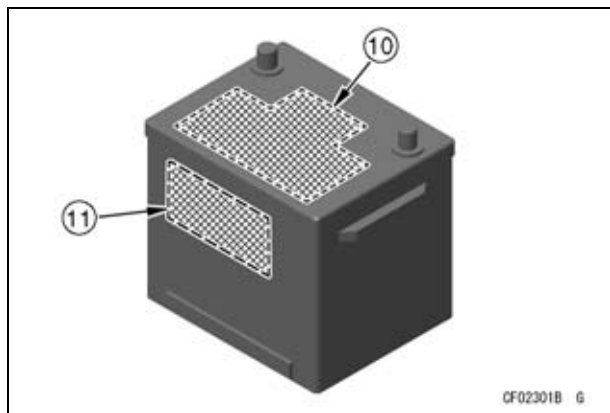


- 1. Warning (General)**
- 2. Certification (ANSI/OPEI)**
- 3. Front Power Outlet Socket Information**
- 4. Notice (Shifting)**

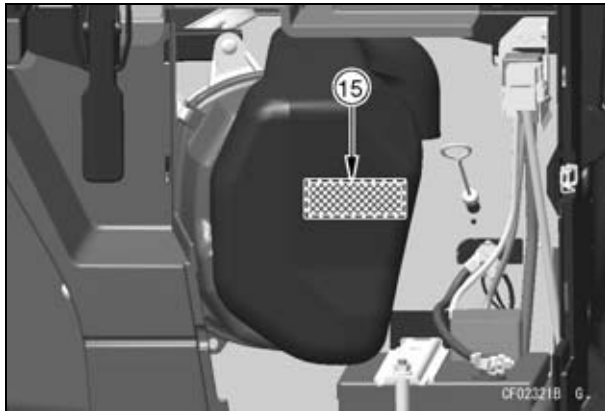
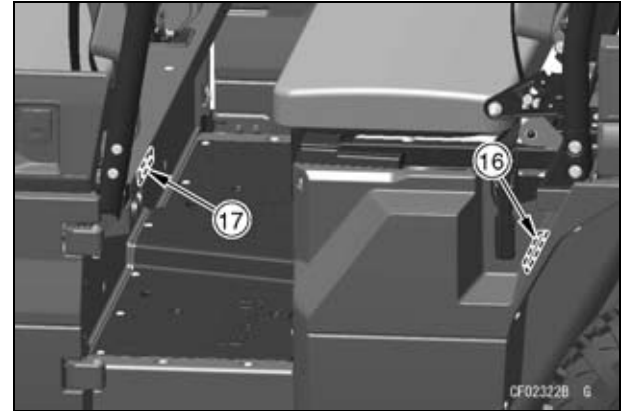
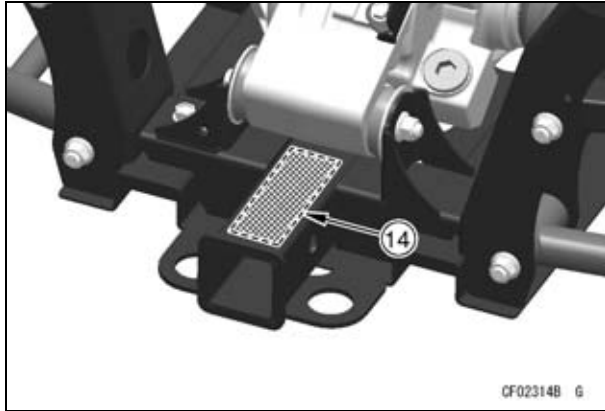


- 5. Specification (ROPS)
- 6. Notice (No Storage Area)
- 7. Specification (Model)
- 8. Danger (Radiator Cap)
- 9. Warning (Brake Fluid)

22 LOCATION OF LABELS

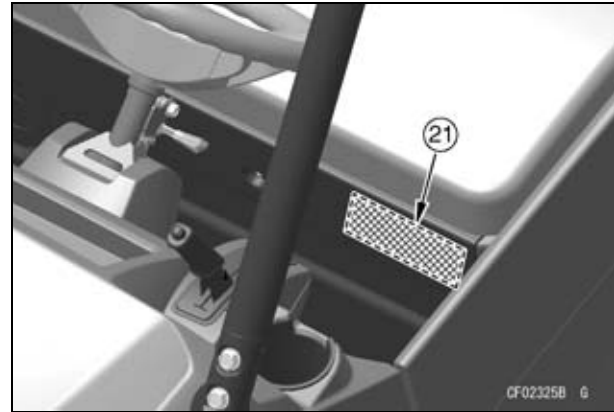
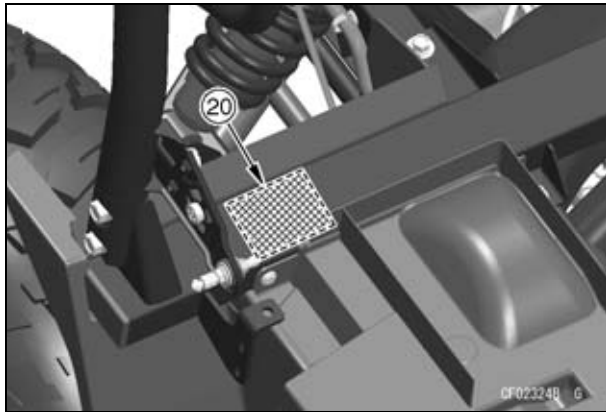
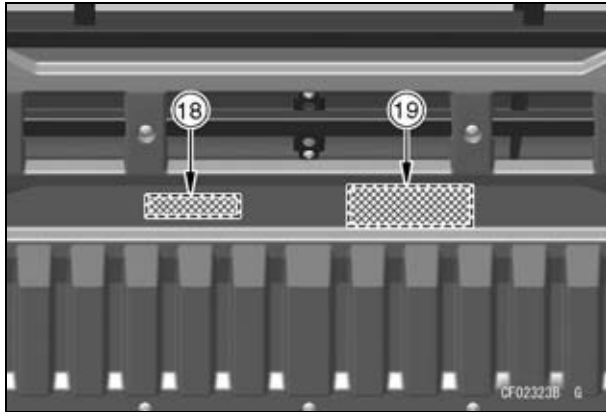


- 10. Danger/Poison (Battery)
- 11. Lead-acid Battery
- 12. Warning (Refueling)
- 13. Warning (Cargo Bed Lifting: both sides)

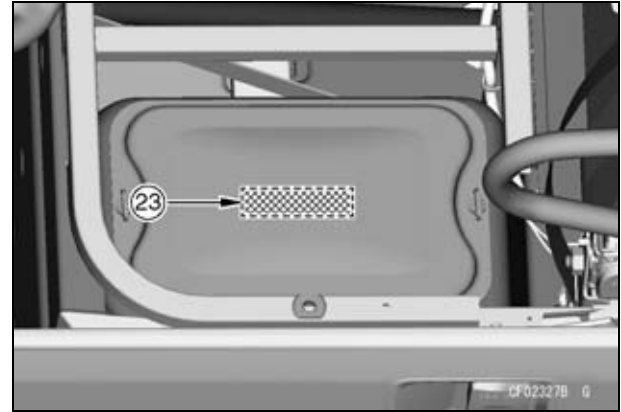
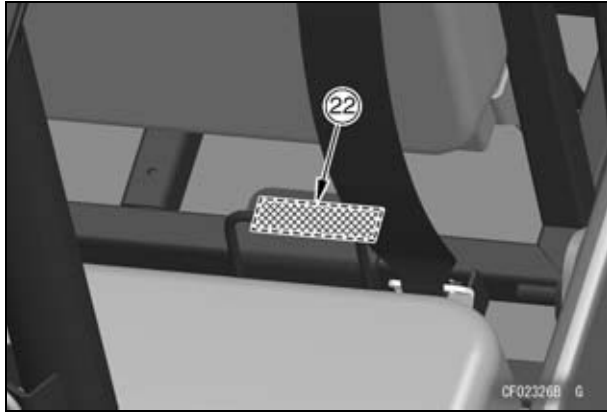


- 14. Warning (Trailer Towing)
- 15. Important Information (Air Cleaner)
- 16. Important Information (Drive Belt)
- 17. Rear Power Outlet Socket Information (KAF1000C)

24 LOCATION OF LABELS



- 18. Warning (Cargo Bed Operation)
- 19. Warning (Cargo Bed Loading)
- 20. Certification (Emission)
- 21. Important Information (Tires/Max. Load)



- 22. Instruction (Rear Seat: both sides)**
- 23. Storage Box Load Information**

26 LOCATION OF LABELS

(1)

▲ WARNING

Improper Use of Off-Highway Vehicles Can Cause Severe Injury or Death

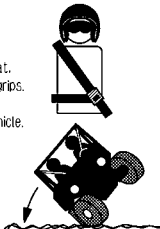
Be Prepared

- Fasten seat belts.
- Wear an approved helmet and protective gear.
- Each occupant must be able to sit with back against seat, feet flat on floor, and hands on steering wheel or handgrips.
- Stay completely inside the vehicle.
- Be sure doors are securely closed before driving this vehicle.

Drive Responsibly

Avoid loss of control and rollovers:

- Avoid abrupt maneuvers, sideways sliding, skidding, or fishtailing, and never do donuts.
- Slow down before entering a turn.
- Avoid hard acceleration when turning, even from a stop.
- Plan ahead for hills, rough terrain, ruts, and other changes in traction and terrain. Avoid paved surfaces.
- Avoid side hilling (riding across slopes).



Rollovers have caused severe injuries and death, even on flat, open areas.

Be Sure Occupants Pay Attention and Plan Ahead

If you think or feel that the vehicle may tip or roll, reduce your risk of injury:

- Keep a firm grip on the steering wheel or handgrips and brace yourself.
- Do not put any part of your body outside of the vehicle for any reason.

Be Sure to Apply the Parking Brake Before Leaving the Vehicle.


Require Proper Use of Your Vehicle

Do your part to prevent injuries:

- Do not allow careless or reckless driving.
- Make sure operators are 16 or older with a valid driver's license.
- Do not let people drive or ride after using alcohol or drugs.
- Do not allow operation on public roads (unless designated for off-highway vehicle access) - collisions with cars and trucks can occur.
- The front seat of this vehicle is designed to carry the operator and a maximum of two passengers.
- The rear seat is designed to carry a maximum of three passengers.


Read Owner's Manual.

Follow All Instructions and Warnings.



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(2)

Manufactured by Kawasaki Motors Manufacturing Corp., U.S.A.
Kawasaki Motors Manufacturing Corp., U.S.A. certifies that
this vehicle complies with the American National Standard for
Multipurpose Off-Highway Utility Vehicles,
ANSI/OPEL  Standard.

0F03054C S

(3)

Do Not Exceed 120 W Total when
Using One or Both Sockets

56033-0997
0F03494C S

(4)



56033-0822

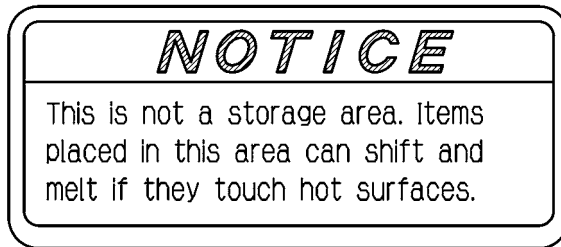
CF03056C S

(5)



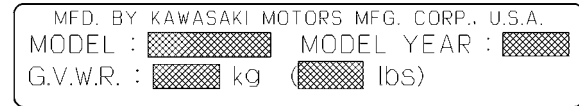
CF03858B S

(6)



56033-1379
CF03525C S

(7)



CF03064C S

(8)



CF03130B G

28 LOCATION OF LABELS

(9)



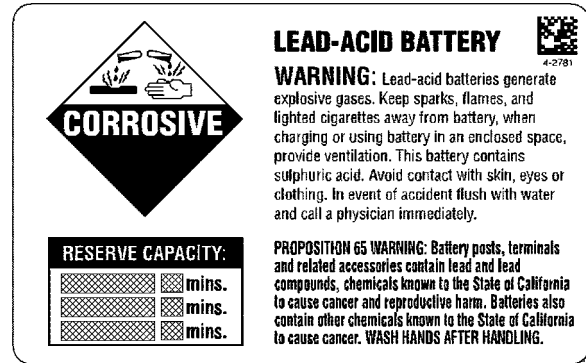
CF03067C S

(10)



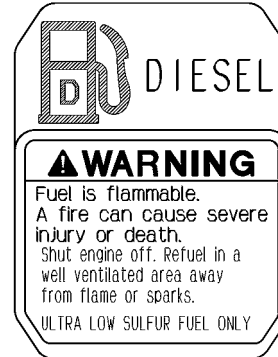
CF03565C S

(11)



CF03566C S

(12)



56071-0746

CF03526C S

(13)



56071-0717

CF03527C S

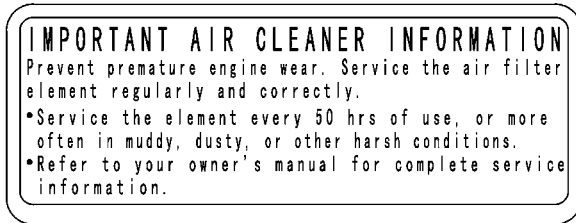
(14)



56071-0711

30 LOCATION OF LABELS

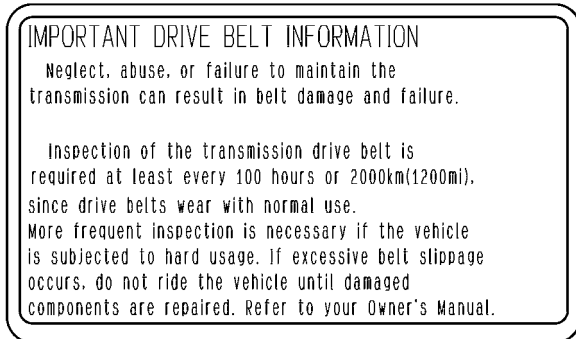
(15)



56033-0724

CF03990BM2 C

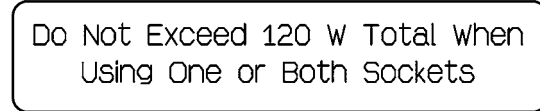
(16)



56033-1000

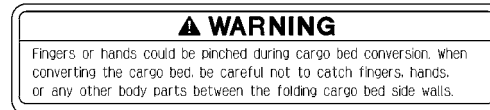
CF03529C S

(17) (KAF1000C)



56033-0997
CF03494C S

(18)




56071-0712
CF03530C S

(19)

⚠ WARNING

- Overloading or failure to properly secure cargo can cause loss of control of the vehicle. Loss of control of the vehicle can result in severe injury or death.
 - Cargo bed capacity: Short bed mode: 158 kg (350 lbs)
 - Cargo bed capacity: Long bed mode: 453 kg (1000 lbs)
- Follow the "Loading Information" and "Cargo Bed" sections in the owner's manual.
- Driving with a passenger in the cargo bed can result in severe injury or death.
 - Never carry passengers in the cargo bed.



56071-0713

GF03510 S

(20)

VEHICLE EMISSION CONTROL INFORMATION	
ENGINE FAMILY CODE	----- [] DATE OF MFG. --- []
MODEL(S)	----- []
EXHAUST EMISSION CONTROL SYSTEM	----- []
DISPLACEMENT	----- []
TUNE UP SPECIFICATIONS	
FUEL INJECTION TIMING	[] BTDC
IDLE SPEED	[] ± [] RPM IN NEUTRAL
VALVE CLEARANCE (ENGINE COLD)	INTAKE : [] MM ([] IN) EXHAUST : [] MM ([] IN)
FUEL	ULTRA LOW SULFUR FUEL ONLY
ENGINE OIL	SERVICE RATING: (API) CD, CF, CF-4, CI-4 VISCOSITY SAE 10W-40 SEE THE OWNER'S MANUAL FOR OIL INFORMATION.
THIS VEHICLE CONFORMS TO CALIFORNIA REGULATIONS APPLICABLE TO [] MODEL YEAR OFF-ROAD UTILITY VEHICLES AND IS CERTIFIED TO CALIFORNIA [] G/KW-hr HC+NOx [] G/KW-hr CO ENGINE FAMILY EXHAUST EMISSION STANDARD KAWASAKI MOTORS MANUFACTURING CORP., U.S.A.	

CF03166C S

32 LOCATION OF LABELS

(21)

⚠ WARNING

Tire replacement, improper tire pressure or overloading can cause loss of control. Loss of control can result in severe injury or death.

	Load condition (Including occupants and cargo)	Cold tire pressure	Tire size
Front	Up to 717 kg load (1581 lbs)	78.4 kPa (0.80 kgf/cm ² , 11.4 psi)	26x9.00-12
Rear	Up to 590 kg load (1300 lbs)	110 kPa (1.12 kgf/cm ² , 16.0 psi)	26x11.00-12
	OVER 590 Up to 717 kg load (1300 - 1581 lbs)	130 kPa (1.33 kgf/cm ² , 18.9 psi)	

● Maximum weight capacity: 717 kg (1581 lbs) (Including occupants and cargo)

56071-0755

CF03532C S

(22)

Use the handgrip to lift the rear seat.

56033-0999

CF03533C S

(23)

MAXIMUM LOAD: 9 kg (20 lbs)

56033-0966

CF03506C S

LOADING INFORMATION

WARNING

Incorrect loading, improper installation or use of accessories, or modification of your vehicle may result in an unsafe operating condition. Before you operate it, make sure that the vehicle is not overloaded and that you have followed these instructions.

With the exception of genuine Kawasaki Parts and Accessories, Kawasaki has no control over the design or application of accessories. In some cases, improper installation or use of accessories, or vehicle modifications, will void the utility vehicle warranty. In selecting and using accessories, and in loading the vehicle, you are personally responsible for your own safety and the safety of 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

34 LOADING INFORMATION

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.

Short Cargo Bed Mode:

158 kg (350 lb)

Long Cargo Bed Mode:

453 kg (1 000 lb)

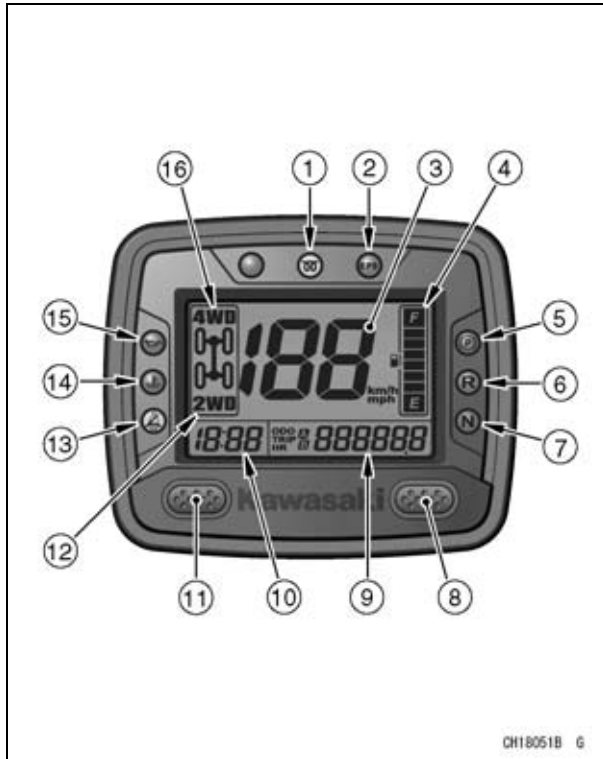
- (Maximum Vehicle Load) Weight of operator, passenger(s), cargo, accessories, and trailer tongue must not exceed following limits.

Maximum Vehicle Load: 717 kg (1 581 lb)

- 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



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.

36 GENERAL INFORMATION

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

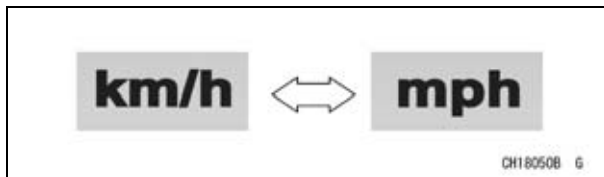
- Do not operate the vehicle with the digital meter displaying in the wrong unit (mph or km/h).
- Display the odometer in the digital meter.

- 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.



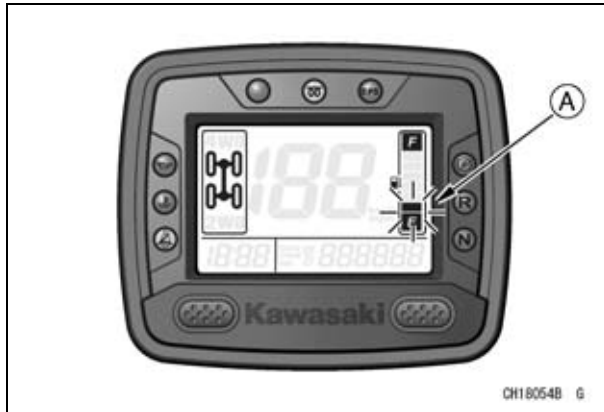
NOTE

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

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).

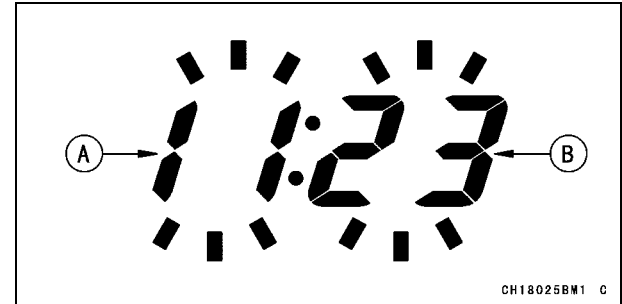


A. Blinking to warn of a low fuel level

Clock

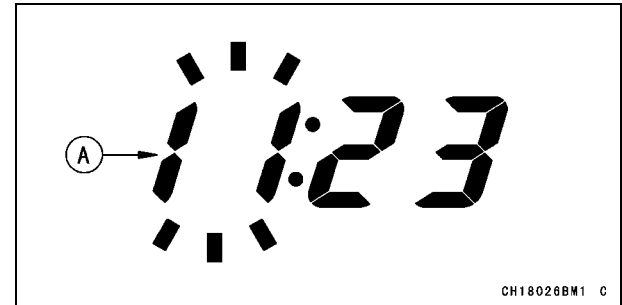
To adjust hours and minutes:

- 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

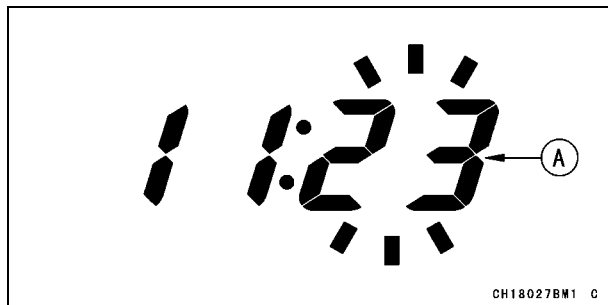
- Push the right button. The hour display only blinks. Push the left button to advance the hours.



- 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.

38 GENERAL INFORMATION



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.



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

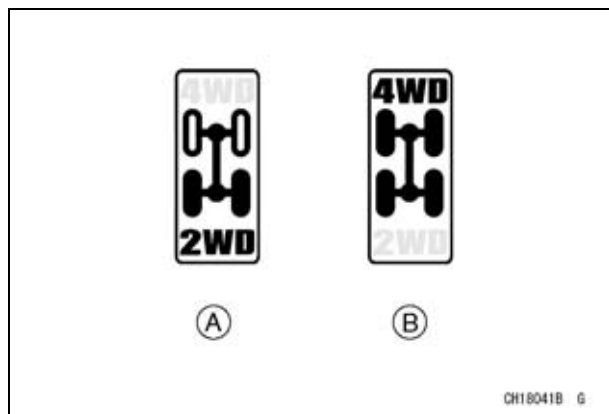
2WD/4WD Indicator Symbol

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

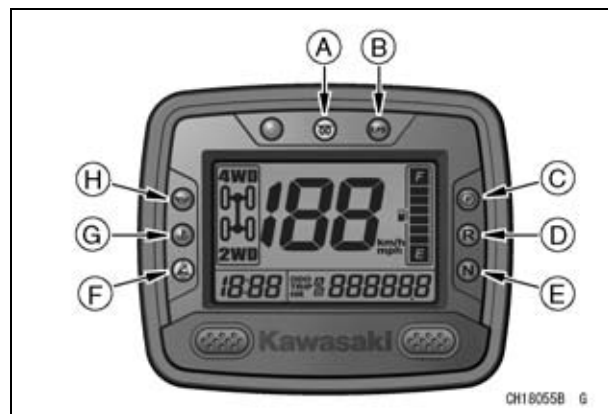
When the selectable 2WD/4WD shift switch is in “4WD,” the “4WD” indicator symbol will appear.

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

40 GENERAL INFORMATION



- 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. 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

- *The KAF1000A model does not have the EPS system on it. Therefore, the EPS warning indicator light does not go on except for a second when the main switch is turned on.*
- *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. After approximately 8 seconds, if the operator’s belt is not buckled, the seat-belt use reminder starts blinking.

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.

42 GENERAL INFORMATION

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 Socket/Electrical Accessory Connector

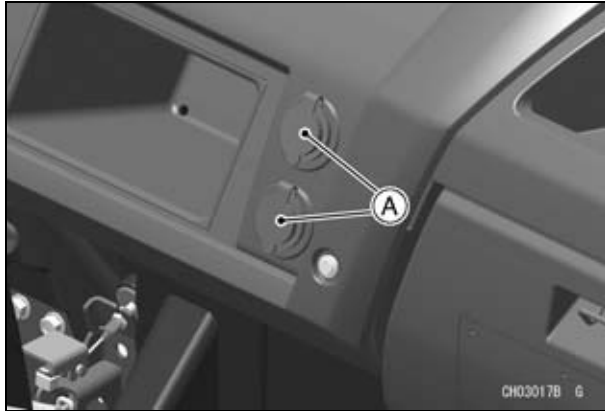
NOTICE

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

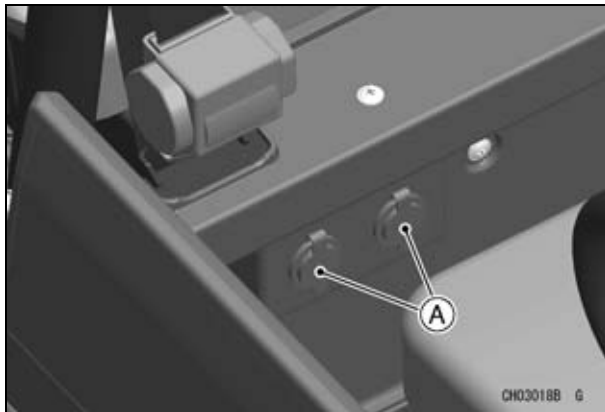
Lighting/Electrical Accessory Socket

The lighting/electrical accessory 12 volt sockets are located on the dashboard. On KAF1000C models, the rear power outlet sockets are located on the footwell of the rear seat.

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



A. Front Power Outlet Sockets



A. Rear Power Outlet Sockets (KAF1000C)

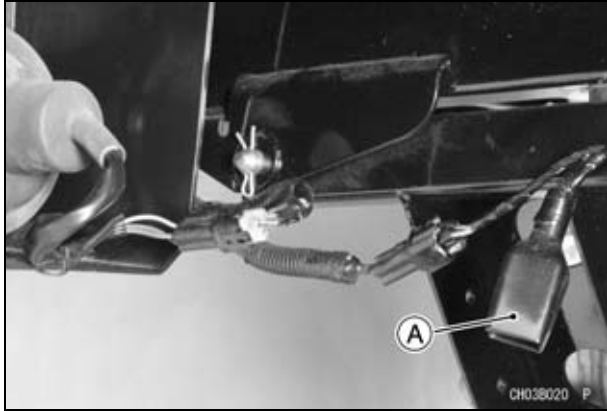
Electrical Accessory Connector

The front electrical accessory connectors are located under the front access cover. The rear electrical accessory connectors are located under the right side of cargo bed. An accessory may be connected to these connectors.



A. Front Electrical Accessory Connectors



44 GENERAL INFORMATION




A. Rear Electrical Accessory Connectors

Light Switches

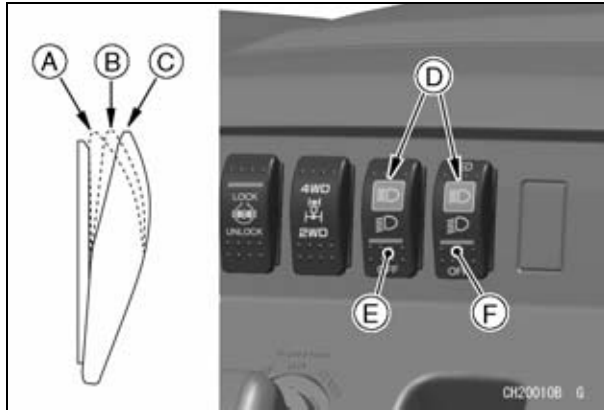
The light switches are 3-position type with an indicator.

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

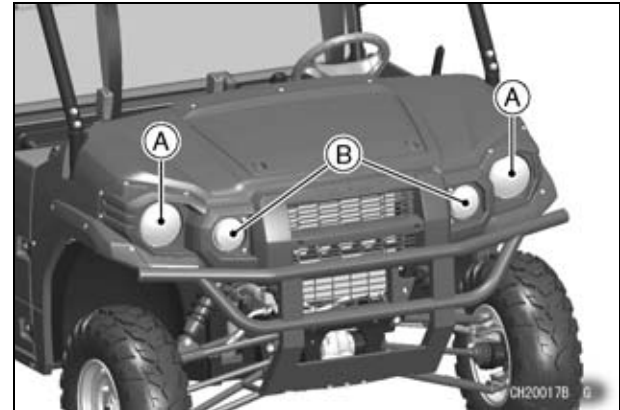
 : High Beam

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 (KAF1000C)**

The KAF1000C model is equipped with LED sub headlights. The operation of the LED sub headlight switch is similar with the headlight switch.

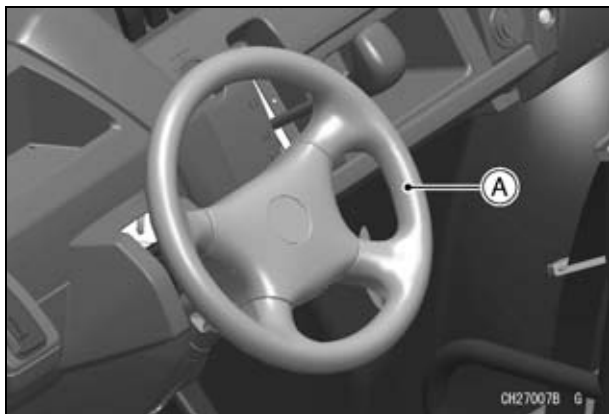


- A. Headlights**
- B. LED Sub Headlights (KAF1000C)**

Steering Wheel

The KAF1000B/C models are 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

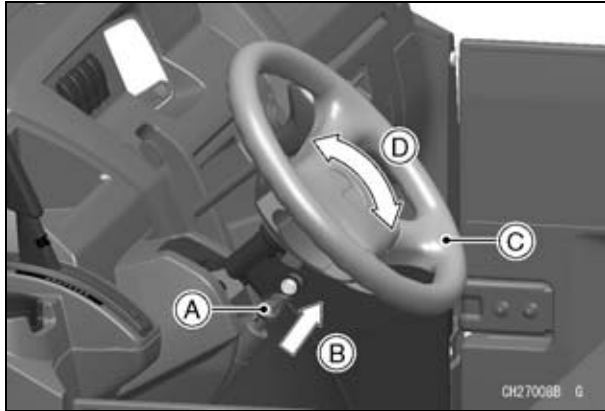
The steering wheel position can be adjusted to suit the operator.

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.



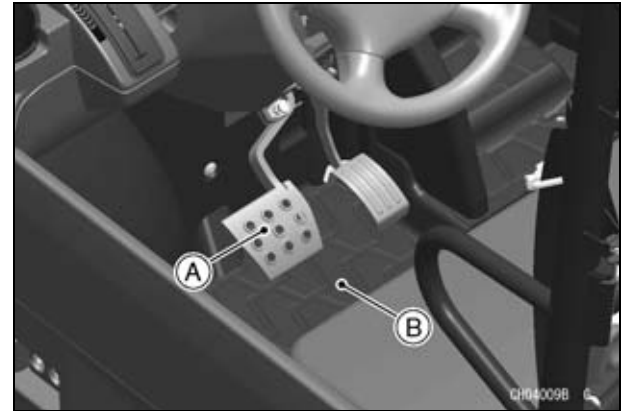
- A. Tilt Lock Lever
- B. Pull up.
- C. Steering Wheel
- D. Adjusting Direction

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. Press the pedal to slow or stop the vehicle.

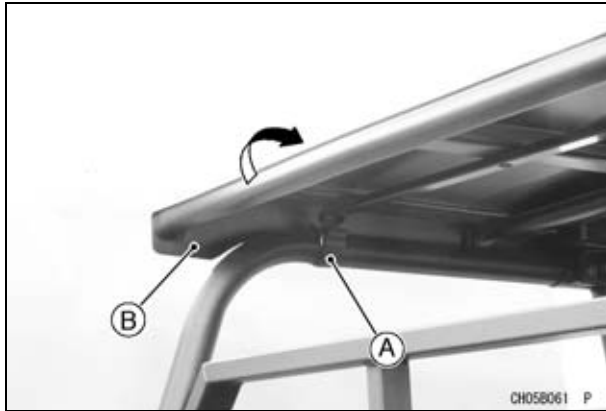


- A. Brake Pedal
- B. Floorboard

48 GENERAL INFORMATION

Sun Top (Equipped Model)

The rear of the sun top can be raised and flipped forward after unhooking the rubber retaining straps on both sides so that it does not interfere with the front of the cargo bed when it is lifted in extended condition.



A. Rubber Retaining Strap (Both Sides)

B. Sun Top

After the cargo bed is lowered and latched, return the rear of the sun top to its original position. Hook the rubber retaining straps on both sides to secure the rear of the sun top.

NOTICE

Do not drive the Mule with the rear of the sun top flipped forward as it could damage the hinge of the sun top.

Converting Rear Seat and Cargo Bed

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.

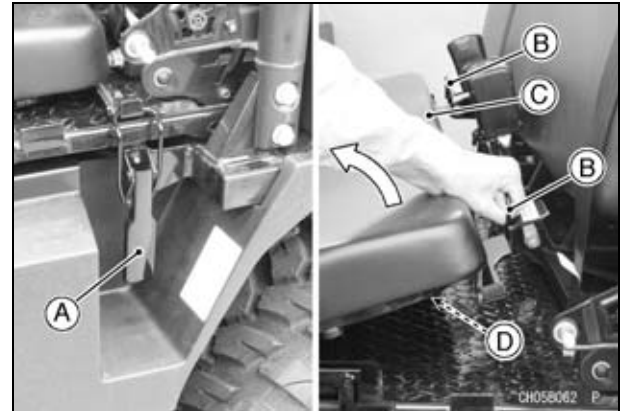
From 6-Persons to 3-Persons Mode

⚠ 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.

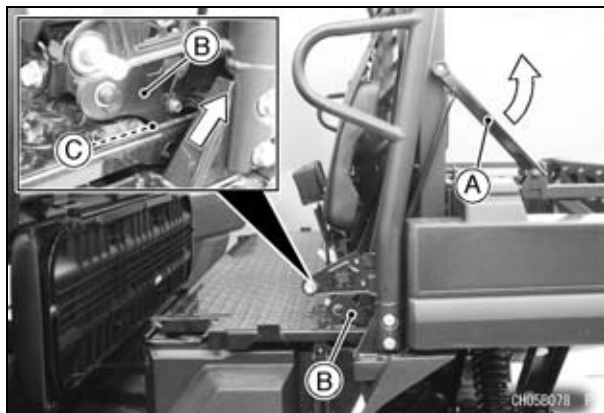
3. Push the rear seat frame forward into the stored position.

50 GENERAL INFORMATION



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)

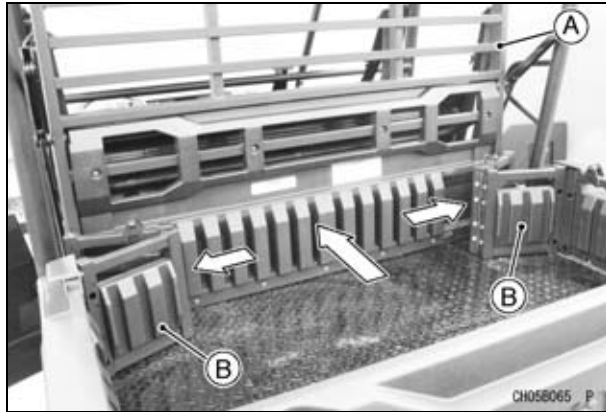
B. Lower Locking Arm (Both Sides)

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.



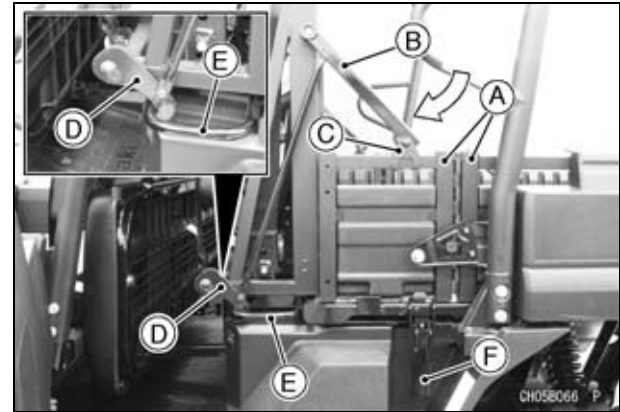
A. Cargo Bed Screen

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.

52 GENERAL INFORMATION

From 3-Persons to 6-Persons Mode

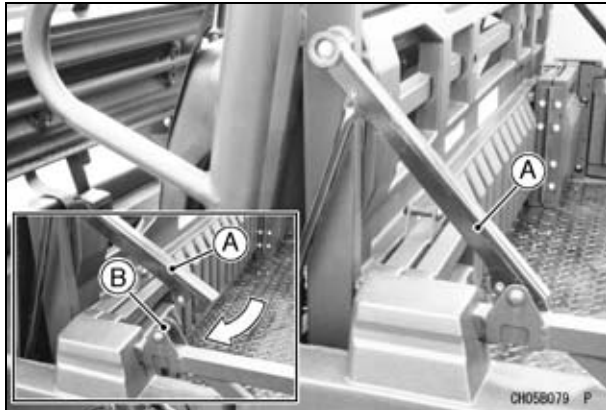
⚠ WARNING

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 6-persons to 3-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

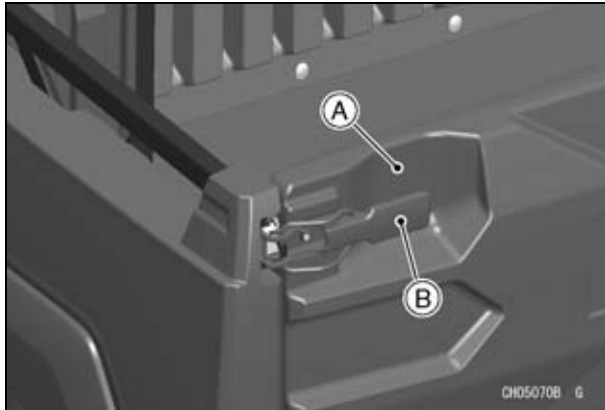
Failure to properly lock the cargo bed or screen may allow them to move suddenly while driving, causing loss of control and an accident resulting in serious injury or death. To prevent the cargo bed from suddenly moving, make sure that the cargo bed and screen has been locked properly after handling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

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.

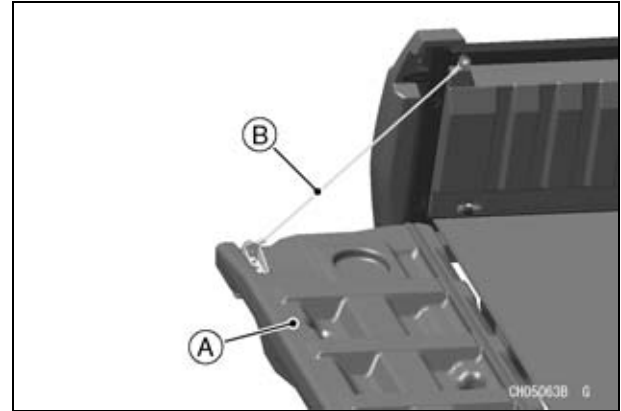
To open the tailgate, release the latches and lower the tailgate. Cables hold the tailgate level with the cargo bed.



- 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

Loading Cargo Bed

⚠ 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.**

Lifting and 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. 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.

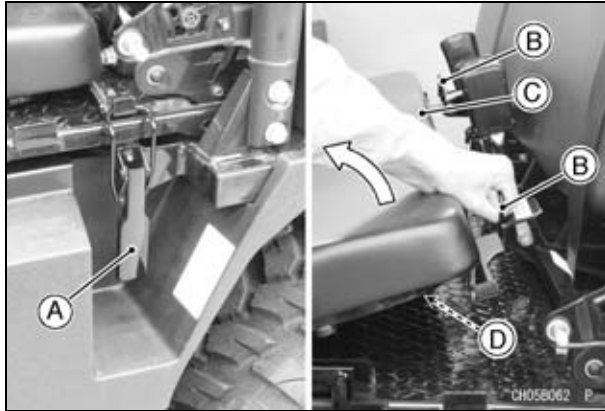
Support the bed in the tilted position with the supporting damper and supporting rod provided on the bottom of the cargo bed. Do not drive the vehicle with the front end of the cargo bed raised or unlatched.

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

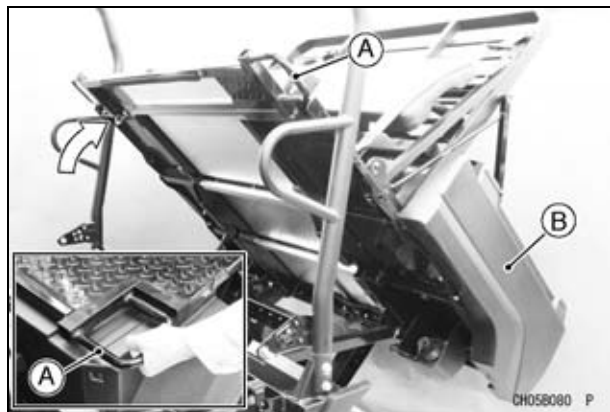
NOTICE

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.

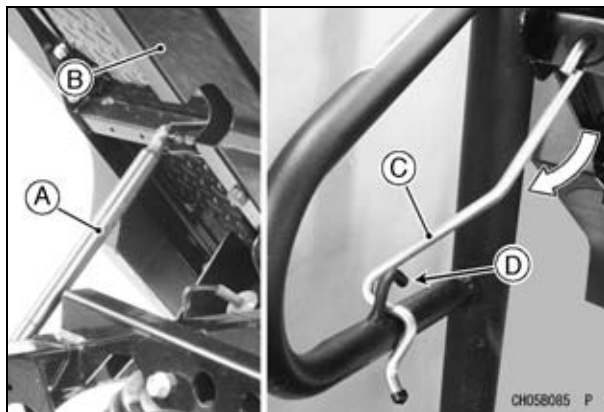


A. Handgrip
B. Cargo Bed

⚠ 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 hook the curved end of the supporting rod onto the bar of the ROPS to support the cargo bed. Position the supporting rod on the back side of the hook without fail.



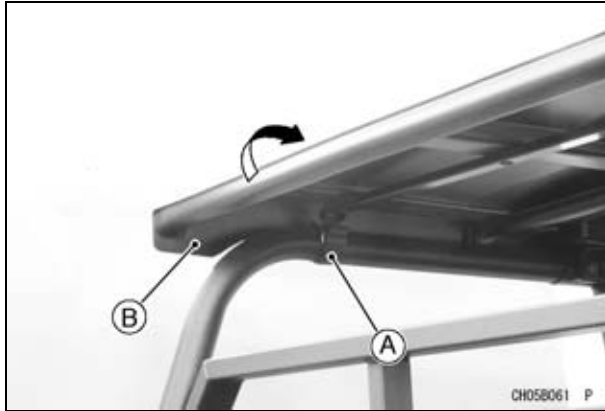
A. Supporting Damper
B. Cargo Bed (Raised Position)
C. Supporting Rod
D. Hook

⚠ 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

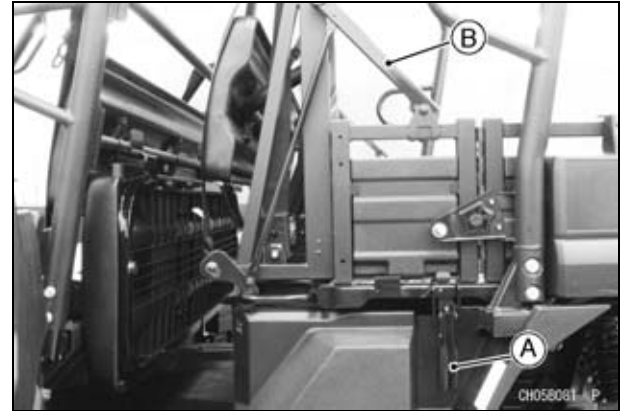
1. On models equipped with a sun top, unhook the rubber retaining straps on both sides, and raise the rear of the sun top it forward.



A. Rubber Retaining Strap (Both Sides)

B. Sun Top

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



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.

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⚠ 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.

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

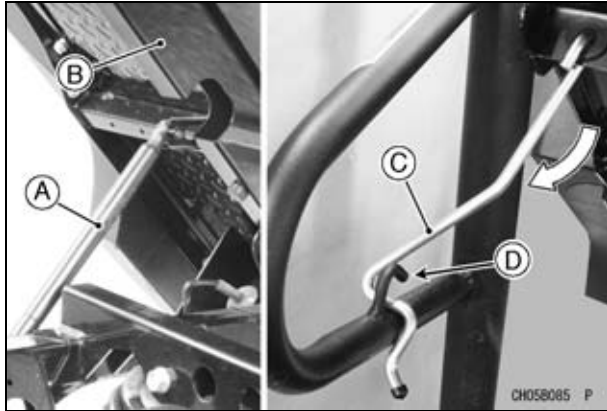


- A. Handgrip
- B. Cargo Bed

⚠ 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.

4. Pull the supporting rod out of its clip and hook the curved end of the supporting rod onto the bar of the ROPS to support the cargo bed. Position the supporting rod on the back side of the hook without fail.



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

⚠ 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.

On models equipped with a sun top, return the rear of the sun top to its original position. Hook the rubber retaining straps on both sides to secure the rear of the sun top.

NOTE

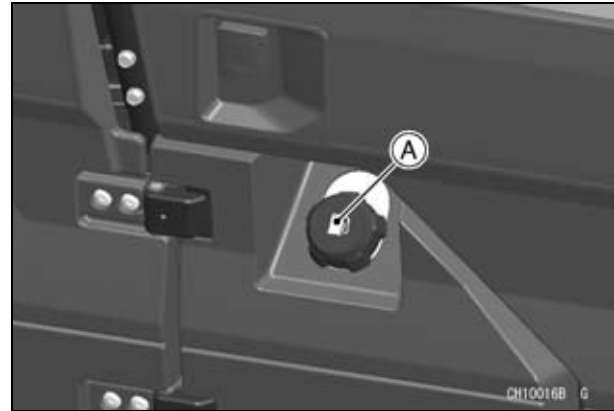
- To lower the cargo bed, follow the reverse procedure for lifting. Be sure to restore the seat as before and put the latches on. Never drive the Mule without locking the latches to the cargo bed.

⚠ 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.**

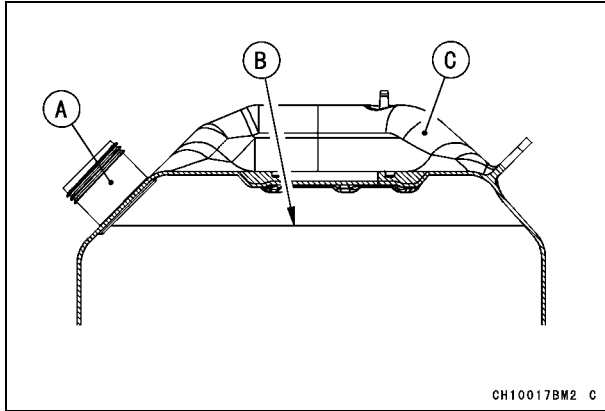
Fuel

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 insure 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.

Fuel Requirements

Fuel Type and Cetane Number

This engine is certified to operate on diesel fuel specially formulated for vehicle use. Use clean, fresh diesel fuel to maintain performance and life from the engine.

Use clean, fresh diesel fuel with a cetane number equal to or higher than that shown in the table.

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

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NOTICE

Use mineral oil derived diesel fuel. Do not use gasoline, gasohol, biodiesel fuel (containing FAME*) or any other alternative fuel. Improper fuel can cause severe fuel line, fuel injection system and engine damage.

*FAME means fatty acid methyl esters being used as alternatives and extenders for mineral oil derived fuels.

Lower Sulfur

Sulfur content is recommended at less than 0.05%.

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

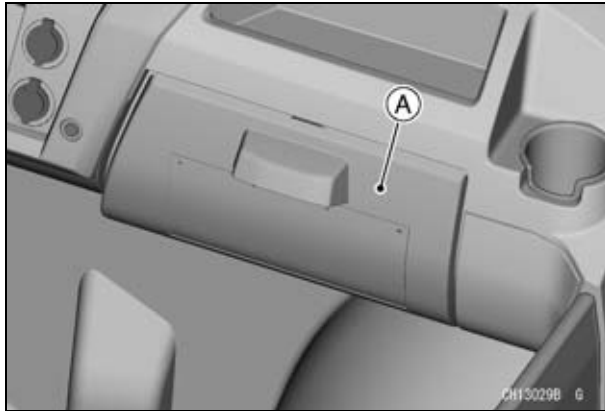
Do not add gasoline, gasohol, alcohol or aftermarket cetane improver additives to diesel fuel. Damage to the fuel injection system may result.

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.

Glove Compartment

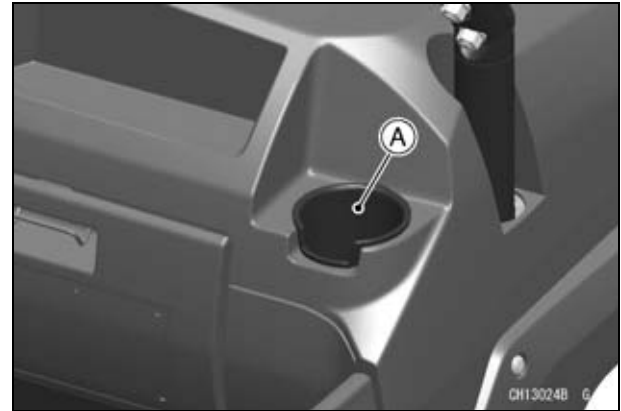
A glove compartment is provided at the right side of the dashboard. Store only light items to avoid damage to the inside of the compartment. Do not store items which must not get wet or dirty.



A. Glove Compartment

Cupholders

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



A. Cupholder (Both Sides)

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Front Access Cover

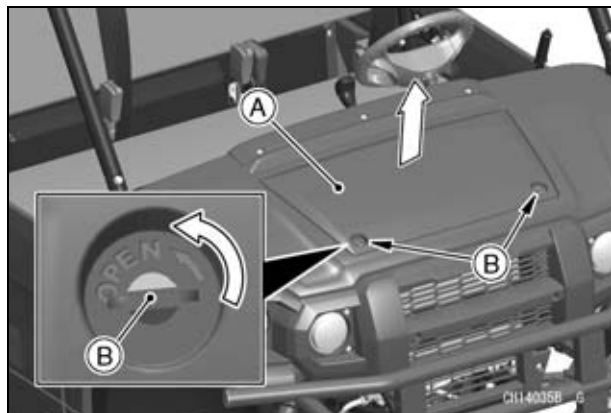
The front access cover can be removed for maintenance such as a coolant level inspection.

NOTICE

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

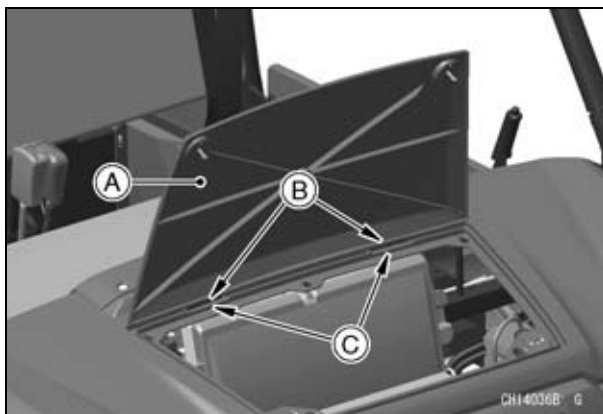
Cover Opening

- 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

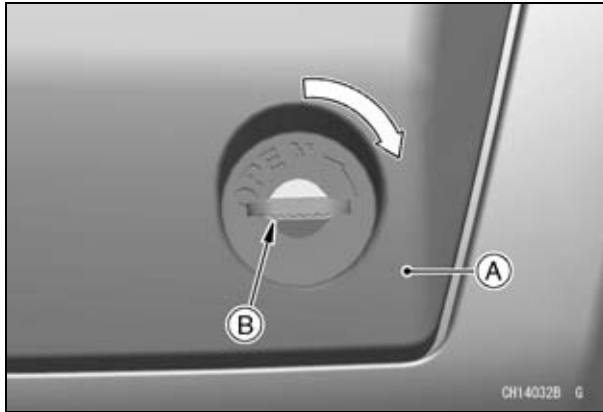
- Pull the front access cover forward to disengage the tabs from the slits of the front hood.



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.

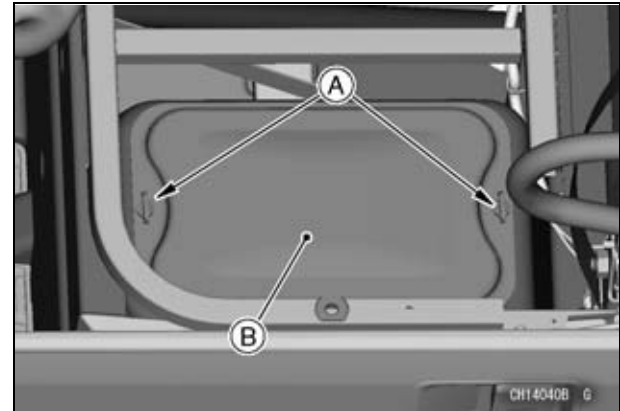
⚠ WARNING

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.

Storage Box

The storage box is located under the front seat. Remove the front seat and turn the knobs in direction as shown to open the cover.



- A. Knobs**
- B. Cover**

The storage box is for storing only light-weight items in it to avoid damage to the inside of the storage box. Do not put items which must not get wet or dirty in it.

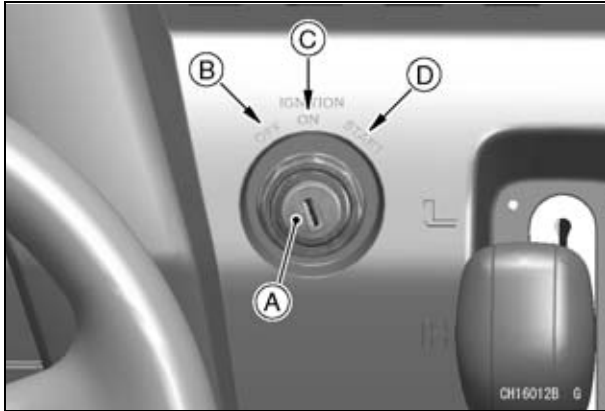
Maximum Storage Box Load:

9 kg (20 lb)

Secure the cover with the knobs and install the front seat when driving the vehicle.

Main Switch

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



- A. Main Switch
- B. “OFF” Position
- C. “ON” Position
- D. “START” Position

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.

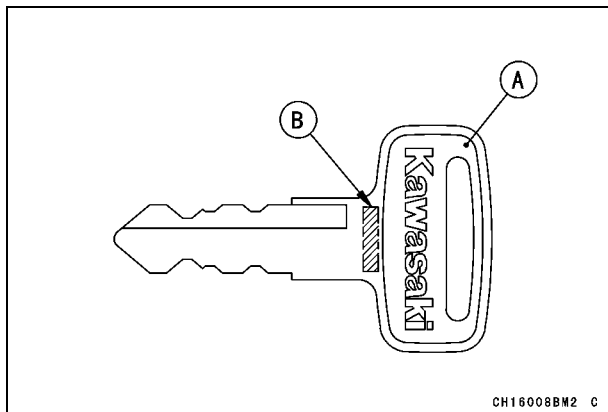
Do not turn the main switch key to the “START” position with the engine running, or damage to the starter can result.

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.*

Keys

This UV comes with two keys. Use one for the main switch and keep the other in a secure place to use as a spare. A key number is stamped on the key itself. Record the key number in the space provided and store the number in a safe place.



A. Key

B. Key Number

Write your key number here.

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

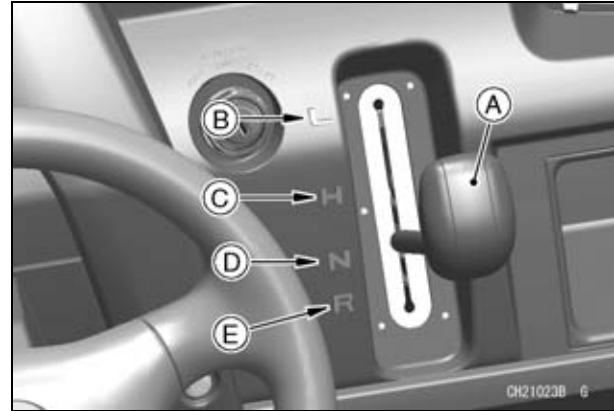
Contact your Kawasaki dealer to purchase additional spare keys either using your original key as a master or using the key code on the tag or your key. Store one key at home and keep another spare in your wallet or riding gear, in case the original is lost.

Gear Shift Lever

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

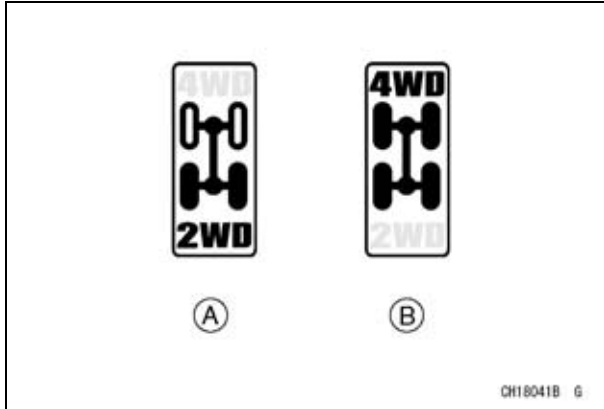
You can select “2WD” or “4WD” to suit various driving conditions. The selectable 2WD/4WD shift switch is located on the dashboard.



- 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

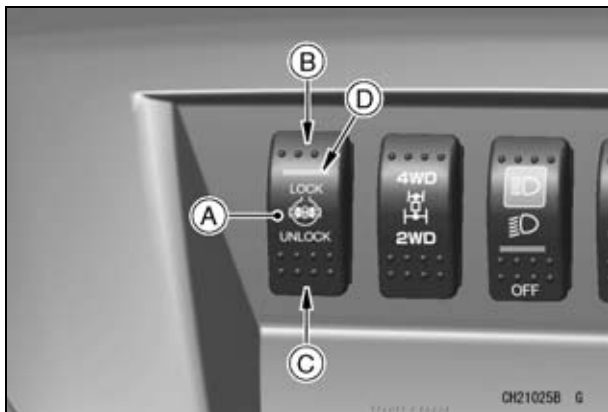
The handling characteristics of this vehicle differs between “2WD” and “4WD” according to terrain. Changing the operating mode while moving can cause sudden changes in handling performance which can cause the operator to lose control and have an accident. Always stop the vehicle before changing from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

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

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.

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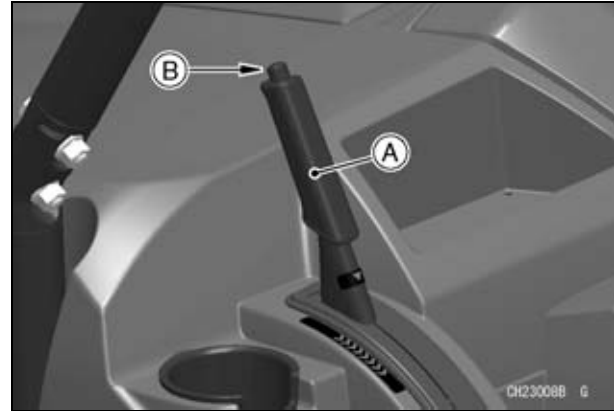
Parking Brake Lever

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

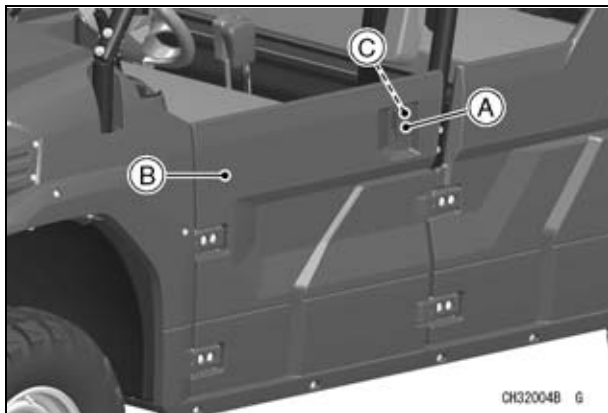
⚠ WARNING

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.

Doors

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.*

NOTICE

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

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Seats

There are front and rear seats on this vehicle. It can be transformed from 3-persons to 6-persons by unfolding the rear seat.

3-Persons Mode



A. Rear Seat (Folded Position)

6-Persons Mode



A. Rear Seat

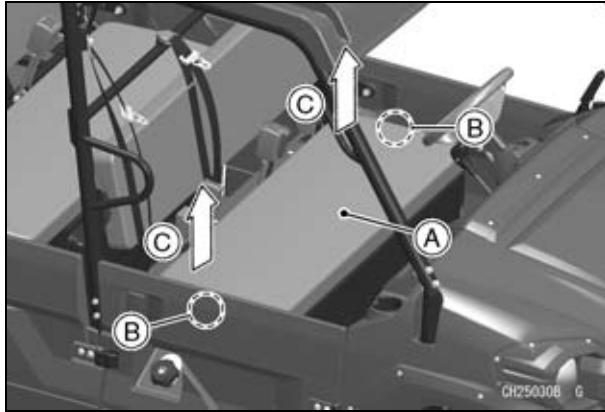
NOTE

○ *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

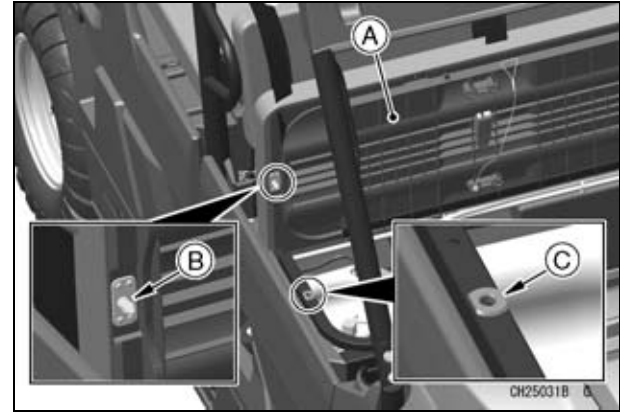
- Pull up the right and left ends of the front seat to clear the projections.
- Remove the front seat.



- 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.

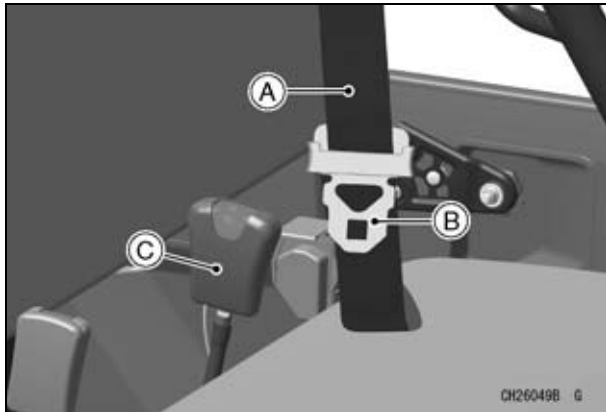


- A. Front Seat
- B. Projection (Both Sides)
- C. Grommet (Both Sides)

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Seat Belts

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



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

⚠ WARNING

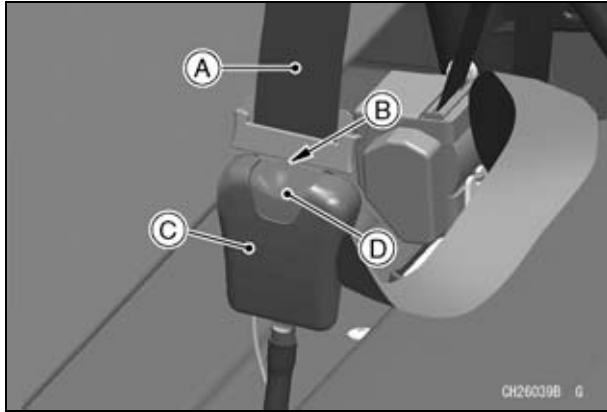
Not wearing a seat belt, or wearing one improperly can result in serious injury or death in the event of an accident. Make certain the operator and all passengers always wear their seat belts properly.

⚠ 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

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

⚠ WARNING

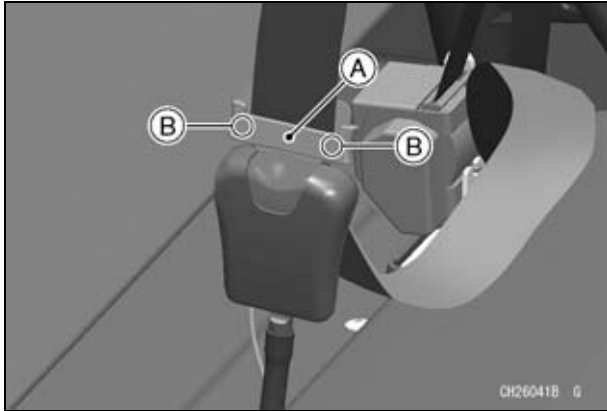
Too much seat belt slack could reduce its protection effectiveness in an accident. Always verify that the belt is at a SNUG FIT.

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.

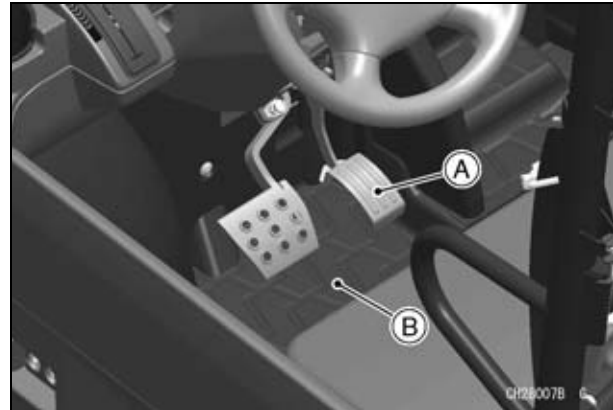
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- A. Slider
- B. Arrow Marks

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

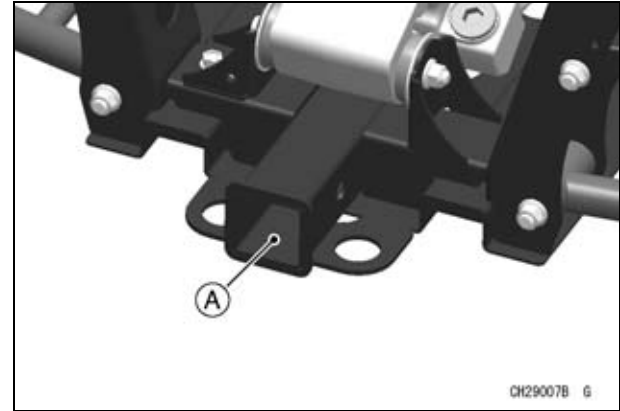
This vehicle is equipped with a bracket for a trailer hitch. Trailer towing equipment is not supplied with this vehicle.

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 68.1 kg (150 lb) tongue weight on the towing bracket.**
- **Do not operate the vehicle faster than 16 km/h (10 mph) when towing. Remember that towing a trailer increases braking distance.**
- **Do not tow more than 907 kg (2 000 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.**



A. Trailer Hitch Bracket

BREAK-IN

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	Check filter element for contamination.
Water Separator	Check for water accumulation and filter element contamination.
Engine Oil	Oil level between Full and Low holes on the dipstick (when engine is cold), no leaks.
Tires	Air pressure (when cold):

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Tire	Load	Cold Tire Pressure
Front	Up to 717 kg (1 581 lb)	78.4 kPa (0.80 kgf/cm ² , 11.4 psi)
Rear	Up to 590 kg (1 300 lb)	110 kPa (1.12 kgf/cm ² , 16.0 psi)
	590 ~ 717 kg (1 300 ~ 1 581 lb)	130 kPa (1.33 kgf/cm ² , 18.9 psi)

Check for cuts, cracks, damage, or excessive wear. Check for any imbedded stones or other foreign particles in tread.

Front Final Gear Case Oil	Oil level come to the bottom of the filler opening, no leaks.
Transmission Case Oil	Oil level between high and low levels on the rib in the oil filler opening, no leaks.
Coolant	Coolant level between level lines (when engine is cold), no leaks.
Air Cleaner Element	Check for dirt; clean or replace as required.
Screen at Belt Drive Transmission (CVT) Air Duct	Check and clean the screen for obstruction by insects, mud or foreign object.
Throttle	Throttle pedal free play 2 ~ 10 mm (0.08 ~ 0.39 in.). Throttle pedal operates smoothly and returns to rest position when released.
Steering	Steering wheel free play 0 ~ 20 mm (0 ~ 0.79 in.). Action smooth without excessive play, rough spots, or strange noises.
Brakes	Check for braking effectiveness (while test running). Brake pedal free play 2 ~ 10 mm (0.08 ~ 0.39 in.). Brake fluid level between level lines, no leaks. Parking brake: Stops vehicle completely. Visually check the return springs for damage.
Parking Brake Indicator	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.
ROPS	Make sure there is no damage to the structure or loose bolts.
Seat Belts	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 Make sure there is no damage to the structure or loose bolts and all doors are latched securely they are closed.



Starting the Engine

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

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.

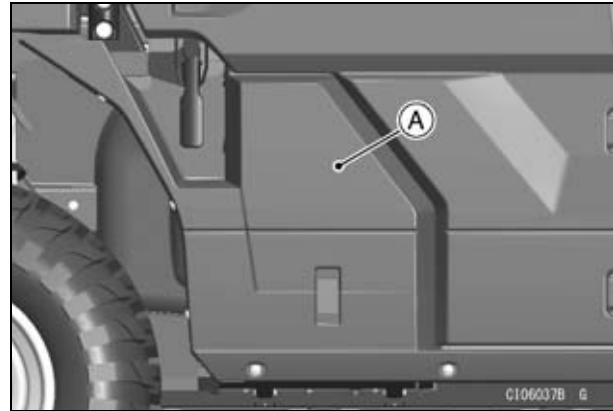
⚠ DANGER

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

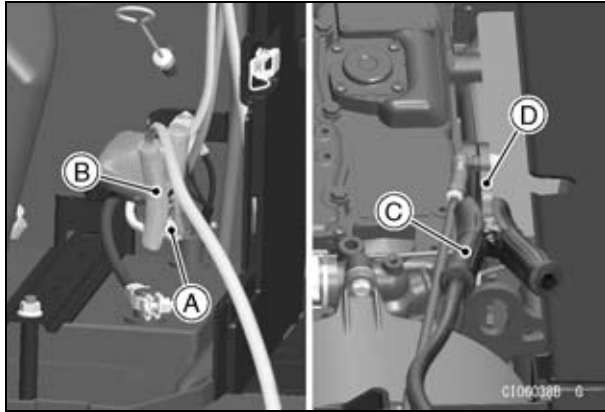
- Make sure the main switch is turned off.
- Remove the battery cover located at the right side of the rear seat. Refer to the "Battery" section in

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.

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- 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

- Make sure that all doors are properly closed.
- Depress the brake pedal.
- 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
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<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 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.

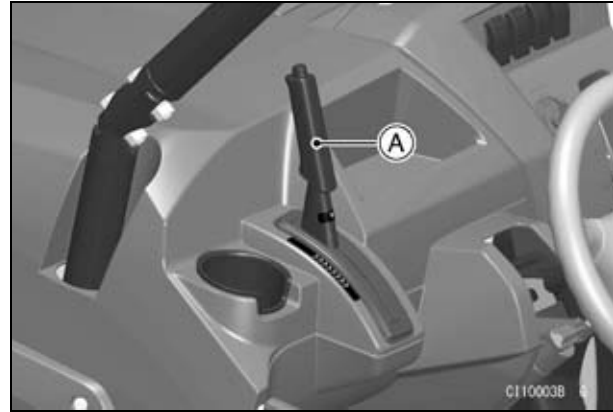
Never touch a hot engine, exhaust pipe, or muffler during operation or after stopping the engine.

- 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.



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.

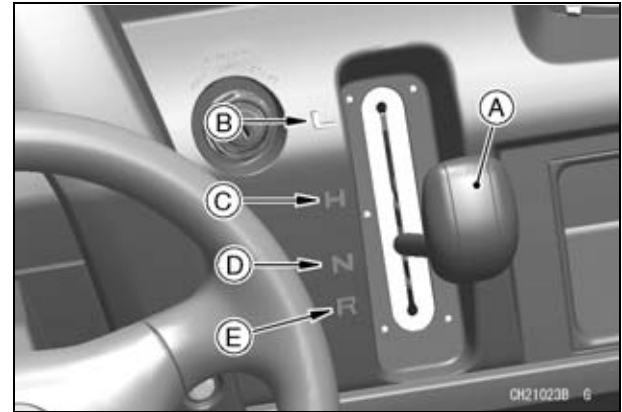
- Remove the main switch key to prevent unauthorized use.
- When parking inside a garage or other structure, be sure the structure is well ventilated and the vehicle is not close to any source of flame or sparks. This includes any appliance with a pilot light.

⚠ 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.

Shifting Gears

- 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

- 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

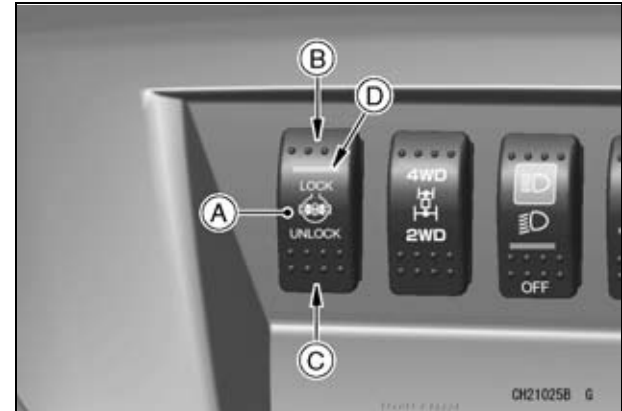
The handling characteristics of this vehicle differs between “2WD” and “4WD” according to terrain. Changing the operating mode while moving can cause sudden changes in handling performance which can cause the operator to lose control and have an accident. Always stop the vehicle before changing from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

- 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

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.

This vehicle is designed for an operator and two passengers (for 3-persons mode) or an operator and five passengers (for 6-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

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.

NOTICE

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

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

Driving in “4WD”

“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.

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Climbing Hills

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

Avoid hills with slippery sides that will cause you to lose traction. Do not climb hills where you cannot see far enough ahead. If you cannot see what is on the other side of the crest of a hill, slow down until you can get a clear view. Don't apply power suddenly while climbing, or the front wheels might rise off the ground. If the vehicle does not have enough power to reach the top of the hill and stalls, allow the vehicle to roll slowly straight back down the hill controlling its descent with the brakes. Leave the gear shift lever in the “H” (High) 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.
- 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. These conditions are particularly hazardous when descending a hill or making a turn. Remember that this vehicle is not for use on public streets, roads, or highways.

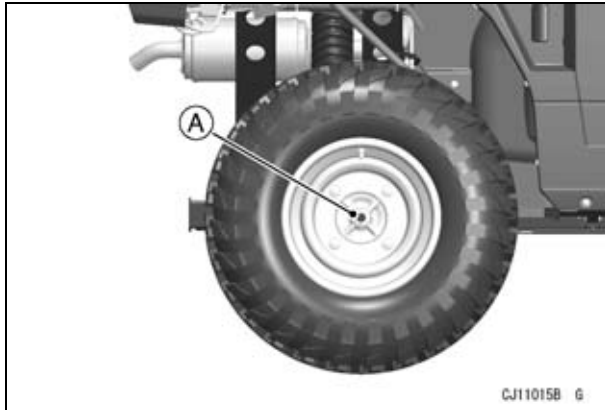
Remember

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

Driving through Water

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

Observe the following rules for operating the vehicle in water.



A. Axle Nut

⚠ 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.

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Operator and Passenger Requirements

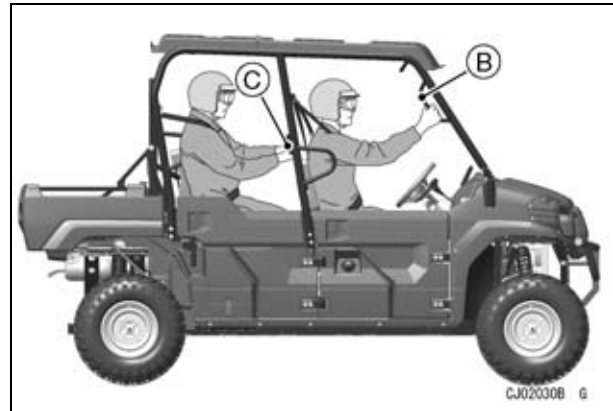
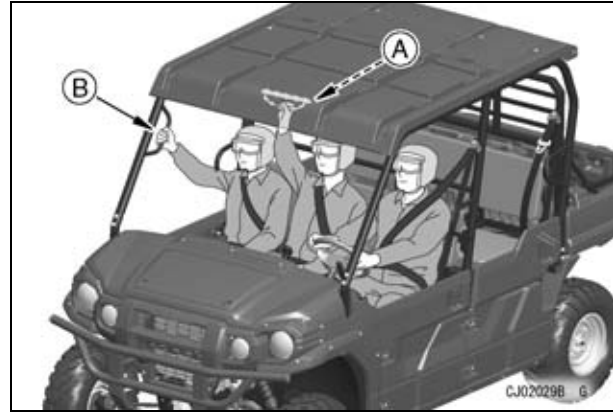
All operators of this vehicle should possess a valid driver's license.

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, handgrips or handhold.

⚠ 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, handgrips, and handhold are not a substitute for the seat belts.



- A. Front Center Handgrip**
- B. Front Right Handgrip**
- C. Rear Handhold**

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

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

MAINTENANCE AND ADJUSTMENT

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

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

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

Periodic Maintenance Chart

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

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

OPERATION	FREQUENCY		Regular Service					
	First 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					●			

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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
Engine oil - change*	●			● or every 6 months whichever comes first		
Oil filter - replace*	D			D or every 6 months whichever comes first		
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		

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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
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)					
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*		●			●	

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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
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	
Bolts, nuts, and fasteners tightness - inspect		D		D		
Seat belts - inspect					●	
Cables - inspect					D	
Cargo bed latch - inspect					●	

Engine Oil

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

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

- Park the vehicle on level ground.

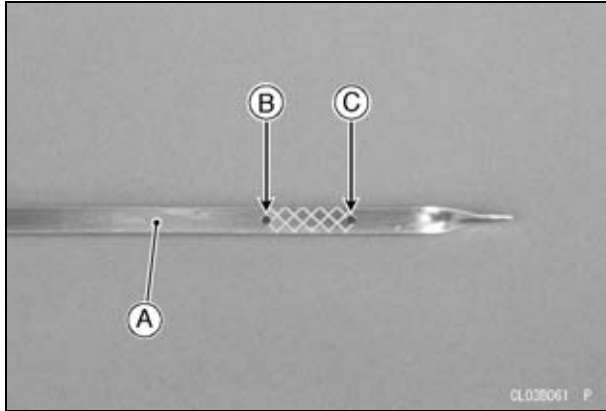
- Remove the battery cover (see Battery Removal).
- Pull up the dipstick out of the dipstick tube, wipe it dry, and insert the dipstick till it bottoms into the tube securely.



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.

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- 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

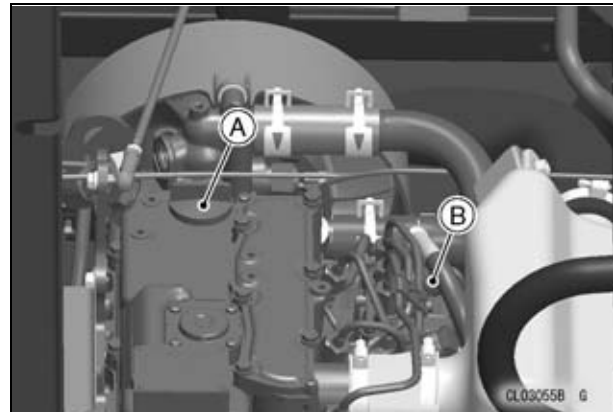
Never overfill. Overfilling may result in white exhaust smoke, engine overspeed or internal damage.

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

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

Oil and/or Oil Filter Change

- 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.

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.

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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]

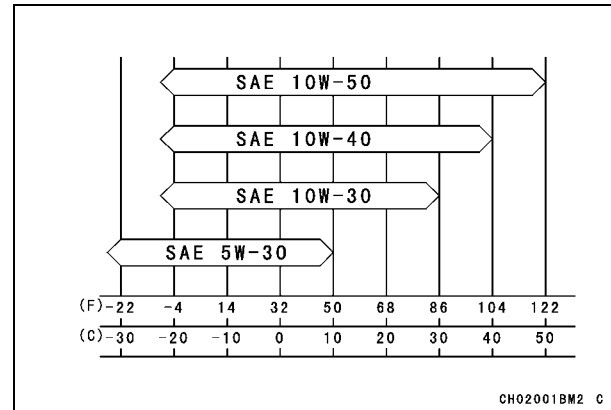
*: When using CJ-4 oil (low ash oil) in your engine, use fuel with less than 0.05% sulfur content to avoid engine oil deterioration.

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

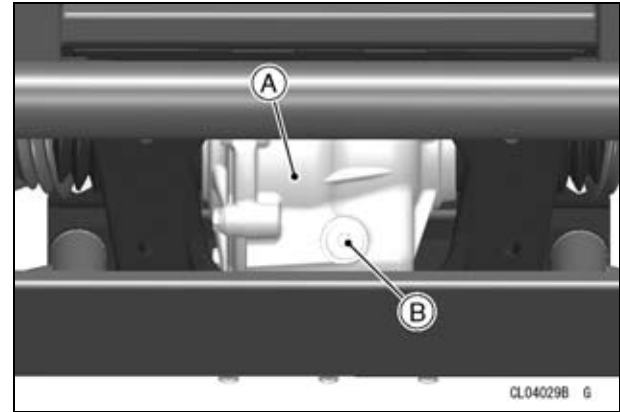
In order for the differential, pinion, and ring gears to function properly, check the oil level and change the oil in accordance with the Periodic Maintenance Chart.

⚠ 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

- 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.



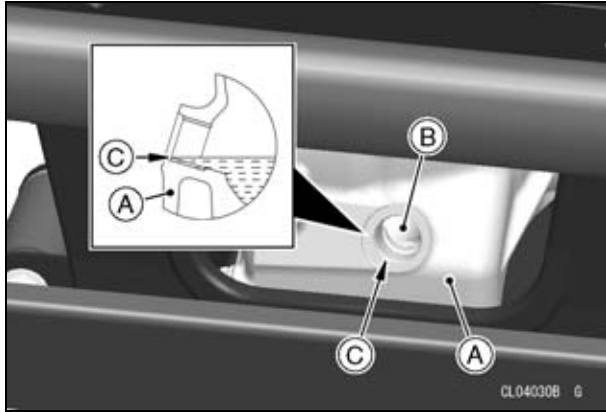
- A. Front Final Gear Case
- B. Oil Filler Cap and O-ring

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.

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- 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.

Oil Change

NOTE

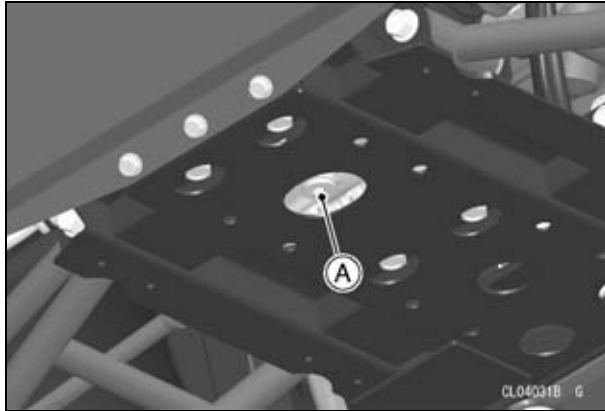
- Before draining the oil, warm it up by running the vehicle. Warm oil drains easily and picks up any sediment.
- With the vehicle level, place an oil pan beneath the gear case.
- Remove the oil filler cap, drain plug and O-rings.

⚠ 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

- 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

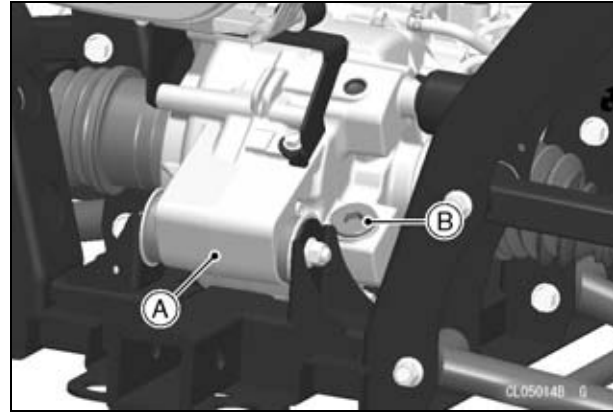
In order for the transmission, differential, pinion, and ring gears to function properly, check the oil level and change the oil in accordance with the Periodic Maintenance Chart.

⚠ 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

- Park the vehicle on level ground.
- Remove the oil filler cap and O-ring.

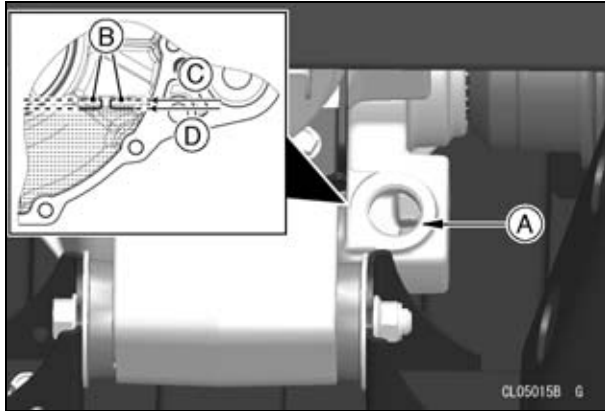


- A. Transmission Case
- B. Oil Filler Cap and O-ring

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.

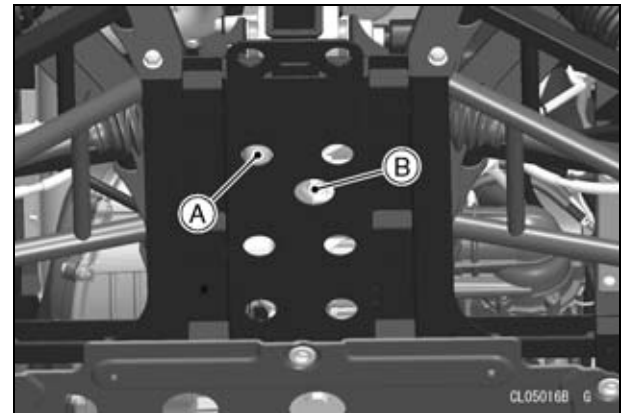
Tightening Torque

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

Oil Change

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

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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 (2.11 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)

Cooling System

⚠ WARNING

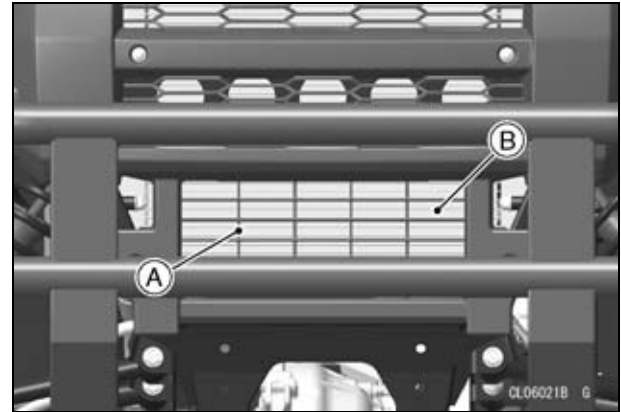
The cooling system is pressurized and can get extremely hot during normal operation and cause serious burns. To prevent burns, do not touch the radiator when it is hot. Do not attempt to open the radiator cap when hot since steam and hot coolant can forcefully erupt when the cap is even loosened slightly.

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.

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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

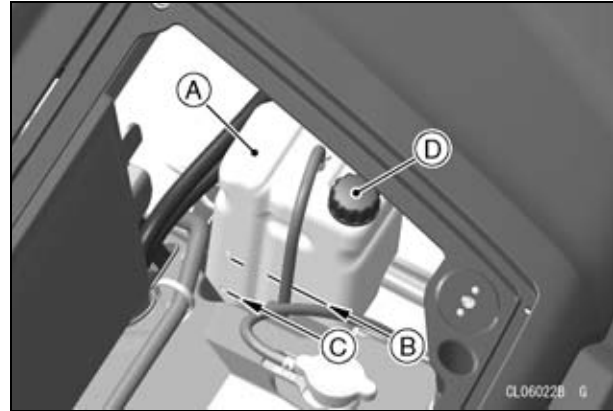
- Situate the vehicle on level ground.
- Remove the front access cover. Refer to the "Front Access Cover" section in the "GENERAL INFORMATION" chapter.
- Check the coolant level through the coolant level gauge on the reserve tank. The coolant level should be between the "F" (Full) and "L" (Low) marks.

NOTE

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

Coolant Capacity

6.1 L (6.4 US qt)



- 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 antifreeze 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.

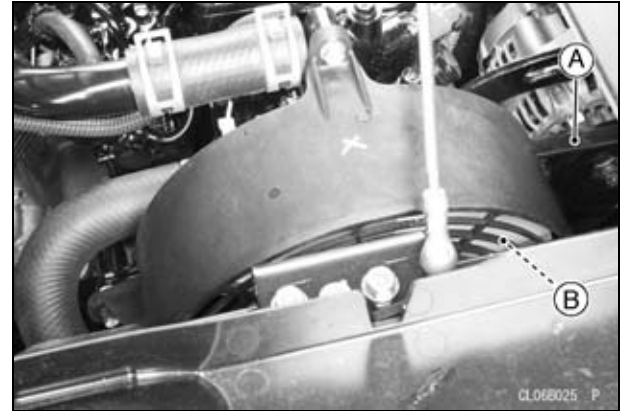
Coolant Change

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**

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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	0.15 ~ 0.25 mm (0.0059 ~ 0.0098 in.)
Exhaust	0.15 ~ 0.25 mm (0.0059 ~ 0.0098 in.)

Engine Air Cleaner

A clogged engine air cleaner restricts the engine's air intake, increasing fuel consumption, reducing engine power.

⚠ 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.

NOTICE

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

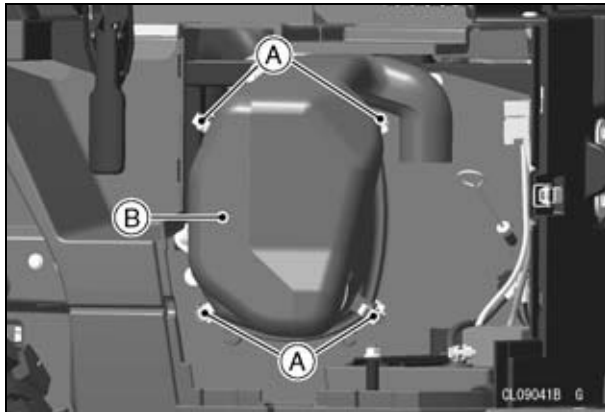
The air filter element should be cleaned in accordance with the Periodic Maintenance Chart. In dusty areas, the element should be cleaned more frequently than the recommended interval.

Element Removal

- Remove the battery cover (see Battery Removal).

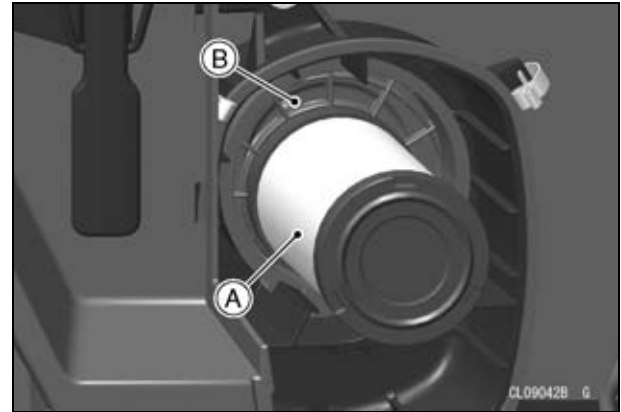
NOTE

- 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.



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.

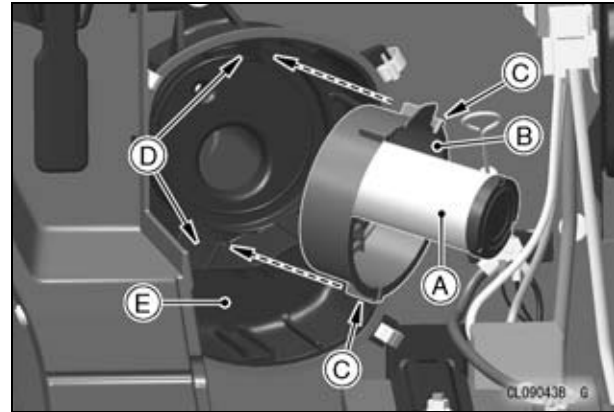
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Element Cleaning

- 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

- 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).

Spark Arrester

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

⚠ WARNING

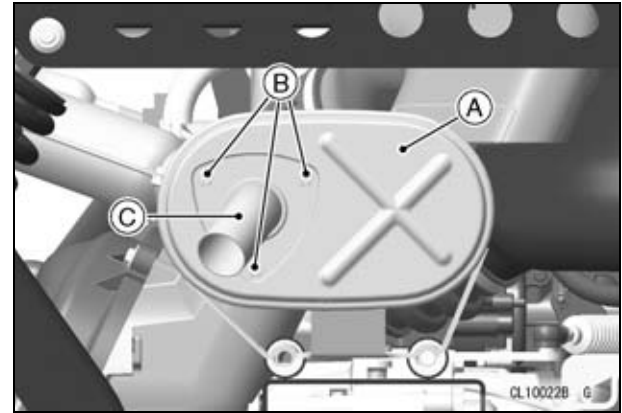
An incorrectly installed spark arrester can emit sparks and cause a fire. Be sure the spark arrester and muffler are installed securely.

Spark Arrester Cleaning and Inspection

⚠ 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.



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

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- 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

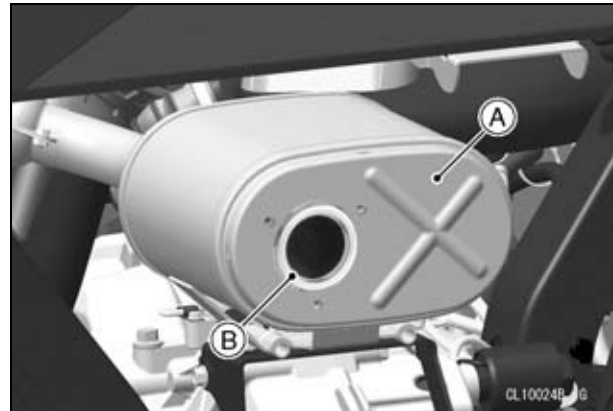
Hot carbon particles are emitted when the spark arrester is cleaned and can cause a fire resulting in severe burns and damage. Do not clean the spark arrester or run the engine with the spark arrester disassembled near combustible materials.

- 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)

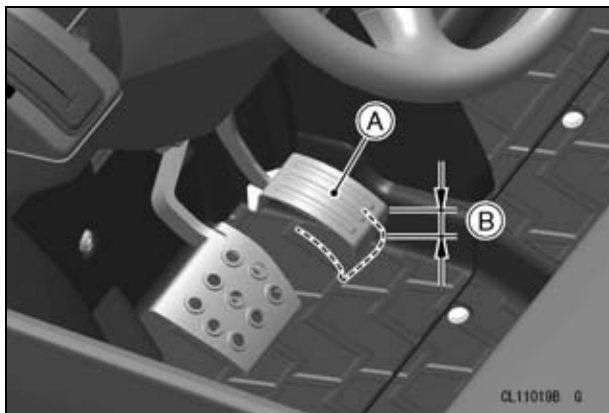
Throttle Pedal

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 2 ~ 10 mm (0.08 ~ 0.39 in.). If the free play is out of specification, have your authorized Kawasaki dealer adjust the throttle pedal play.

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- A. Throttle Pedal
- B. 2 ~ 10 mm (0.08 ~ 0.39 in.)

Idle Adjustment

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

Fuel Hose

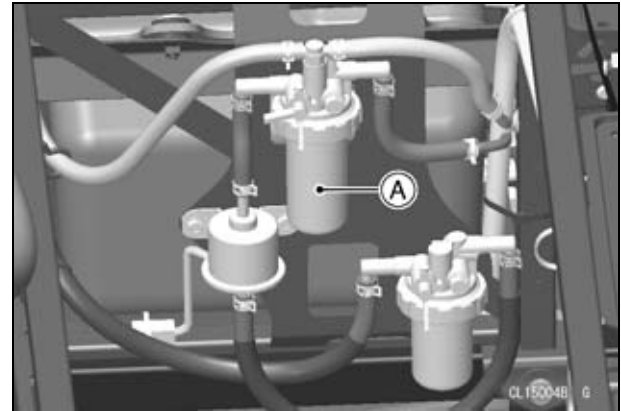
Fuel hose and connections should be checked and replaced periodically by an authorized Kawasaki dealer in accordance with the Periodic Maintenance Chart.

Fuel Filter

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.

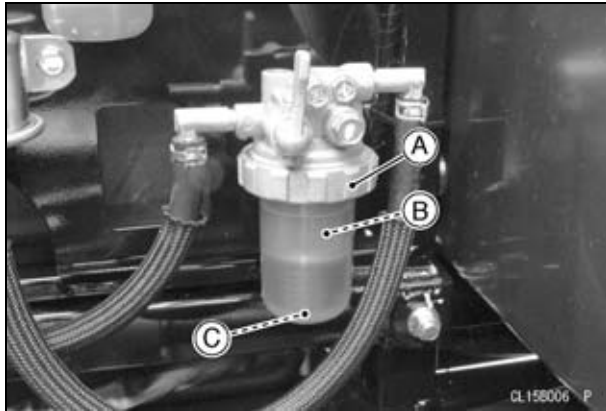
130 MAINTENANCE AND ADJUSTMENT

Water Separator

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**

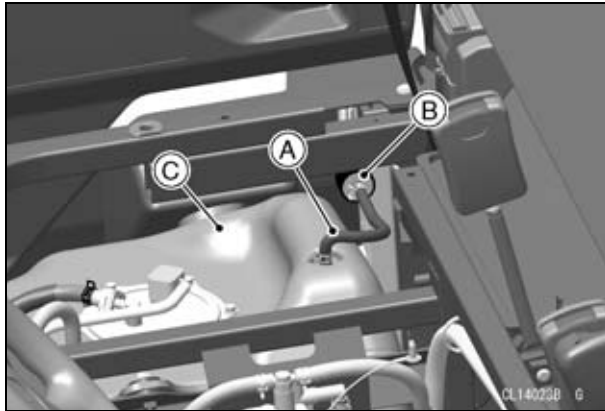
NOTE

- *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

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.

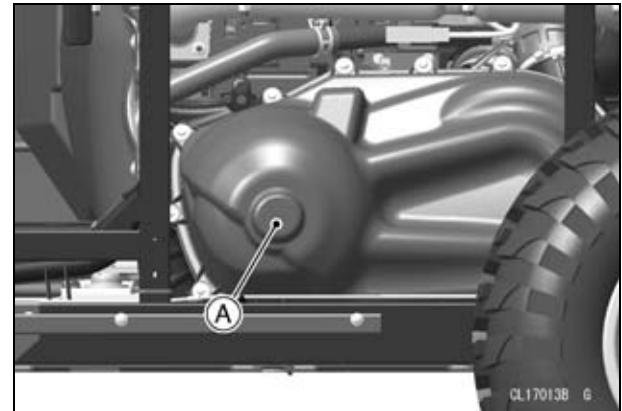


- A. Fuel Tank Vent Hose
- B. Check Valve
- C. Fuel Tank

Belt Drive Transmission (CVT)

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.

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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.

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

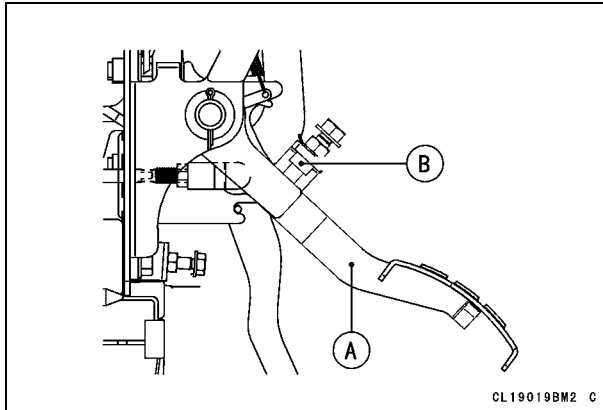
The vehicle is equipped with hydraulically activated disc brakes on all four wheels.

Brake Pedal

Brake Pedal Free Play Inspection

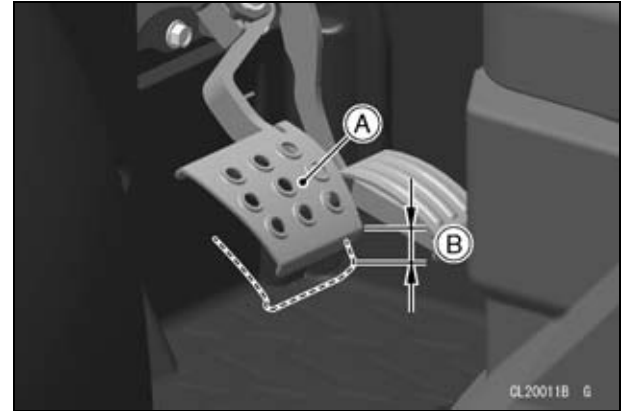
In accordance with the Periodic Maintenance Chart, check the brake pedal free play.

- 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 2 ~ 10 mm (0.08 ~ 0.39 in.) of free play.



- A. Brake Pedal
- B. 2 ~ 10 mm (0.08 ~ 0.39 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 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

Use heavy-duty brake fluid only from a fresh, unopened container marked DOT4.

⚠ WARNING

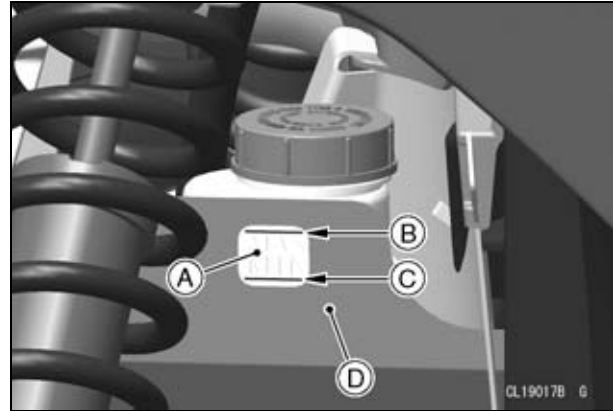
Over time, brake fluid can absorb moisture, lowering its boiling point and reducing brake effectiveness. Do not use fluid from a container that has been left unsealed or that has been open for a long time. Do not mix two types and brands of fluid for use in the brakes. Don't leave the reservoir cap off 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.

NOTICE

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

Fluid Level Inspection

- 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.

- 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

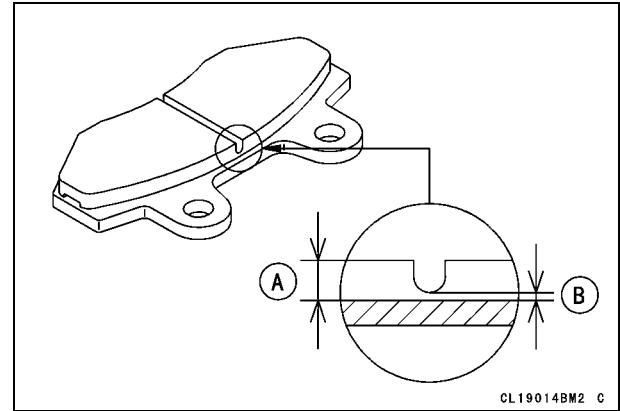
Disc and brake pad wear is automatically compensated for and has no effect on the brake pedal action. There are no parts that require adjustment on the brake.

⚠ 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

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

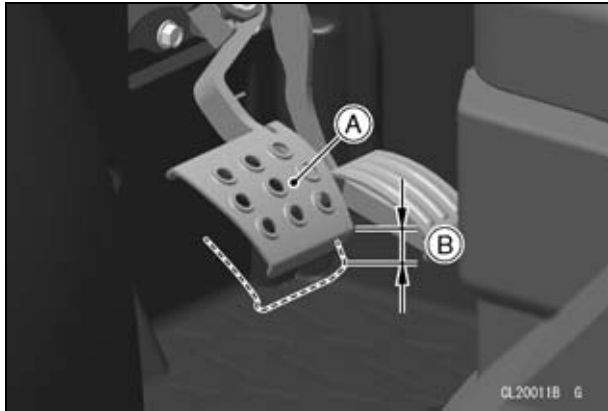
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Brake Light Switch

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 main switch to the “ON” position.
- Depress the brake pedal. The brake light should go on after about 10 mm (0.39 in.) of pedal travel.



- A. Brake Pedal**
- B. 10 mm (0.39 in.)**

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

Adjustment

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

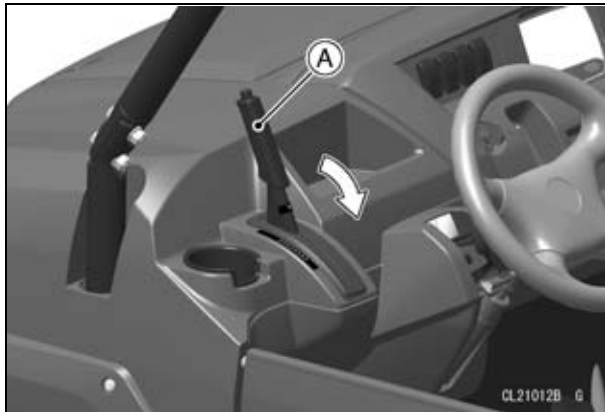
Parking Brake

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.

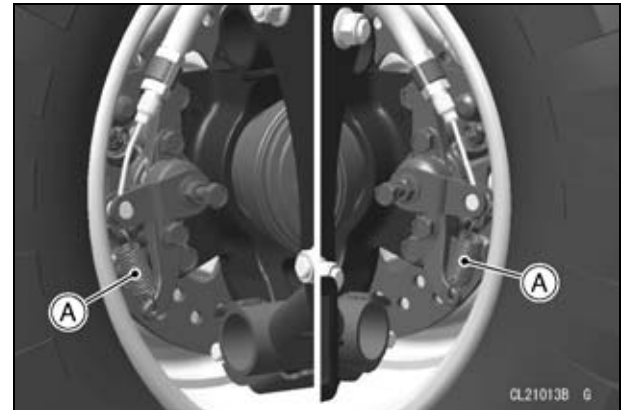


A. Parking Brake Lever

- 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

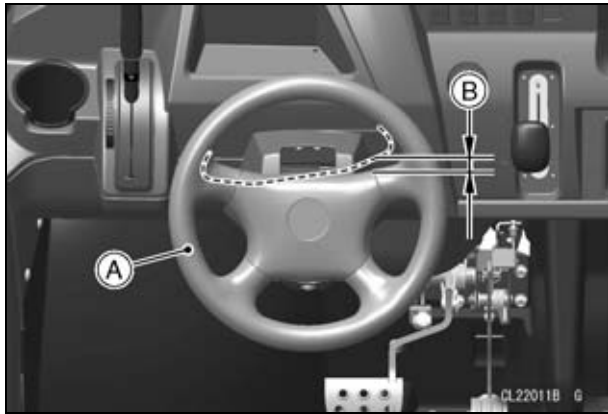
- If it is damaged, have it replaced with a new one by an authorized Kawasaki dealer.

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 0 ~ 20 mm (0 ~ 0.79 in.) of free play.
- If there is excessive free play or strange noises, or the steering feels rough or “catchy,” have the steering system checked by an authorized Kawasaki dealer.



- A. Steering Wheel
- B. 0 ~ 20 mm (0 ~ 0.79 in.)

Power Steering System (KAF1000B/C)

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.
- 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:
120 N·m (12.2 kgf·m, 88.5 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	Make, Type: DURO, FRONTIER DI2037 Size: 26 x 9.00-12 4PR
Rear	Make, Type: DURO, FRONTIER DI2037 Size: 26 x 11.00-12 4PR

Tire Air Pressure (when cold)

Front	Up to 717 kg (1 581 lb) Load	78.4 kPa (0.80 kgf/cm ² , 11.4 psi)
Rear	Up to 590 kg (1 300 lb) Load	110 kPa (1.12 kgf/cm ² , 16.0 psi)
	590 ~ 717 kg (1 300 ~ 1 581 lb) Load	130 kPa (1.33 kgf/cm ² , 18.9 psi)

NOTE

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

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

Maximum Tire Air Pressure for Seating Beads

Front and Rear	250 kPa (2.5 kgf/cm ² , 36 psi)
----------------	--

Payload and Tire Pressure

Failure to maintain proper inflation pressures or observe payload limits for your tires can change or impair handling and performance of the vehicle. The maximum vehicle load is 717 kg (1 581 lb).

Use a tire pressure gauge to accurately set tire pressure.

⚠ WARNING

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

Tire Wear, Damage

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

- In accordance with the Periodic Maintenance Chart, measure the depth of the tread with a

depth gauge, and replace any tire that has worn down to the minimum allowable tread depth.



A. Tire Depth Gauge

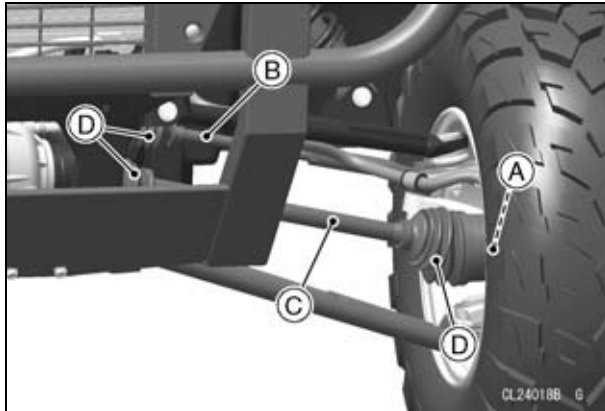
Minimum Tread Depth

4 mm (0.16 in.)

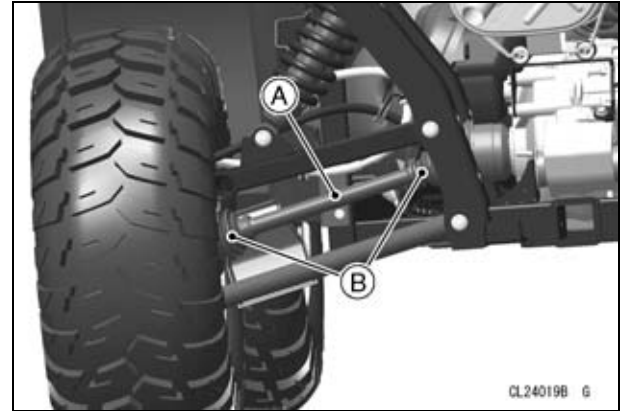
- Visually inspect the tire for cracks and cuts, replacing the tire in case of bad damage. Swelling or high spots indicate internal damage, requiring tire replacement.
- Remove any imbedded stones or other foreign particles from the tread.

Joint Boots

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



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

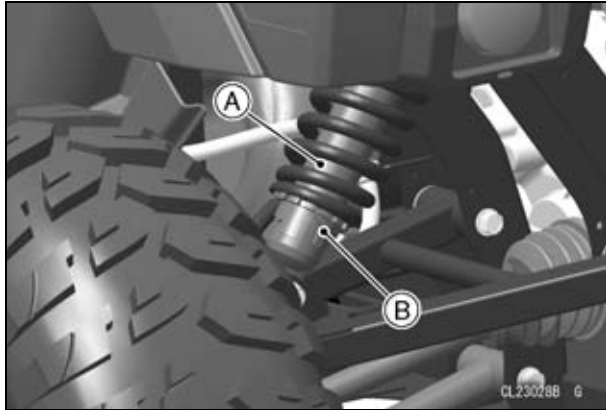


- A. Rear Axle
- B. Joint Boots

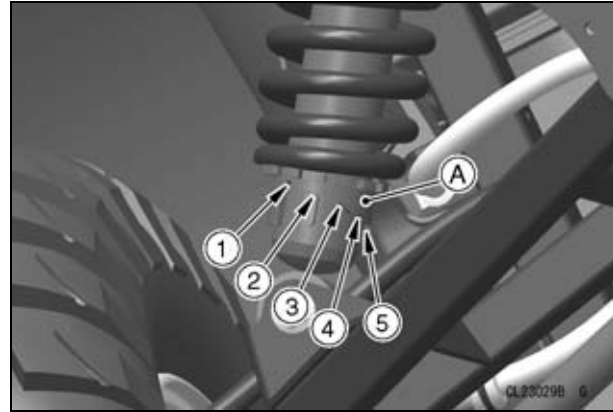
Suspension

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.

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

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

Spring Action (Front Shock Absorber) 590 ~ 717 kg (1 300 ~ 1 581 lb) Load

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

Spring Action (Rear Shock Absorber) 590 ~ 717 kg (1 300 ~ 1 581 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

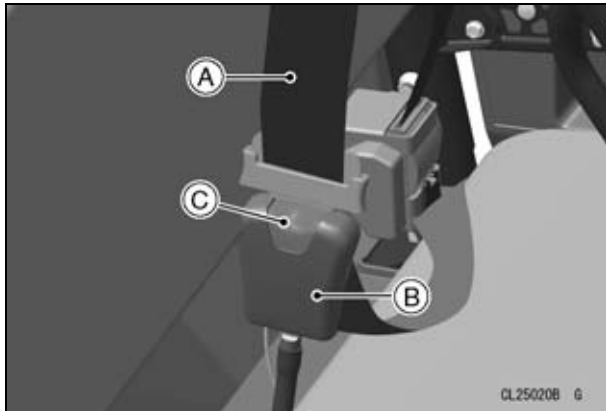
Improper shock absorber adjustment can cause poor handling and loss of stability, which could lead to an accident.

Always adjust the shock absorbers on the left and right side to the same setting.

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Seat Belts

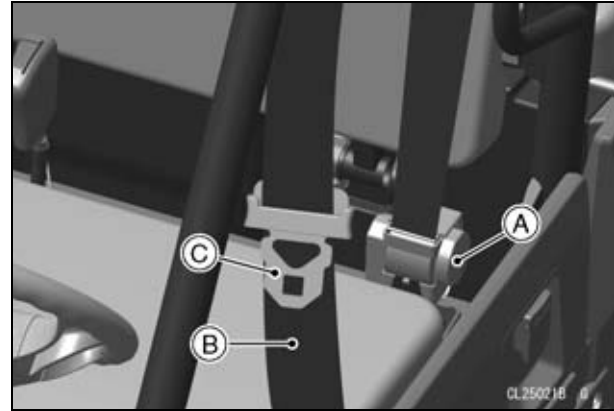
In accordance with the Periodic Maintenance Chart, check that each seat belt functions properly. Push the latch plate into the buckle until it clicks. The latch plate must slide smoothly into the buckle. The click sound indicates it is securely latched. Pull the belt vigorously to make sure the retractor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



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

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.

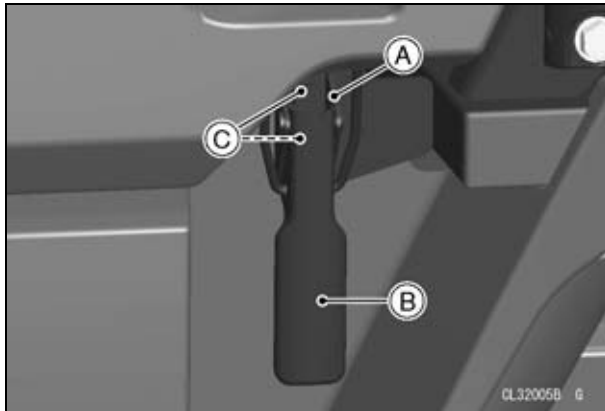


- A. Retractor
- B. Seat Belt
- C. Latch Plate

Cargo Bed Latches

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

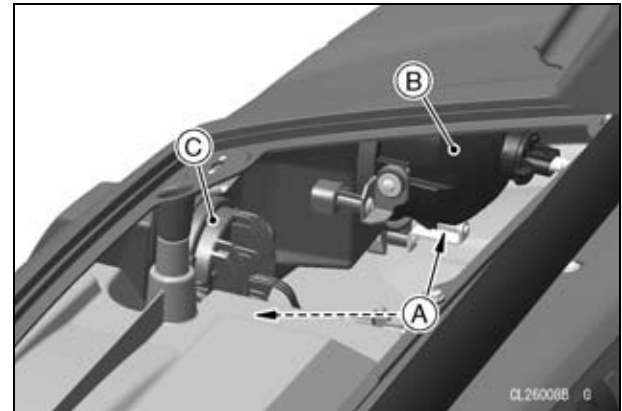
NOTE

○ Adjustment should be made for both sides.

Headlight Beam

The headlight beams can be adjusted vertically.

- 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.



- A. Adjusting Screws
- B. Headlight
- C. LED Sub Headlight (KAF1000C)

Battery

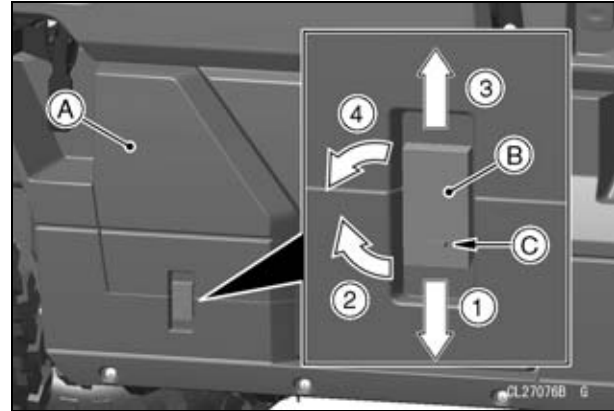
The battery is located under the right end of the rear seat.

⚠ 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.

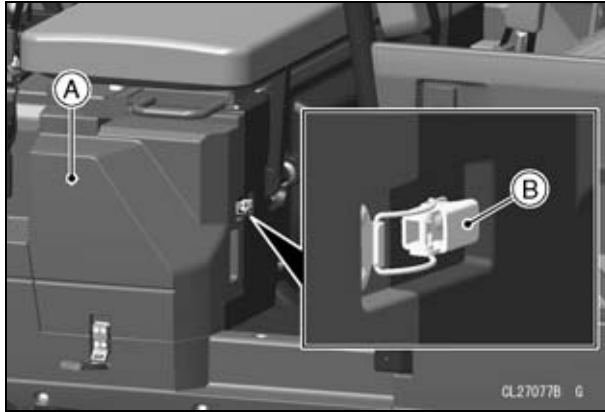
Battery Removal

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



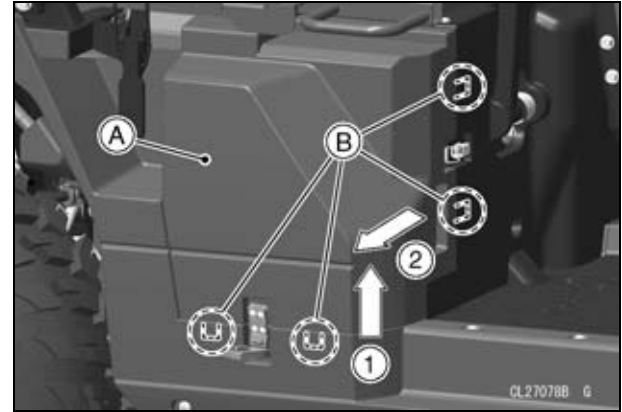
- A. Battery Cover**
- B. Latch**
- C. Locking Tab**
- 1. Push the locking tab.**
- 2. Pull**
- 3. Slide**
- 4. Open**

- Unlatch the latch (front side).



- A. Battery Cover**
- B. Latch**

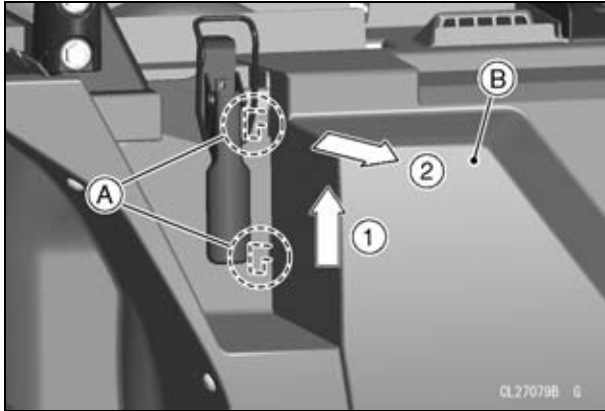
- Clear the tabs of the battery cover as shown.



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

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

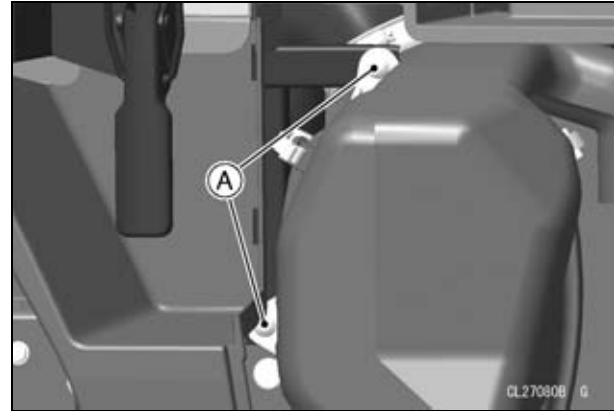
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- A. Hooks
- B. Battery Cover
- 1. Slide
- 2. Pull

NOTE

- If there is dust or mud around the battery and air cleaner housing, clean them using compressed air.
- Remove the screws and washers.

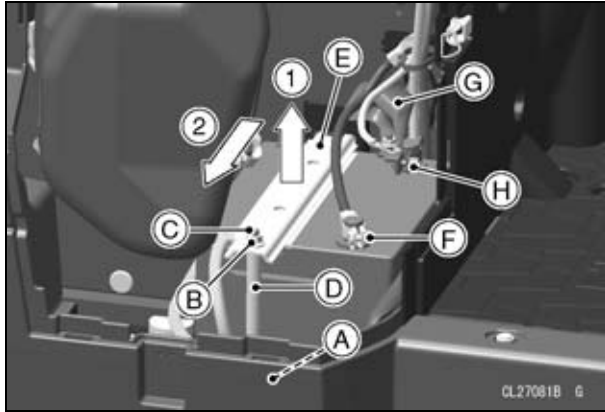


A. Screws and Washers

- Remove the battery holder nut.
- Remove the bolt 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. Bolt
- 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

- 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

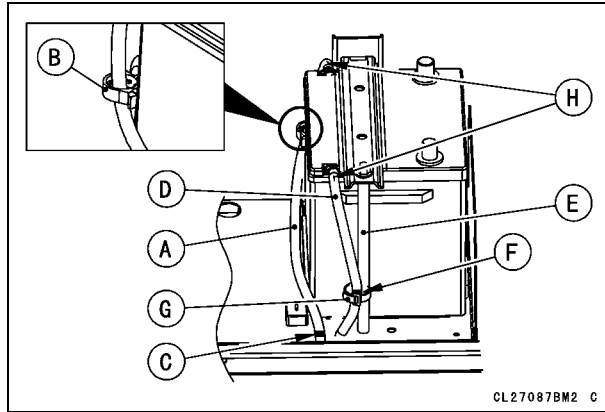
Loose battery cables can create sparks which can cause a fire or explosion resulting in injury or death. Make sure the battery terminal bolts are tightened securely and the cap is installed over the positive (+) terminal.

- Install the battery holder, collar and bolt.
- Tighten the battery holder nut securely.
- Run the left breather hose into the clamp, and run into the floorboard until the blue painted mark position is level with the floorboard.
- Run the right breather hose into the hole of the floorboard.
- Tie the collar and right breather hose at the white painted mark on the breather hose with a band.
- Be sure that the slit of each breather hose faces up.

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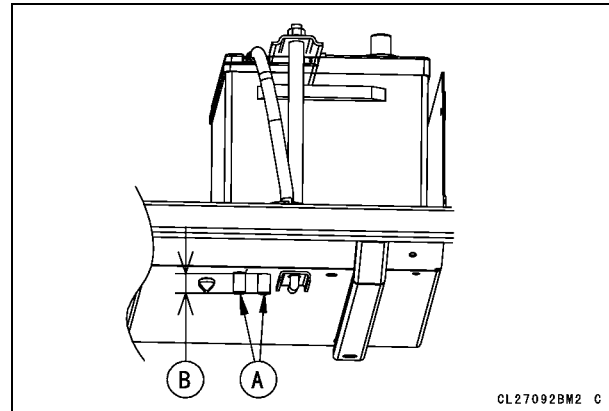
NOTE

- If you install the breather hoses to the battery, do not use any lubricants.
- Do not be choked the breather hoses.



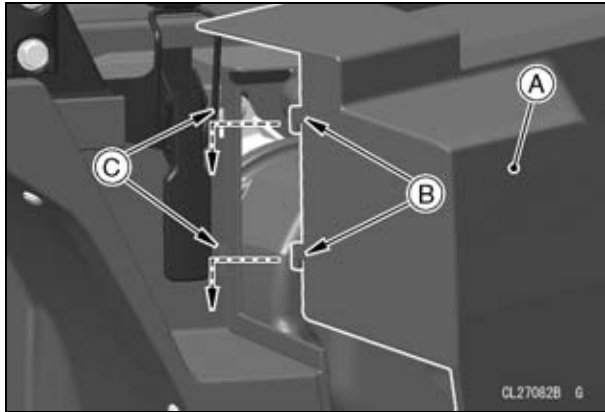
- A. Left Breather Hose
- B. Clamp
- C. Blue Painted Mark
- D. Right Breather Hose
- E. Collar
- F. White Painted Mark
- G. Band
- H. Slits

- Be sure that the breather hose ends are 20 mm (0.8 in.) from bottom surface of floorboard.



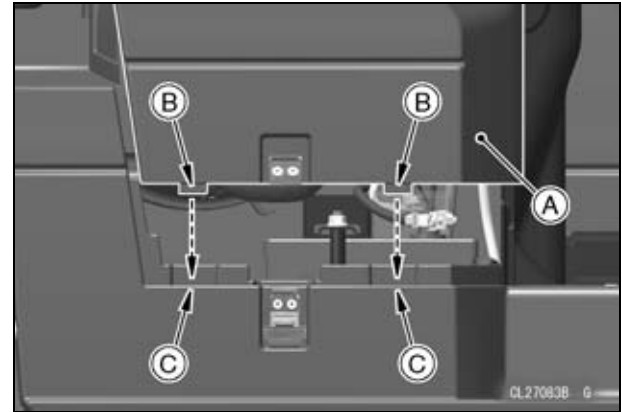
- A. Breather Hose Ends
- B. 20 mm (0.8 in.)

- 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

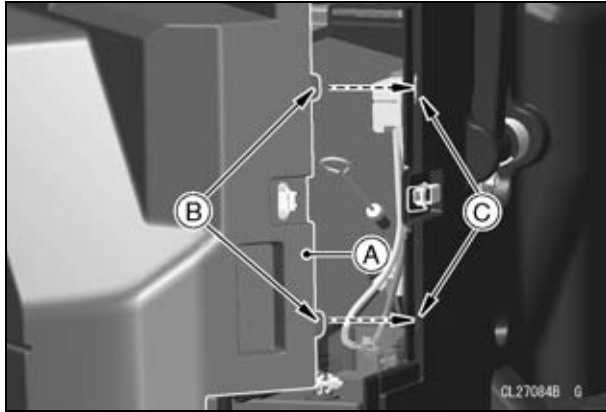
- Insert the tabs of the battery cover into the slots as shown.



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

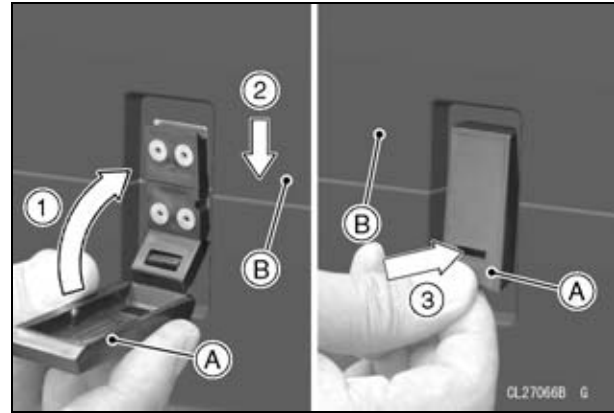
- Insert the tabs of the battery cover into the slots as shown.

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

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



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

Battery Characteristics

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

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

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

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.

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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 by 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 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

- 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.
- 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.*

⚠ WARNING

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

Fuse

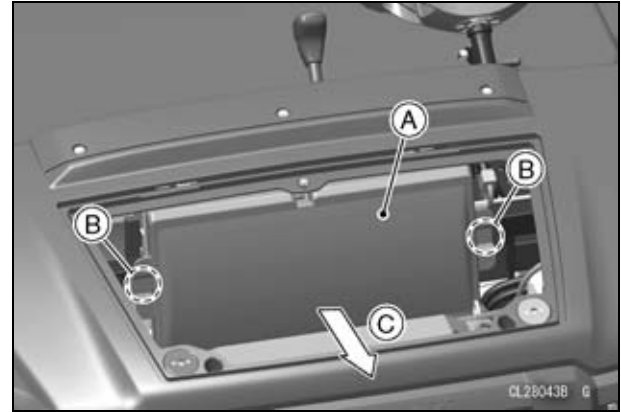
Fuses are arranged in 3 fuse boxes. The fuse box 1 is located under the front access cover. The fuse box 2 and fuse box 3 are located over the battery. If the electrical systems do not function, inspect the fuses. Before replacing a fuse, check the wiring harness and electrical equipment for bare wires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

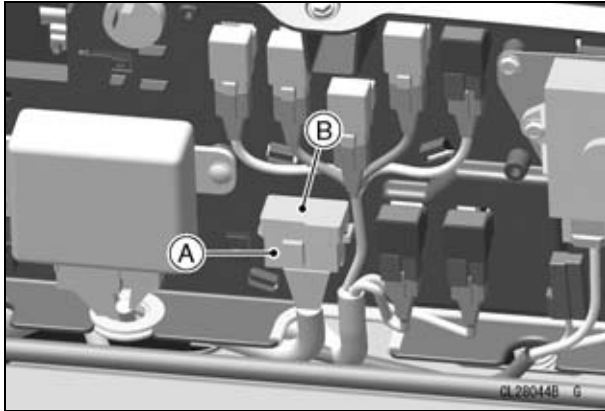
- Remove the front access cover. Refer to the “Front Access Cover” section in the “GENERAL INFORMATION” chapter.
- Pull the cover forward to clear the projections, and remove the cover.



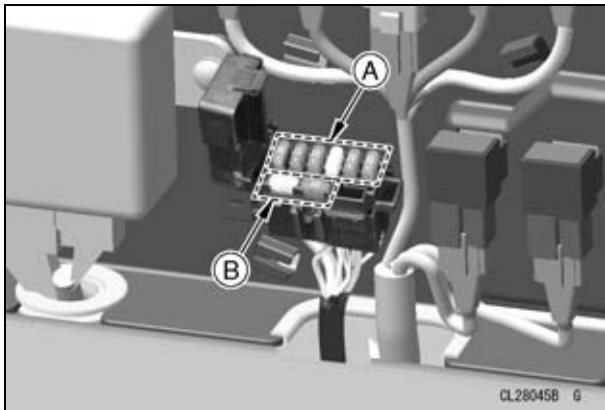
- A. Cover
- B. Projections
- C. Pull forward.

- 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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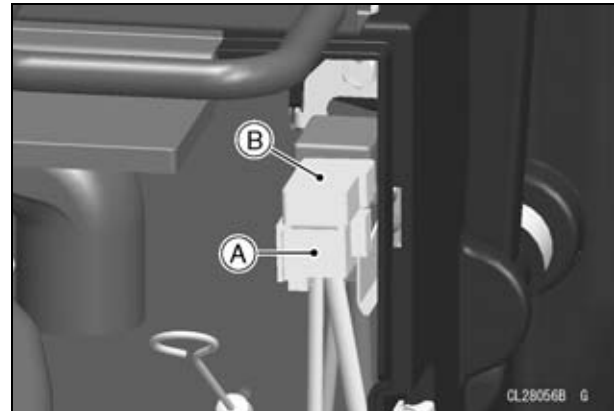
A. Fuse Box 1
B. Fuse Box 1 Lid



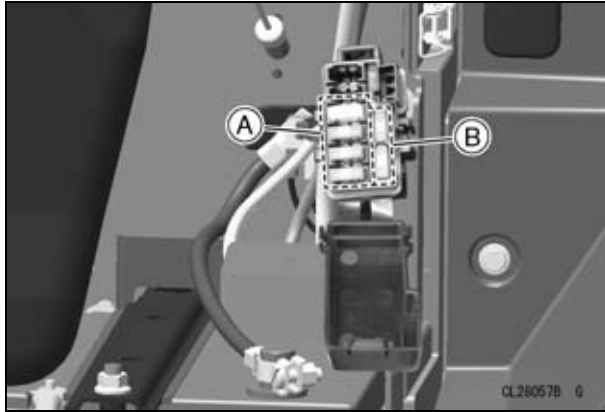
A. Fuses
B. Spare Fuses

Fuse Box 2

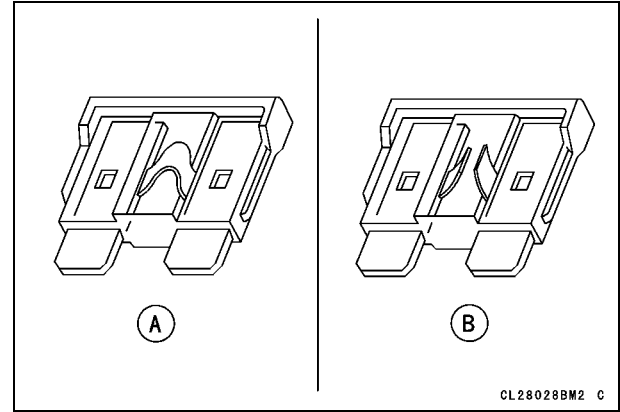
- Remove the battery cover (see Battery Removal).
- Remove the fuse box 2 from the bracket.
- Open the fuse box 2 lid, and check the fuse element. If it is blown out, replace the fuse with a new one.



A. Fuse Box 2
B. Fuse Box 2 Lid



A. Fuses
B. Spare Fuses



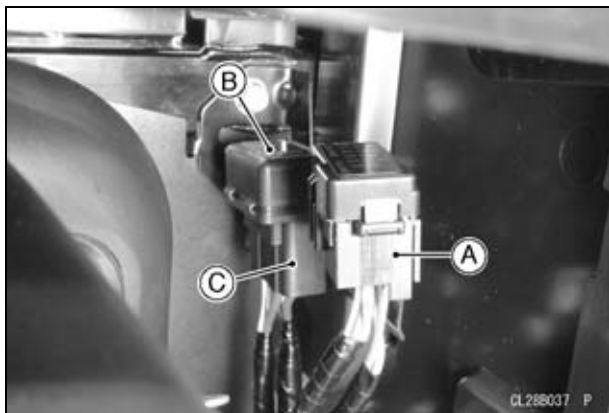
A. Normal
B. Failed

Main Power Fuse

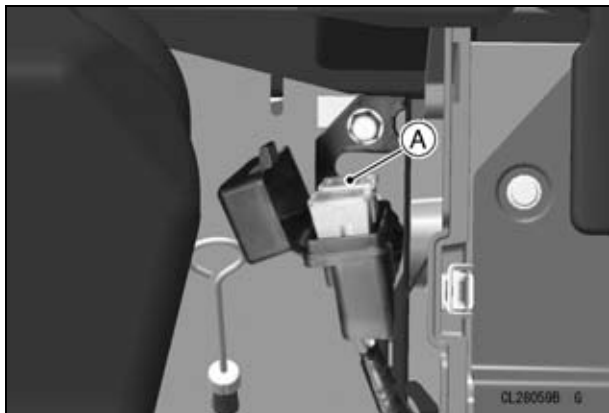
The main power fuse is in the fuse box 3.

- Remove the battery cover (see Battery Removal).
- 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.

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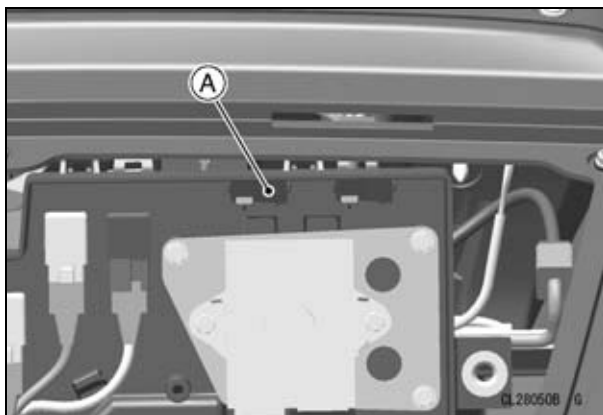


- A. Fuse Box 2
- B. Fuse Box 3 Lid
- C. Fuse Box 3



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

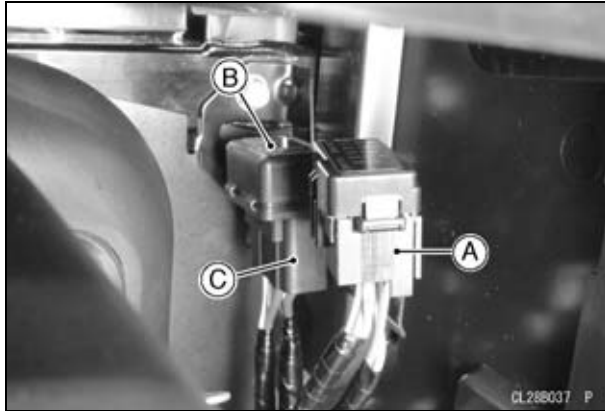
The electrical system can produce painful electrical shocks. When replacing the 60 A fuse, first remove the cables from the battery terminals to avoid electric shock.

Power Steering System Fuse (KAF1000B/C)

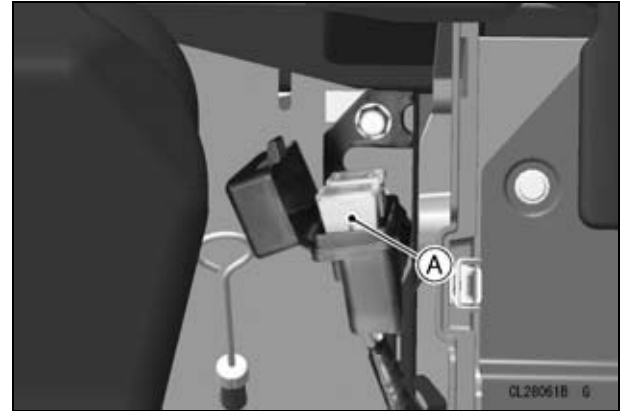
The power steering system fuse is in the fuse box 3.

- Remove the battery cover (see Battery Removal).

- Remove the fuse box 2 from the bracket.
- Open the fuse box 3 lid and remove the 40 A fuse.
- Check the fuse element.

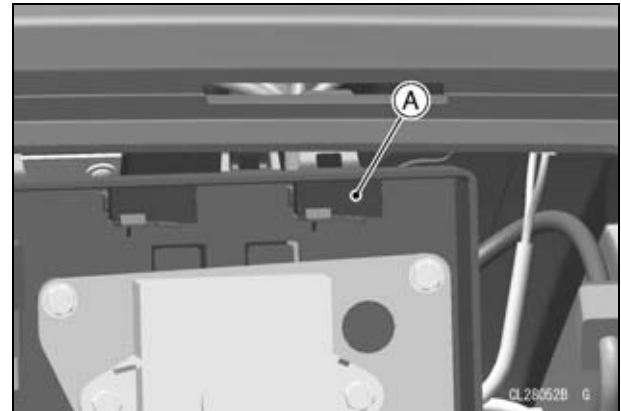


- A. Fuse Box 2**
- B. Fuse Box 3 Lid**
- C. Fuse Box 3**



A. 40 A Fuse

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



A. 40 A Spare Fuse

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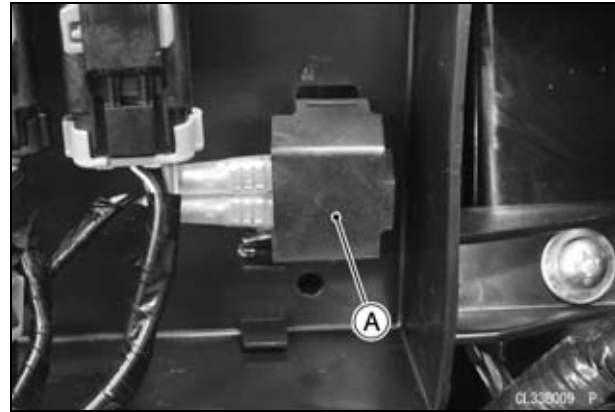
If the fuse is blown, steering becomes heavy. Replace the blown fuse with a fuse of the same specific amperage and type. If a replaced fuse blows again, there can be trouble with the ECU or harness/connectors. Contact an authorized Kawasaki dealer for inspection.

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

The breaker for the radiator fan is located under the front access cover. The reset operation is unnecessary because the fan circuit returns normally by the fan breaker function.



A. Breaker

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

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.

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- 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.*

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.

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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.

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.

TRANSPORTING AND STORAGE

Transporting the Vehicle

Note the following points

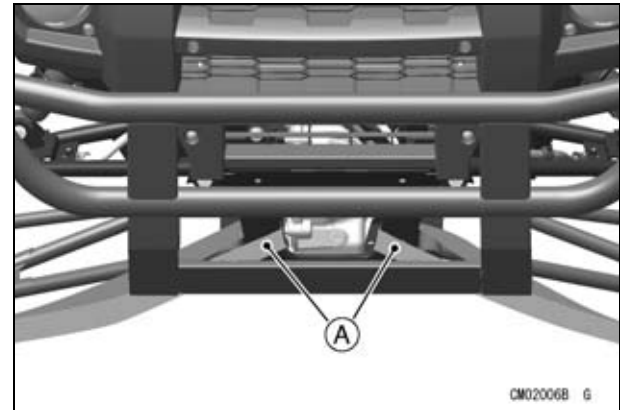
NOTICE

- 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.

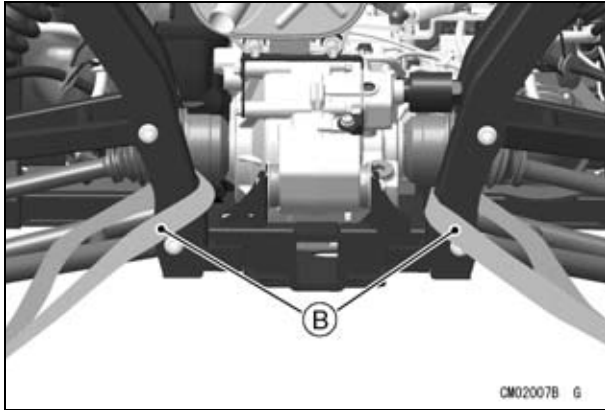
Front Tie Down Points



A. Tie down points on the front of vehicle

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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

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.

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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 the 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.

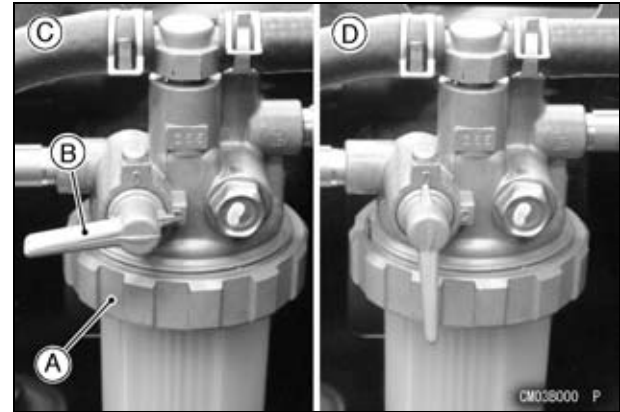
Before Starting Engine after Long Storage

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
- Air filter clogged or intake blocked
- Engine flooded
- Fuel tank vent clogged
- Valve clearance incorrect
- Fuel line clogged
- Air in fuel system

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.
- No fuel in tank
- Water in fuel
- Fuel filter clogged
- Fuel line clogged
- Air filter clogged or intake blocked
- Fuel tank vent clogged
- Engine overheated
 - Too much idling or low speed running (not enough air flow)
 - Overloaded
 - Radiator clogged
 - Coolant level too low
 - Coolant deteriorated
 - Radiator fan breaker functioned
 - Engine oil level too low

No Power

- Engine overheated
 - Too much idling or low speed running (not enough air flow)
 - Overloaded
 - Radiator clogged
 - Coolant level too low
 - Coolant deteriorated
 - Radiator fan breaker functioned
 - Engine oil level too low
- Compression leakage
 - Valve clearance insufficient
- Fuel filter clogged
- Air filter clogged or intake blocked
- Engine oil incorrect
- Water in fuel
- Drive belt slipping
- Water in belt drive torque converter housing
- 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.

Power Steering Won't Work (KAF1000B/C)

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

Selectable 2WD/4WD or DIFF-LOCK Systems Malfunction

- Actuators failed
- Vehicle controller failed
- Battery disconnected

YOUR WARRANTY/OWNER SATISFACTION

Welcome to the Kawasaki family!

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

Frequently Asked Questions

What is a Limited Warranty?

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

What is the Kawasaki Protection Plus?

Much of the warranty coverage offered by the limited warranty can be extended by purchasing the Kawasaki Protection Plus (KPP). See your Kawasaki dealer or go to Kawasaki.com for more information if you don't already have the KPP.

What Am I Responsible For?

You are responsible for maintaining your vehicle according to the maintenance schedule shown in this owner's manual.

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

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

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

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

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

What Are The Dealership's Responsibilities?

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

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

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

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

How Do I Get Warranty Service?

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

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

What if I am not Satisfied With My Warranty Service?

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

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

Want to Contact Kawasaki?

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

Please send your correspondence to:

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

ENVIRONMENTAL PROTECTION

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

Tread Lightly!

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

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

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

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

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

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

MAINTENANCE RECORD

Owner Name.....

Address

Phone Number

Engine Number

Vehicle Number.....

Key Code.....

Selling Dealer Name

Address

Phone Number

Warranty Start Date

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

Date	Traveled Distance	Maintenance Performed	Dealer Name	Dealer Address

KAF1000AJ/BJ/CJ

