Read this manual carefully, it contains important safety information.

Models sold in and used in California:
The removal or modification of evaporative emission-related parts on this OHRV is illegal. Violators may be subject to civil and/or criminal penalties as provided under California and federal law.

OWNER'S MANUAL

2023 PIONEER 500 / 520

Minimum recommended operator age: 16

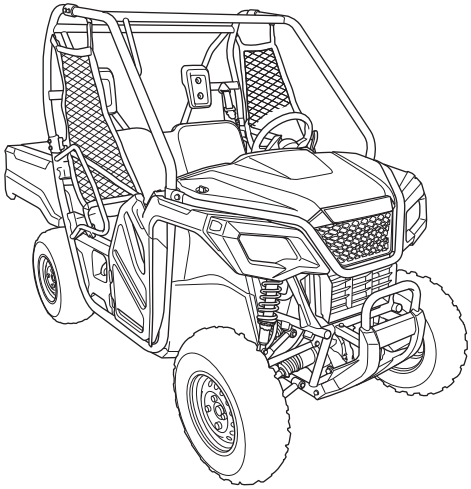
Mfg. #

This owner's manual should be considered a permanent part of the vehicle and should remain with the vehicle when it is resold.

This publication includes the latest production information available before printing. Honda Motor Co., Ltd. reserves the right to make changes at any time without notice and without incurring any obligation.

This vehicle pictured in this owner's manual may not match your actual vehicle.

2023
Honda
Pioneer 500 SXS500M2
Pioneer 520 SXS520M2
OWNER'S MANUAL



Introduction

Congratulations on choosing your Honda Pioneer. When you own a Honda, you're part of a worldwide family of satisfied customers–people who appreciate Honda's reputation for building quality into every product.

Before you begin driving your vehicle, we recommend that you read this owner's manual. It's full of facts, instructions, safety information, and helpful tips. To help you find what you are looking for, the manual contains a detailed list of contents at the beginning of each section and an alphabetical index at the back of the book.

To protect your investment, we urge you to keep your vehicle well maintained. Scheduled service is a must, of course, but it's also important to observe the break-in guidelines and perform all pre-drive and other periodic checks detailed in this manual.

As you read this manual, you will find information that is preceded by a NOTICE symbol. This information is intended to help you avoid damage to your Honda, other property, or the environment.

Be sure to read the Warranties Booklet (page 253) so you understand the coverages that protect your new Honda and are aware of your rights and responsibilities.

If you have any questions, or if you ever need special service or repairs, remember that your dealer knows your Honda SXS best and is dedicated to your complete satisfaction.

Introduction

Please report any change of address or ownership to your dealer so we will be able to contact you concerning important product information.

You may also want to visit our website at www.honda.com.
USA: www.powersports.honda.com.
Canada: www.honda.ca.

- The following codes in this manual indicate each country.

SXS520M2

A	United States of America - 49 states
AC	United States of America - 50 states (meets California)
CM	Canada

SXS500M2

A	United States of America - 49 states
AC	United States of America - 50 states (meets California)

- The illustrations herein are based on the SXS520M2 A type.
- The specifications may vary with each locale.

A Few Words About Safety

Your safety, and the safety of others, is very important. And operating your Honda safely is an important responsibility.

To help you make informed decisions about safety, we have provided operating procedures and other information on labels and in this manual. This information alerts you to potential hazards that could hurt you or others.

Of course, it is not possible to warn you about all hazards associated with operating or maintaining this vehicle. You must use your own good judgment.

You will find important safety information in a variety of forms, including:

Safety Labels — on the vehicle.

Safety Messages — boxed messages preceded by a safety alert symbol ⚠ and one of three signal words: **DANGER**, **WARNING**, or **CAUTION**.

These signal words mean:

⚠DANGER	**You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.**
⚠WARNING	**You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.**
⚠CAUTION	**You CAN be HURT if you don't follow instructions.**

A Few Words About Safety

Safety Headings — such as "Important Safety Reminders" or "Important Safety Precautions."

Safety Section — "Driver & Passenger Safety," beginning on page 1.

Instructions — how to operate this vehicle correctly and safely.

In addition to the above, your owner's manual is full of information that can help you safely operate and maintain your vehicle. So please read it carefully.

Contents

These pages give an overview of the contents of your owner's manual.
The first page of each section lists the topics discussed in that section.

Contents

Driver & Passenger Safety

This section presents some of the most important information and recommendations to help you drive your Honda safely. Please take a few moments to read these pages. This section also shows you the location of safety labels on your vehicle.

Important Safety Information

There is much that you can do to protect yourself and your passenger. You'll find many helpful recommendations throughout this manual. The following are those we consider to be most important.

Follow Age and Size Recommendations

The driver should be at least 16 years old and tall enough to wear the seat belt properly and reach all the controls. A passenger should also be tall enough for the seat belt to fit properly and brace themselves, if needed, placing both feet firmly on the floor. Never allow anyone to ride in the middle of the bench seat. There is no seat belt to restrain them.

Always Wear a Seat Belt

Wearing a properly positioned seat belt is your best protection against injury in a crash or rollover.

Protect Your Head and Eyes

We recommend that occupants always wear a helmet with a chin strap. We also recommend that you wear eye protection, boots, gloves, and other protective gear (page 61).

Keep Doors and Side Nets Closed

Make sure the doors are closed and the side nets are secure to help keep the driver's and passenger's arms and legs inside the occupant protective structure (OPS), should the vehicle tip or turn over.

Important Safety Information

Never Carry a Passenger in the Cargo Area

Your vehicle was designed to carry a driver and one passenger. Never carry additional passengers in the cargo area, as they could be thrown against or out of the vehicle and be seriously hurt or killed.

Obey Loading Limits & Guidelines

Do not carry more than 450 lb (204 kg) in the cargo bed (SXS520M2) or on the cargo carrier (SXS500M2). Make sure all cargo is properly loaded and as far forward, centered, and low as possible.

Keep Your Vehicle in Safe Condition

It's important to keep your vehicle properly maintained and in safe operating condition. Having a breakdown can be difficult, especially if you are stranded far from your base. To help avoid problems, inspect your Honda before each use and perform all recommended maintenance.

Don't Drink or Use Drugs and Drive

Alcohol or drugs and driving don't mix. Even one alcoholic drink can reduce your ability to respond to changing conditions, and your reaction time gets worse with every additional drink. The same is true for drug use. Don't drink or use drugs while driving, and don't let your friends do it either.

Stay Off Public Roads

Your vehicle has been designed for use on private property and designated off-highway areas. It does not have turn signals or many other items required for use on either paved or unpaved public roads.

Accessories & Modifications

Modifying your vehicle or using non-Honda accessories can make it unsafe. Before you consider making any modifications or adding an accessory, be sure to read the following information.

Accessories

We strongly recommend that you use only Honda Accessories that have been specifically designed or approved and tested for your vehicle. Because Honda cannot test all other accessories, you must be personally responsible for the proper selection, installation, and use of non-Honda accessories.

You should also be aware that accessories add weight, reducing the amount of cargo you can carry, and can raise the vehicle's center of gravity, increasing the risk of a rollover.

Check with your dealer for assistance, and always follow these guidelines:

- Make sure the accessory does not obscure any lights or reflectors [if equipped], reduce ground clearance, limit suspension travel or steering travel, or interfere with operating any controls.
- Do not add any electrical equipment that will exceed the vehicle's electrical system capacity (page 240). A blown fuse can cause a loss of lights or engine power (page 220).

⚠WARNING

Improper accessories or modifications can cause a crash in which you can be seriously hurt or killed.

Follow all instructions in this owner's manual regarding accessories and modifications.

Accessories & Modifications

Modifications

We strongly advise you not to remove any original equipment or modify your Honda in any way that would change its design or operation. Such changes could seriously impair your vehicle's handling, stability, and braking and make it unsafe to drive.

We also advise you not to make any modifications or remove any equipment (such as the spark arrester, muffler, or emissions control system components) that would make your vehicle illegal in your area.

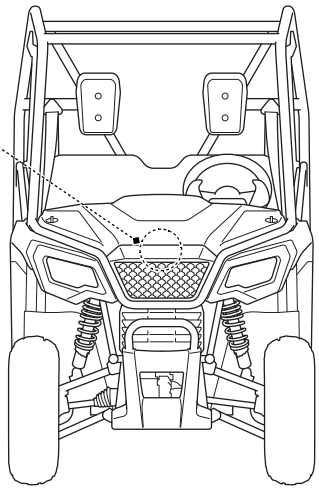
Safety Labels

Your Honda comes with several labels that contain important information.
You, and anyone else who operates or rides in the vehicle, should read and understand this information before driving.

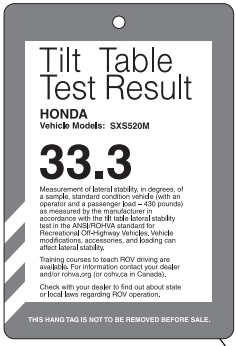
The labels should be considered permanent parts of the vehicle. If a label comes off or becomes hard to read, contact your Honda dealer for a replacement.

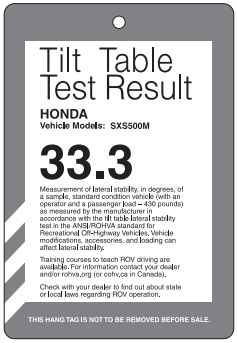
——◆ Indicates something apparent.
·····◆ Indicates something concealed.

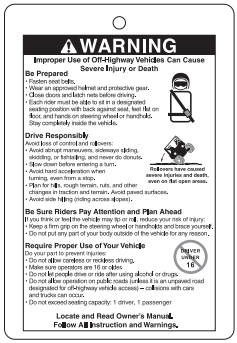
radiator cap danger



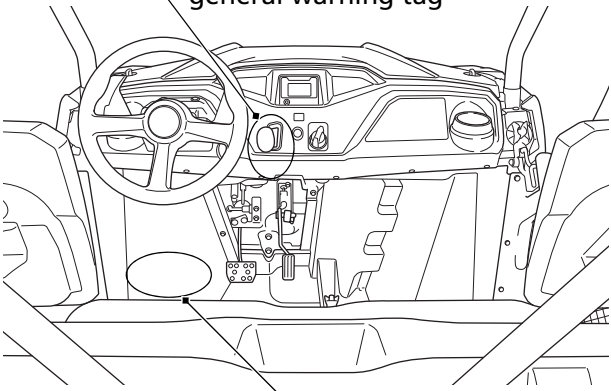
Safety Labels

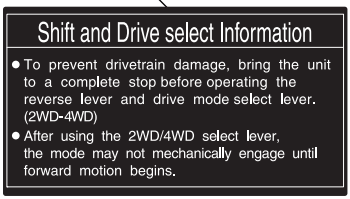






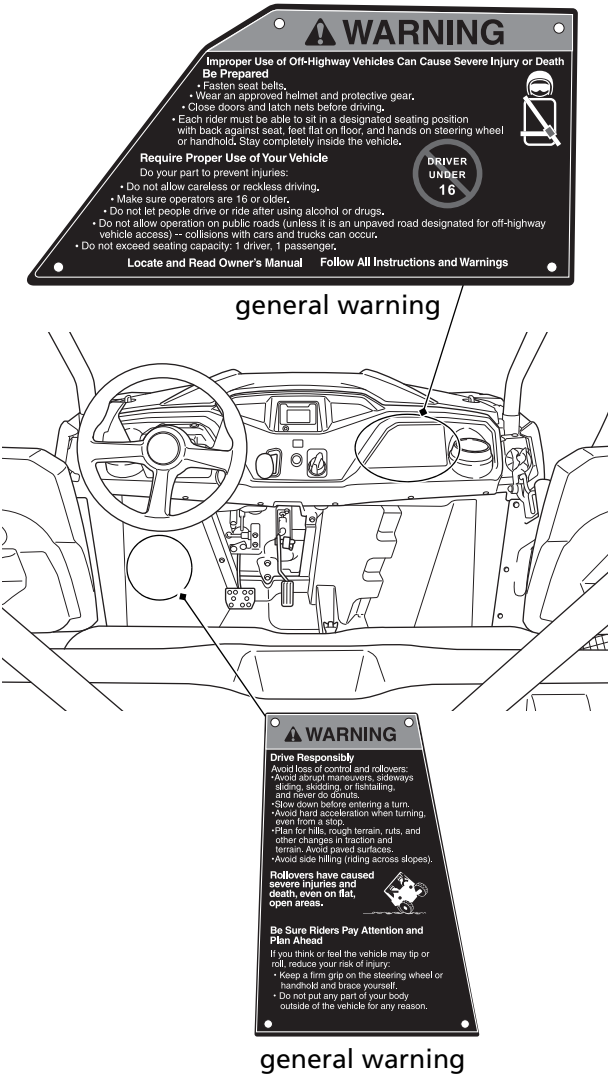
general warning tag



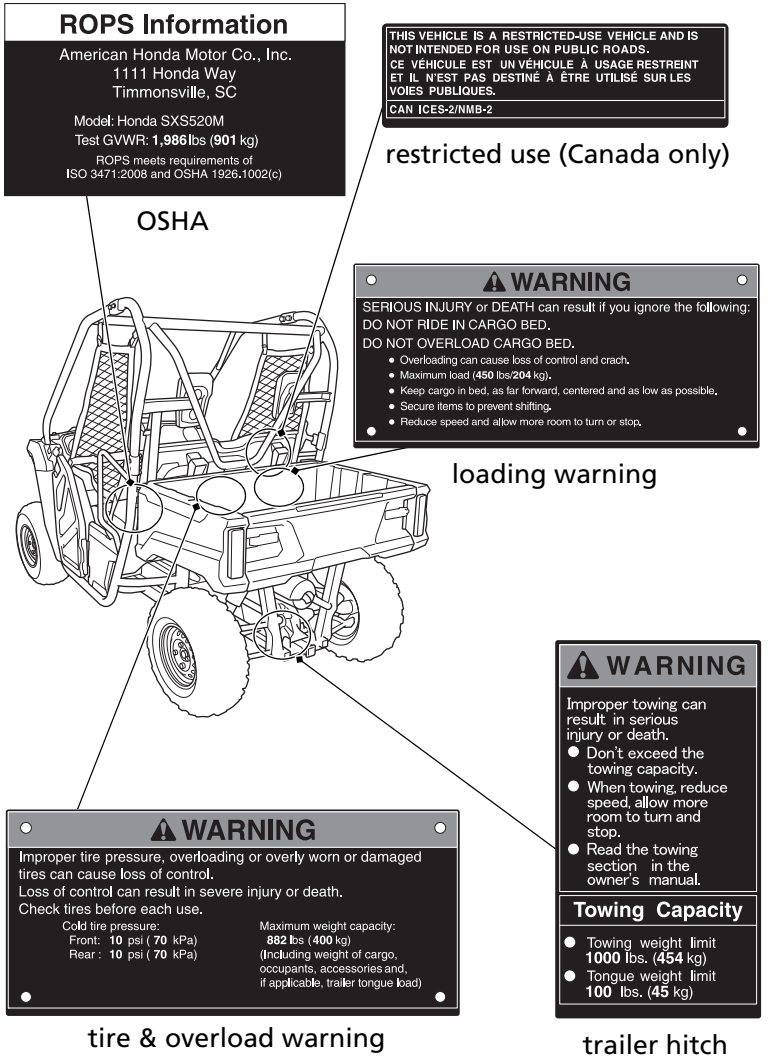


shift & drive select

Safety Labels



SXS520M2


ROPS Information
American Honda Motor Co., Inc.
1111 Honda Way
Timmonsville, SC
Model: Honda SXS520M
Test GVWR: 1,986 lbs (901 kg)
ROPS meets requirements of
ISO 3471:2008 and OSHA 1926.1002(c)
OSHA
THIS VEHICLE IS A RESTRICTED-USE VEHICLE AND IS NOT INTENDED FOR USE ON PUBLIC ROADS.
CE VÉHICULE EST UN VÉHICULE À USAGE RESTREINT ET IL N'EST PAS DESTINÉ À ÊTRE UTILISÉ SUR LES VOIES PUBLIQUES.
CAN ICES-2/NMB-2
restricted use (Canada only)
WARNING
SERIOUS INJURY or DEATH can result if you ignore the following:
DO NOT RIDE IN CARGO BED.
DO NOT OVERLOAD CARGO BED.
Overloading can cause loss of control and crach.
Maximum load (450 lbs/204 kg).
Keep cargo in bed, as far forward, centered and as low as possible.
Secure items to prevent shifting.
Reduce speed and allow more room to turn or stop.
loading warning
WARNING
Improper tire pressure, overloading or overly worn or damaged tires can cause loss of control.
Loss of control can result in severe injury or death.
Check tires before each use.
Cold tire pressure:
Front: 10 psi (70 kPa)
Rear : 10 psi (70 kPa)
Maximum weight capacity:
882 lbs (400 kg)
(Including weight of cargo, occupants, accessories and, if applicable, trailer tongue load)
tire & overload warning
WARNING
Improper towing can result in serious injury or death.
Don't exceed the towing capacity.
When towing, reduce speed, allow more room to turn and stop.
Read the towing section in the owner's manual.
Towing Capacity
Towing weight limit 1000 lbs. (454 kg)
Tongue weight limit 100 lbs. (45 kg)
trailer hitch

Safety Labels

SXS500M2

ROPS Information

American Honda Motor Co., Inc.
1111 Honda Way
Timmonsville, SC

Model: Honda SXS500M
Test GVWR: **1,986** lbs (**901** kg)

ROPS meets requirements of
ISO 3471:2008 and OSHA 1926.1002(c)

OSHA

⚠ WARNING

Improper tire pressure, overloading, or overly worn or damaged tires can cause loss of control.
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Front : **10** psi (**70** kPa)
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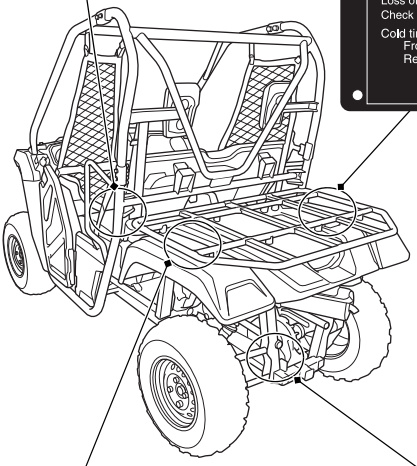
Maximum weight capacity:
882 lbs (**400** kg)
(Including weight of cargo, occupants, accessories and, if applicable, trailer tongue load)

tire & overload warning



⚠ WARNING

SERIOUS INJURY or DEATH can result if you ignore the following:
DO NOT RIDE ON CARGO RACK.
DO NOT OVERLOAD CARGO RACK.

- Overloading can cause loss of control and crach.
- Maximum load (**450** lbs/**204** kg).
- Keep cargo on rack, as far forward, centered and as low as possible.
- Secure items to prevent shifting.
- Reduce speed and allow more room to turn or stop.

loading warning

⚠ WARNING

Improper towing can result in serious injury or death.

- Don't exceed the towing capacity.
- When towing, reduce speed, allow more room to turn and stop.
- Read the towing section in the owner's manual.

Towing Capacity

- Towing weight limit **1000** lbs. (**454** kg)
- Tongue weight limit **100** lbs. (**45** kg)

trailer hitch

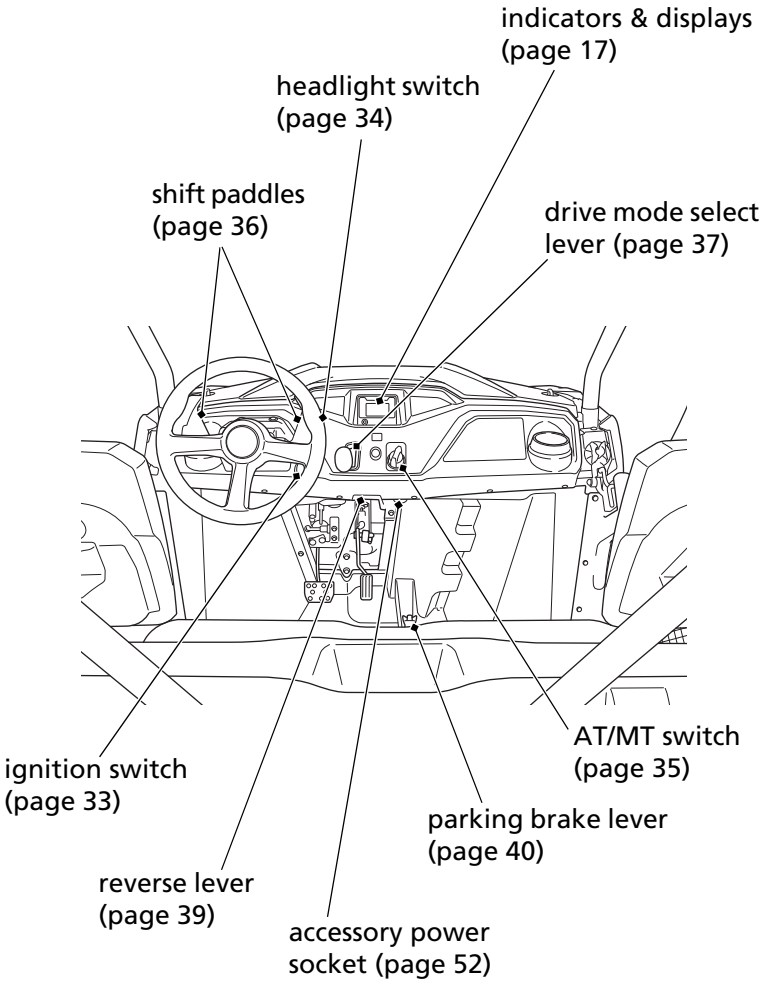
Instruments & Controls

The items listed below are described in this section.

(cont'd)

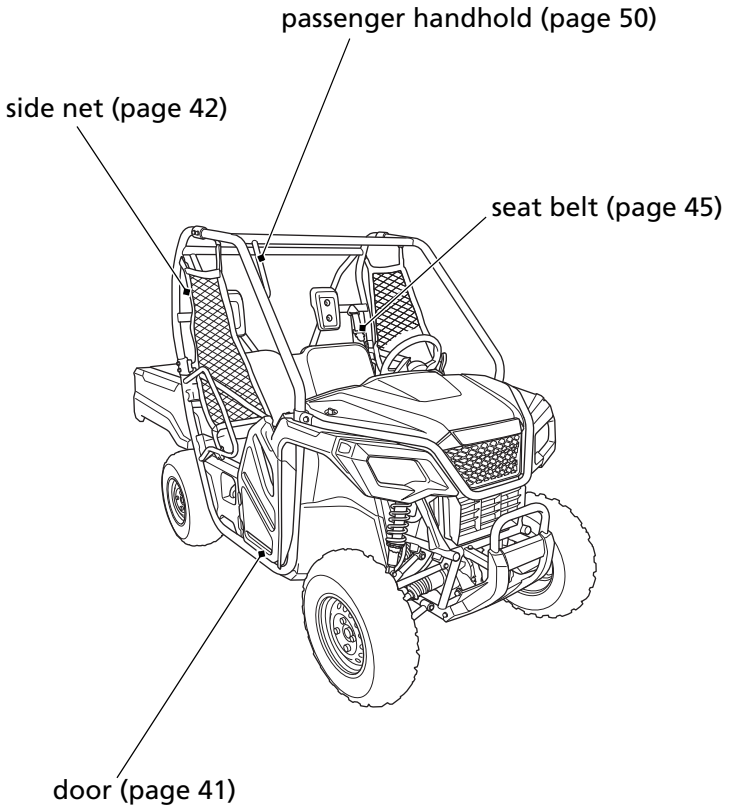
Instruments & Controls

Operation Component Locations



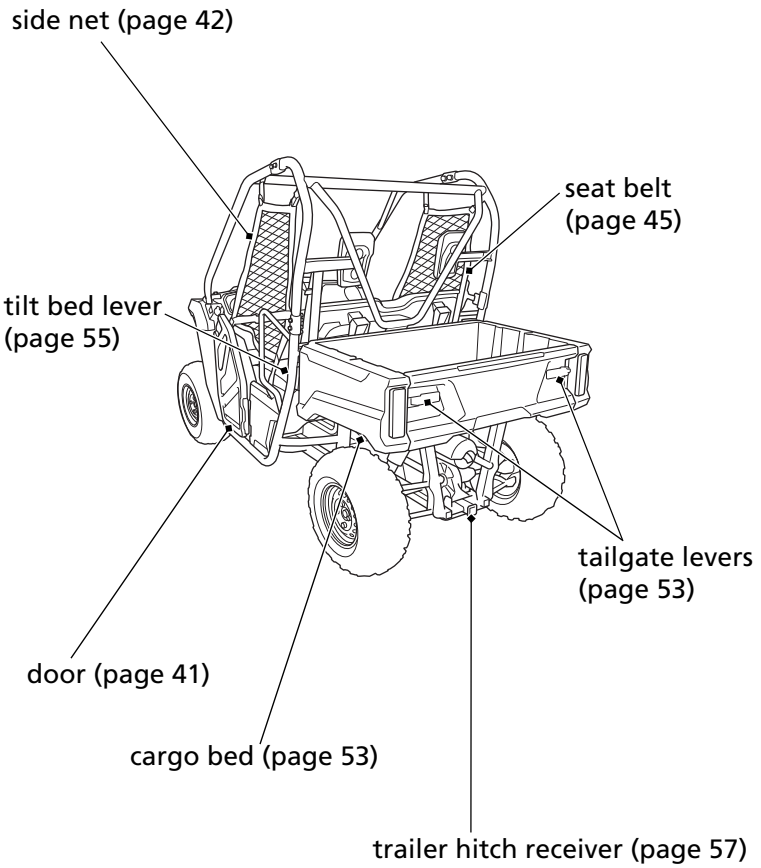
Operation Component Locations

SXS520M2 shown



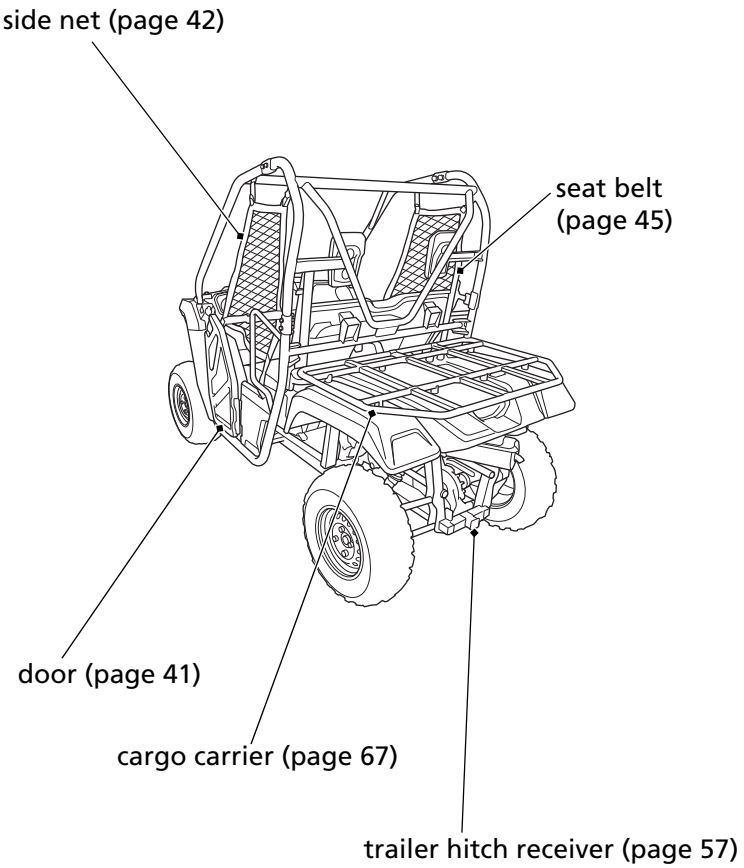
Operation Component Locations

SXS520M2 shown



Operation Component Locations

SXS500M2 shown



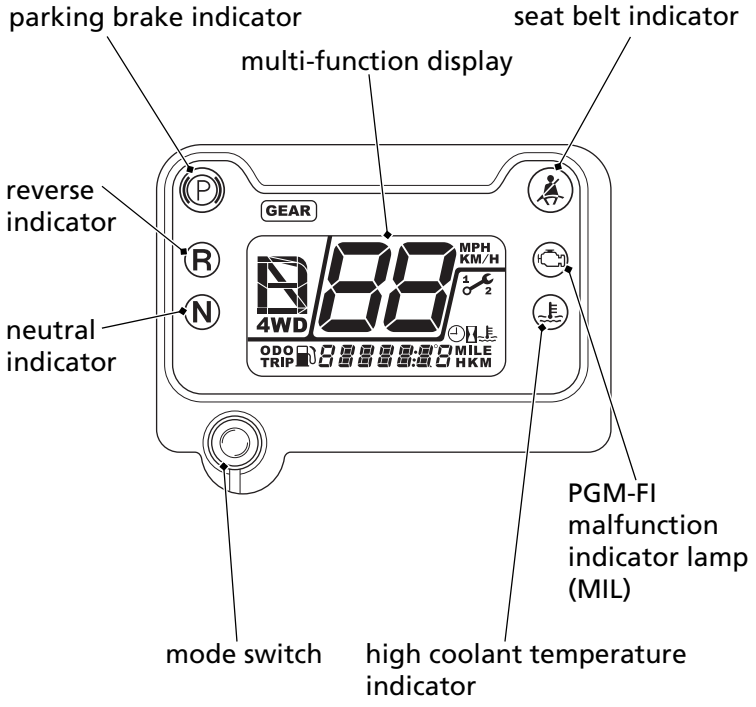
Indicators & Displays

The indicators and displays on your Honda SXS keep you informed, alert you to possible problems, and make your driving safer and more enjoyable. Refer to the indicators frequently. Their functions are described on the following pages.

Lamp Check

The indicators come on and go off sequentially when you turn the ignition switch to the ON (I) position.

If one of these indicators does not come on when it should, have your dealer check for problems.



Indicators & Displays

Neutral Indicator
This indicator comes on and stays on when the transmission is in neutral.

Reverse Indicator
This indicator comes on and stays on when the transmission is in reverse.

Parking Brake Indicator
This indicator comes on and stays on when the parking brake is on.

High Coolant Temperature Indicator
This indicator comes on and stays on when the coolant temperature is high enough to adversely affect the service life of the engine. If this indicator comes on while you are driving, stop as soon as possible, turn the engine off, and let it cool.

PGM-FI Malfunction Indicator Lamp (MIL)
This indicator comes on and stays on when there is a problem with your vehicle's engine system. If this happens, reduce speed and take your vehicle to a dealer as soon as possible.

Seat Belt Indicator
This indicator starts blinking if the driver's seat belt is not latched and remains blinking until the driver's seat belt is latched. If the driver's seat belt is not latched properly, the maximum vehicle speed will be limited by the seat belt speed limiting system. (page 46)

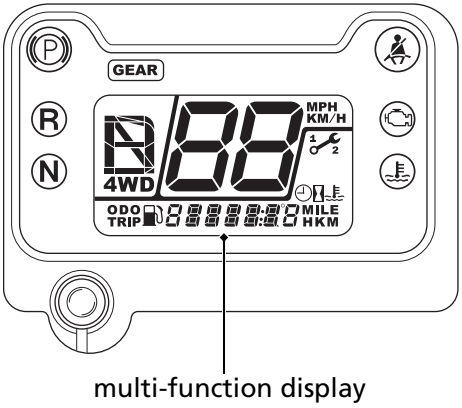
Multi-function display	This display includes the following functions.
Speedometer display	Shows driving speed in miles or kilometers per hour (page 22).
Odometer display	Shows fuel gauge, digital clock, odometer, tripmeter, coolant temperature gauge, hour meter, maintenance tripmeter and maintenance hour meter (page 23).
Gear position display	Shows gear position (page 32).
Mode switch	This button is used to select the mode, to change the mileage unit and adjust/ reset the digital clock, tripmeter and hour meter (page 21).

Indicators & Displays

Display Check

When the ignition switch is turned ON (I), the multi-function display will temporarily show all the modes and digital segments and initial message. This indicates that the liquid crystal display is functioning properly.

If any part of this display does not come on when it should, have your dealer check for problems.

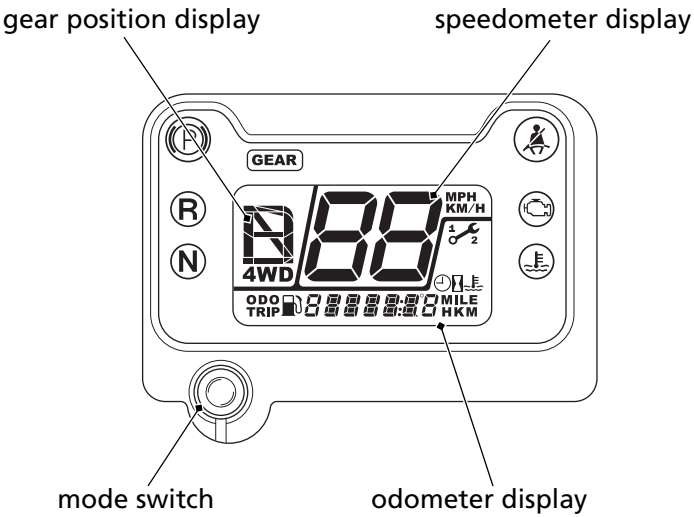


multi-function display

Multi-function Display

The multi-function display consists of the following function displays:

- Speedometer display
- Odometer display
- Gear position display



Indicators & Displays

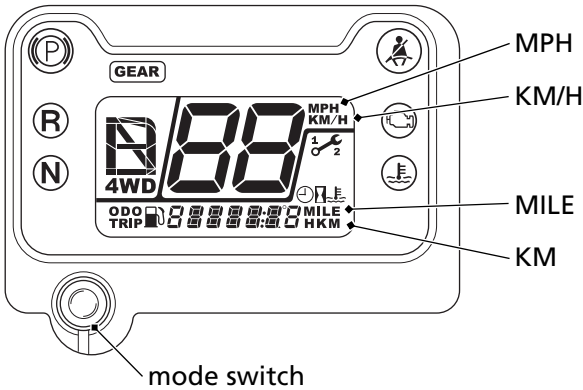
Speedometer Display

This display shows speed in miles or kilometers per hour.

Mileage Unit Change

The speedometer, odometer, tripmeter, and maintenance tripmeter show in either "MPH" and "MILE" or "KM/H" and "KM".

To change the mileage unit, press and hold the mode switch for more than 5 seconds in odometer mode (page 23) with the vehicle stopped.

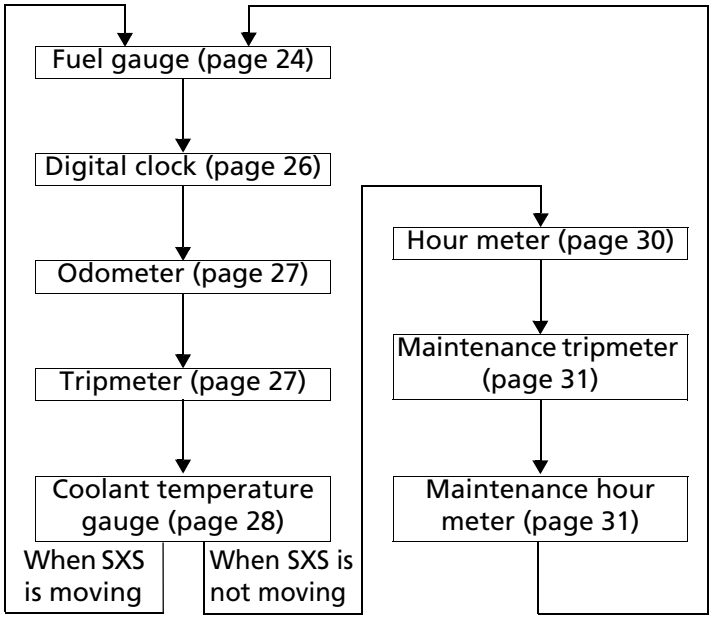


Speedometer Blinking

If the speedometer digits and seat belt indicator blink simultaneously while you are driving, the maximum vehicle speed will be limited to no more than 15 mph (24 km/h) by the seat belt speed limiting system (page 46).

Odometer Display

This display includes the fuel gauge, digital clock, odometer, tripmeter, coolant temperature gauge, hour meter, maintenance tripmeter, and maintenance hour meter.
Each time you press the mode switch, the mode will change as shown in the illustration.



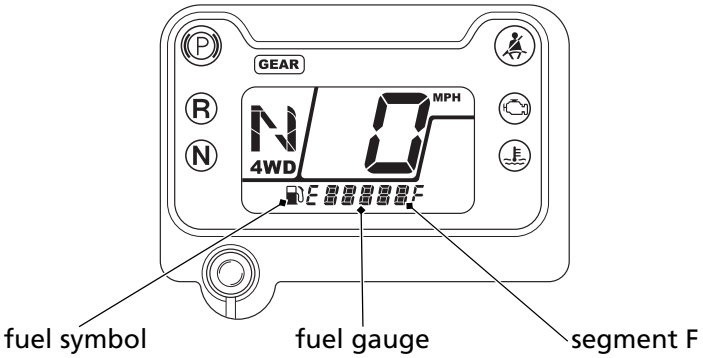
If there are unusual indications with your SXS, and mode switch is not pressed for 10 seconds, a message will automatically appear in the display.

Indicators & Displays

Fuel gauge

The fuel gauge shows the approximate fuel supply available in a graduated display with the fuel symbol. When the segment F goes on, the fuel tank capacity is:

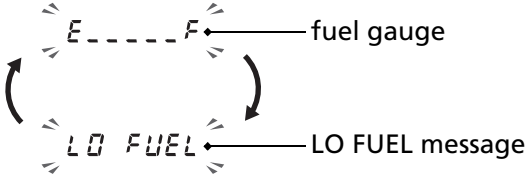
4.07 US gal (15.4 ℓ)



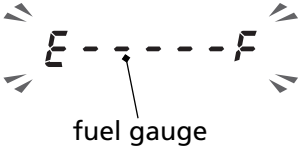
Regardless of what mode the display is in, when the fuel level has only one segment remaining, the display will automatically switch to the fuel gauge display. You should refuel as soon as possible. With the vehicle on a firm, level surface, the amount of fuel left in the tank when one fuel segment remains is approximately:

1.11 US gal (4.2 ℓ)

The fuel gauge and LO FUEL message will begin to flash alternately when the fuel level decreases further.



Fuel gauge failure:
If the fuel system has an error, the fuel gauge will flash.
If this occurs, see your dealer as soon as possible.



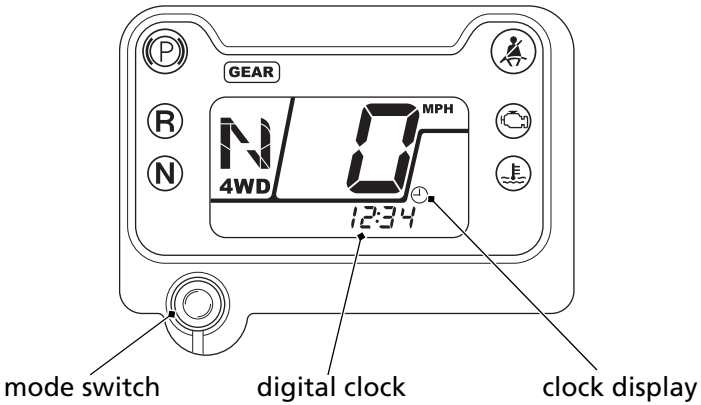
Indicators & Displays

Digital clock

The digital clock shows the hour and minutes with the 12-hour clock display.

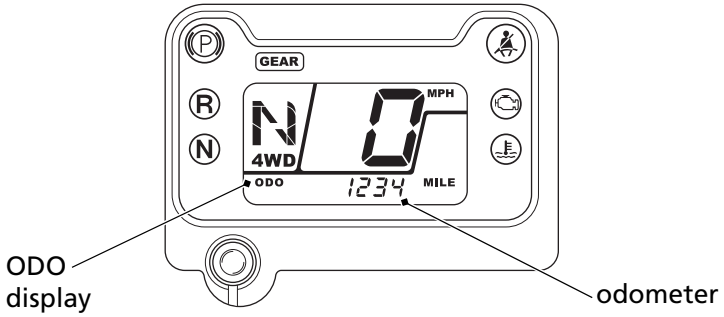
To set the time:

1. Turn the ignition switch to ON (I).
2. Press and hold the mode switch in the clock mode. The clock will start blinking.
3. Press and hold the mode switch until the desired time appears.
4. To complete setting the clock, press the mode switch or turn the ignition switch OFF.



Odometer

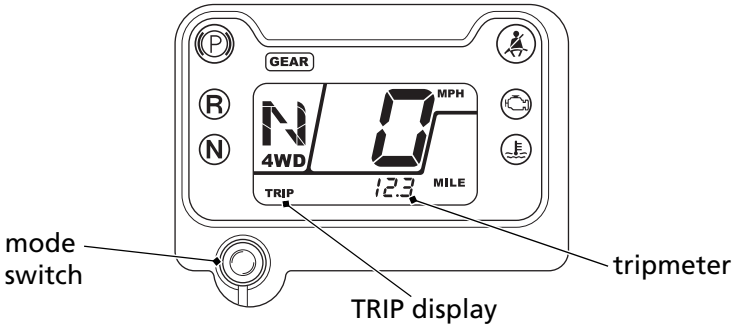
The odometer shows the total miles or kilometers ridden with the ODO display. The odometer locks at 999,999 when the readout exceeds 999,999.



Tripmeter

The tripmeter shows the number of miles or kilometers ridden since you last reset the tripmeter. The tripmeter returns to 0 when the readout exceeds 999.9.

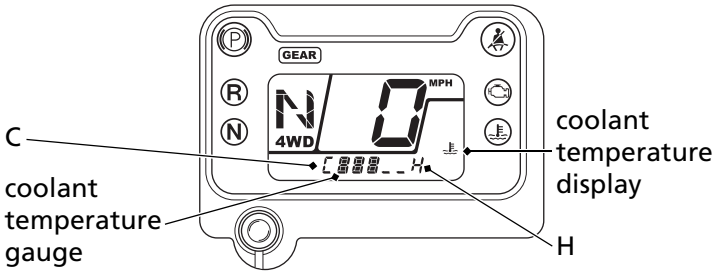
To reset the tripmeter, press and hold the mode switch while the display is in TRIP mode.



Indicators & Displays

Coolant temperature gauge

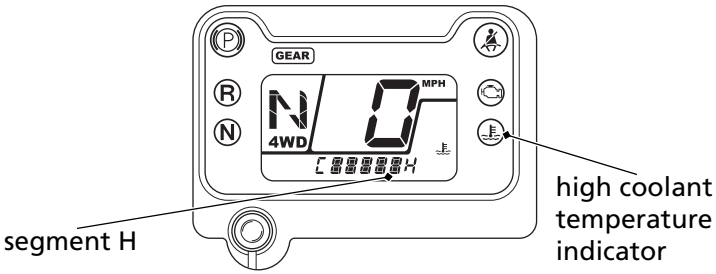
The coolant temperature gauge shows engine coolant temperature with the coolant temperature display. When the segment begins to move above the C (Cold) display, the engine is warm enough for the SXS to be ridden. When the coolant temperature is low, the coolant temperature gauge will display "Lo". The normal operating temperature range is within the section between the H and C displays.



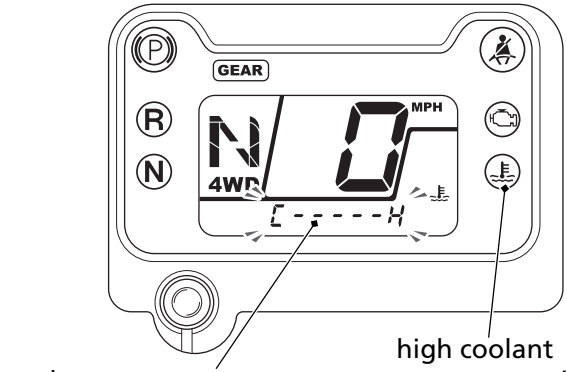
If all sections of the coolant temperature gauge, including segment H and the high coolant temperature indicator are on, the engine is overheated. Stop the engine and check the reserve tank coolant level. Read page 218 and do not drive the SXS until the problem has been corrected.

NOTICE

Continuing to ride with an overheated engine can cause serious engine damage.



Coolant temperature gauge failure:
If the coolant temperature system has an error, the coolant temperature gauge will flash and appear in the display, and/or the high coolant temperature indicator will turn on.
If this occurs, see your dealer as soon as possible.



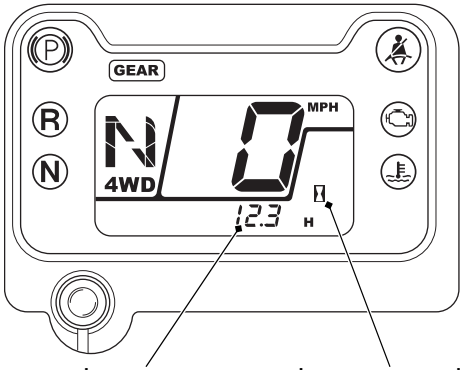
coolant temperature gauge

high coolant temperature indicator

Indicators & Displays

Hour meter

The hour meter display shows the accumulated hours the ignition is ON (I). The hour meter locks at 99,999.9 when the readout exceeds 99,999.9.



Maintenance minder indicator

The maintenance minder indicator appears in the display when the mileage or operating hours on your Honda SXS reach the maintenance interval specified on the maintenance schedule (page 99).

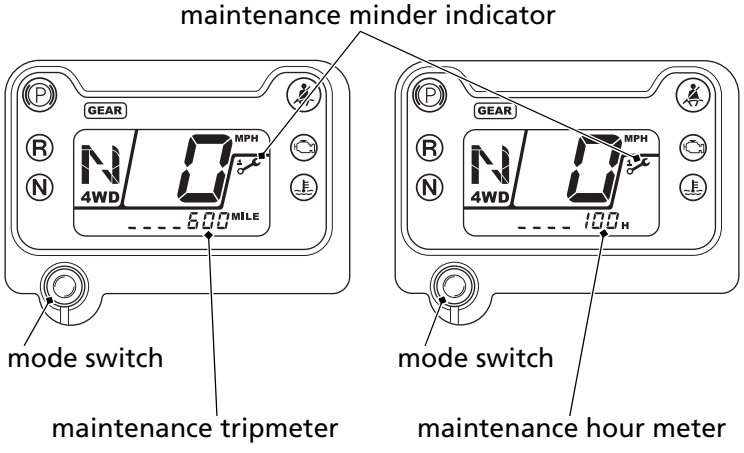
Reset the indicator after each scheduled maintenance is performed. If the scheduled maintenance is performed before the maintenance minder indicator appears, be sure to reset the maintenance minder after performing the scheduled maintenance.

Resetting the indicator:

To reset the indicator, press and continue to hold the mode switch and turn the ignition switch to ON (I). The indicator message will light up, and after 2 seconds will flash twice to indicate, the maintenance minder indicator is reset.

The maintenance tripmeter and maintenance hour meter will also reset.

See more details about the maintenance minder indicator on page 97.



Indicators & Displays

Gear Position Display

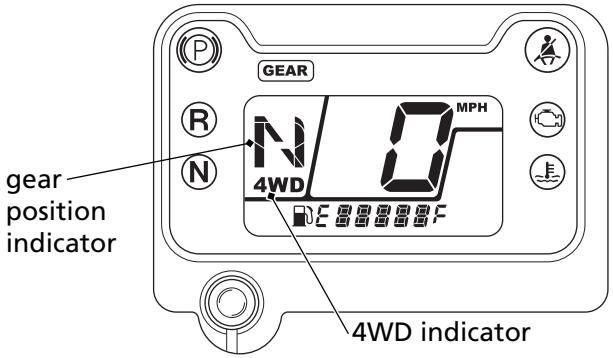
Gear position indicator
The gear position indicator shows the gear position when the ignition switch is in the ON (I) position.

AT mode:
The indicator displays N for neutral, R for reverse, and D for drive.
MT mode:
The indicator displays N for neutral, R for reverse, and 1, 2, 3, 4, 5 for the five forward gears.

"–" will be displayed on the gear position indicator when the transmission is not shifted into gear properly. Before driving, check that the gear position is properly displayed on the gear position indicator.

If the gear position indicator shows "–" and blinks, turn the ignition switch to the OFF (O) position, and then turn it back to the ON (I) position again. If the gear position indicator still shows "–" and blinks, see your dealer.

4WD indicator
This indicator will be on when the 4WD mode engages (page 37).



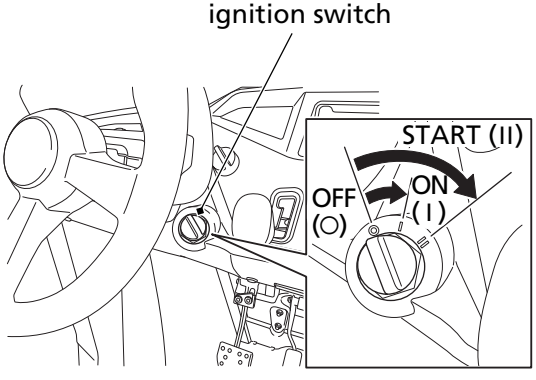
Ignition Switch

The ignition switch is a three-position, key-operated switch used to start and stop the engine.

OFF (○) — The engine and all electrical circuits are off. The key can be inserted and removed only when it is in this position.

ON (I) — The electrical circuits are on. You can use the accessory power socket in this position.

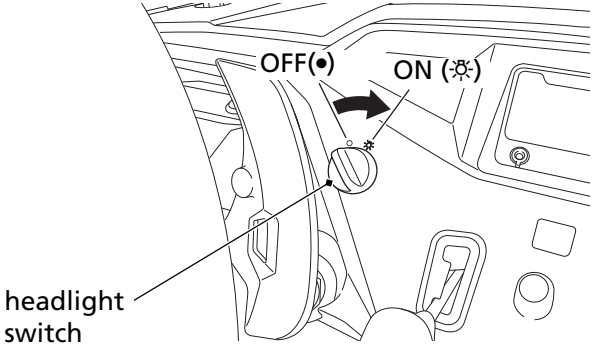
START (II) — This position is used only to start the engine. The key will automatically return to the ON (I) position when you let go of it.



Driver Controls

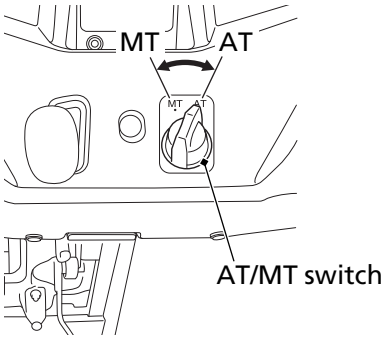
Headlight Switch

The headlight switch is located on the front console, to the right side of the steering wheel. This switch turns the headlights and taillight on and off.



AT/MT Switch

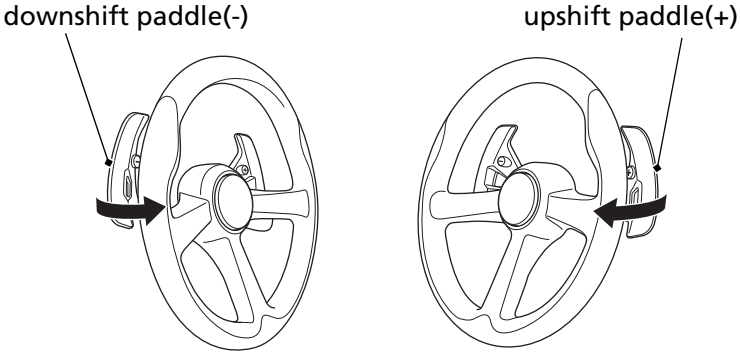
The AT/MT switch is located to the right of the drive mode select lever.
The AT/MT switch has two positions, AT (automatic shift mode) and MT (manual shift mode).
To select the transmission mode, turn the AT/MT switch to the desired position.
See *Shifting Gears*, page 74.



Driver Controls

Shift Paddles

Your Honda SXS is equipped with a pair of shift paddles that are located behind the steering wheel.



Pull the upshift paddle (+) to shift to a higher gear position and the downshift paddle (-) to shift to a lower gear position and R (reverse).

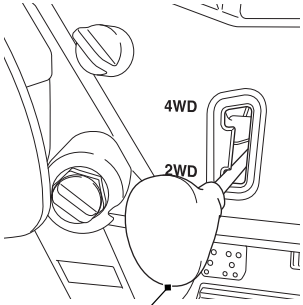
In MT mode, the shift paddles are used to change gears while driving the SXS.
In AT mode, you can drive the SXS without operating the shift paddles. You can also operate the shift paddles to temporarily change the gear position.

See *Shifting Gears*, page 74.

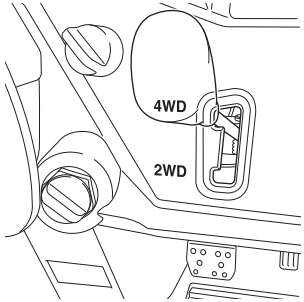
Drive Mode Select Lever

The drive mode select lever, located to the right of the ignition switch, has two drive mode positions: 2WD and 4WD.

2WD mode position



4WD mode position



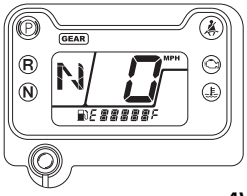
drive mode select lever

To check your present drive mode, look at the 4WD indicator.

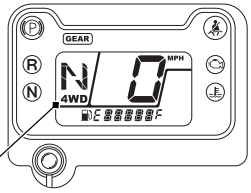
2WD mode:
The 4WD indicator will be off when the 2WD mode is engaged.

4WD mode:
The 4WD indicator will be on when the 4WD mode is engaged.

2WD mode



4WD mode



4WD indicator

Driver Controls

You should change drive modes only when the vehicle is stopped and the engine is idling.

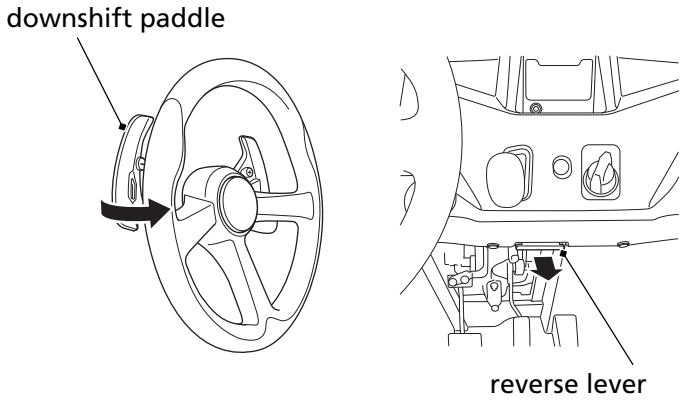
NOTICE

Changing drive modes while the vehicle is moving could damage the drivetrain.

After changing the drive mode, drive several yards, make right and left turns, and make sure the indicators work properly. If the indicators do not go out or come on according to the drive mode position, see your dealer.

Reverse Lever

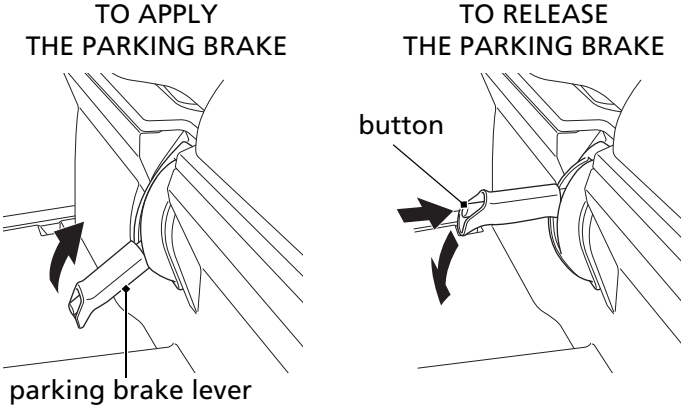
The reverse lever is located in the center of the lower dash. To operate, bring the SXS to a complete stop (the transmission cannot be shifted into reverse if the SXS is moving). Make sure the transmission is in neutral. While pulling the reverse lever and depressing the brake pedal, pull the downshift paddle (left handle shift paddle) once to shift into "R" (reverse) gear. See *Driving in Reverse*, page 79.



Driver Controls

Parking Brake Lever

The parking brake lever is located just in front of the bench seat between the driver's and passenger's seating positions. To apply the brake, pull the lever up fully. To release it, pull up slightly, push the button at the end of the lever, then lower it.
Before driving, check that the parking brake indicator is off.



NOTICE

Driving with the parking brake on can damage the rear brake and drivetrain.

Doors

Your Honda SXS is equipped with doors to prevent branches, gravel, or other debris from getting inside the driver's compartment, and to keep the driver's and passenger's legs and feet inside the vehicle if your vehicle ever tips or overturns. Be sure all doors are securely closed before driving your Honda SXS, and never remove a door.

If a door is damaged or does not close securely, see your dealer for repair or replacement.
Do not drive the Honda SXS with the doors open or removed.

The left and right doors can be opened in the same manner.

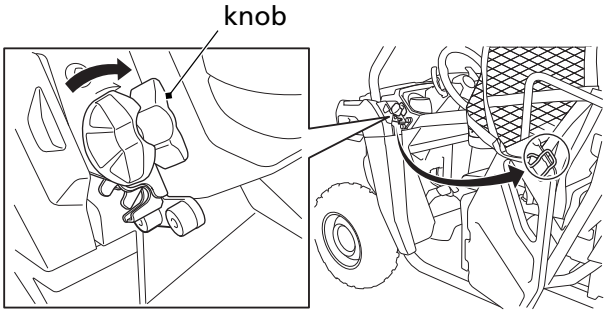
Open

1. Turn the knob inward.
2. Open the door.

Close

1. Close the door securely until the second latch click is heard.
2. Make sure the door is closed securely.

LEFT SIDE



Side Nets

Your Honda SXS is equipped with side nets to prevent branches, or other debris from getting inside the driver's compartment, and to keep the driver's and passenger's hands and arms inside the occupant protective structure (OPS) if the vehicle ever tips or overturns.

The side nets are secured to the OPS with side net D-rings and side net snap hooks. To function properly, the side nets should be tight. If a side net is loose, tighten the belts on the side net D-rings.

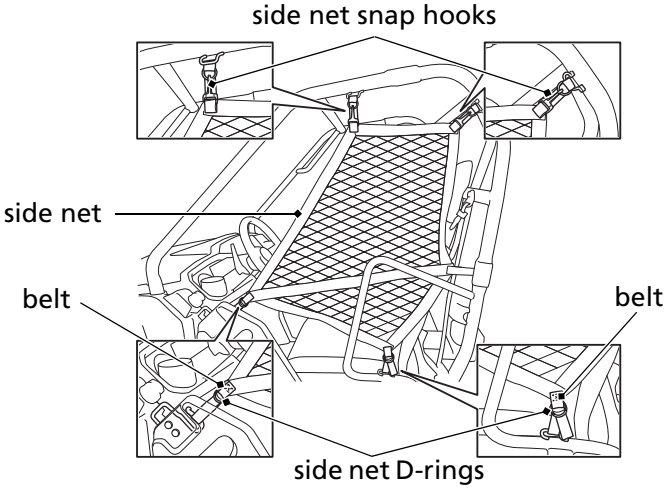
Be sure the side nets are properly adjusted and secure to assure proper function before driving your Honda SXS, and never remove side nets from the vehicle. Inspect the condition of the side net and its mounting hardware. If there is wear, deterioration, damage, or they do not latch and tighten securely, see your dealer for repair or replacement.

Side Nets Set Up

The left and right side nets can be set up in the same manner.

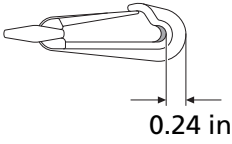
Inspect the side nets and their mounting hardware for damage as specified in the maintenance schedule on page 99.

1. Hook the side net snap hooks.
2. Tighten the belt on the lower side net D-ring and door side net D-ring.



Side net snap hooks wear limit

Inspect the side net snap hooks for wear. If the side net snap hook become less than 0.24 in (6 mm), see your SXS dealer for replacement.



Seat

Seat

Your Honda SXS is equipped with a bench seat that is designed to carry one driver and one passenger only.

The center of the bench seat is not intended as a seat and is, therefore, not equipped with a seat belt. Do not allow someone to ride there.

⚠WARNING

Do not sit on the center of the bench seat.

The center is not equipped with a seat belt.

Not wearing a seat belt can result in serious injury or death.

⚠CAUTION

Driving with cargo on the passenger seat can interfere with the drivers ability to control the vehicle.

Cargo on the passenger seat can be thrown around causing injury or a crash.

Do not drive with any cargo on the passenger seat. Properly secure all cargo in the cargo area.

Seat Belts

Your Honda SXS is equipped with lap/shoulder seat belts in each seating position. A seat belt keeps you connected to the vehicle so you won't be thrown out during a crash or rollover. Together with a proper helmet, a seat belt is your best protection against serious injuries in any type of crash, so make sure you and your passenger always buckle up before driving.

⚠WARNING

Not wearing a seat belt, or wearing one improperly, can result in serious injury or death in a crash or rollover.

Make sure the driver and passenger always wear their seat belts properly.

Of course, seat belts cannot completely protect you in every crash. But in most cases, seat belts can reduce your risk of serious injury.

Seat Belts

Seat Belt Speed Limiting System

When the driver's seat belt is not latched properly, the maximum vehicle speed will be limited by the seat belt speed limiting system.

When the driver's seat belt is not latched, the seat belt speed limiting system will:

- Limit the maximum vehicle speed to no more than 15 mph (24 km/h).
- Cause the seat belt indicator and speedometer to blink simultaneously.

To return the vehicle to normal operation the driver must:

1. Properly deploy and latch their seat belt.
2. Release the throttle for one second if the vehicle is moving.

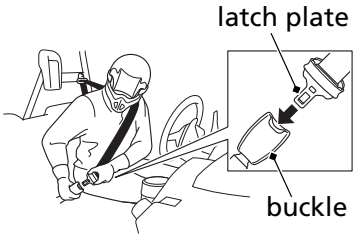
The speed limitation will be removed and seat belt indicator and speedometer will stop blinking after the driver follows this procedure and correctly deploys and fastens their seat belt.

To avoid speed limitations altogether, the driver should always deploy and fasten their seat belt (and require all passengers to be securely belted) before driving the vehicle and keep their seat belt fastened while underway. If the driver unlatches their seat belt while the vehicle is travelling at speeds greater than 15 mph (24 km/h), the vehicle speed will be limited to 15 mph or less until the driver's seat belt is deployed and properly latched and throttle is released for one second.

Seat Belts

How you wear a seat belt also matters. For the best protection:

1. Insert the latch plate into the buckle, then tug on the belt to make sure it is securely latched.



2. Check that the belt is not twisted, because a twisted belt can cause injuries.
3. Position the lap part of the belt as low as possible across your hips, then pull up on the shoulder part of the belt to make sure the lap part is snug. This keeps you connected to the vehicle and lets your strong pelvic bones take the force of a crash.
4. Make sure the shoulder part of the belt goes over your shoulder and rests against your chest.

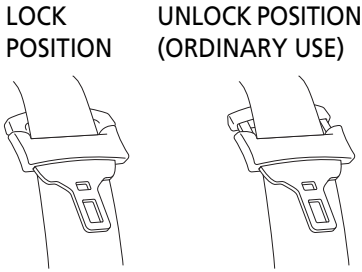
To unlatch a seat belt, press the red button on the buckle.

Seat Belts

Seat Belt Locking Mechanism

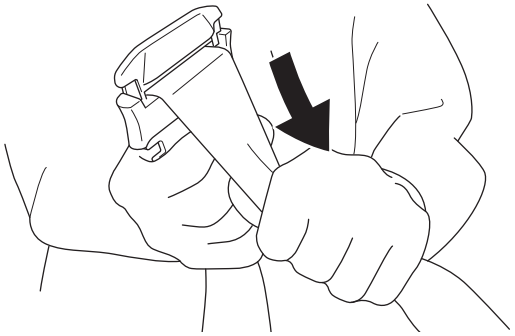
The seat belts in your Honda SXS are equipped with a belt locking mechanism.

The belt locking mechanism is in the holder of the latch plate. When the seat belt is subjected to intense forces during a crash or rollover, part of the holder locks the belt.



Unlock

1. To unlatch a seat belt, press the red button on the buckle.
2. Hold the latch plate and one side of the belt, and pull the other side of the belt. Doing so unlocks part of the holder.



If you have been driving in an extremely muddy or dusty area, be sure to inspect your belt and remove any dirt or debris before letting the belt retract into the retractor. Failure to do so could clog the retractor and make it inoperable.

Each seat belt has an emergency locking retractor. In normal driving conditions, the retractor lets you move freely in your seat while keeping some tension on the belt. During a crash or rollover, the retractor automatically locks the belt to help restrain your body.

Do not put any accessories on a seat belt, as that may reduce the effectiveness of the belt and increase the chance of injury in a crash.

If a seat belt is worn in a crash, the seat belt assembly must be replaced by your dealer. A belt that has been worn during a crash may not provide the same level of protection in a subsequent incident. The dealer should check the retractor and replace it if needed.

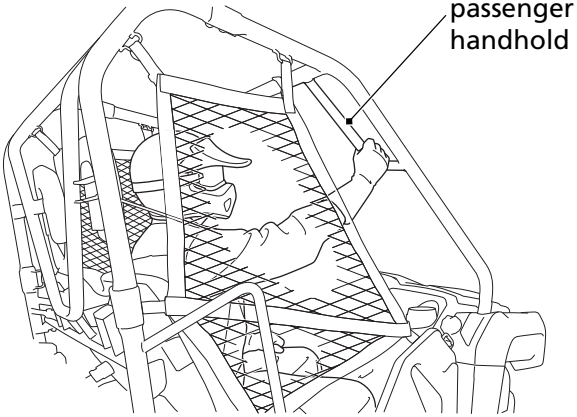
Seat belt washing procedure

1. Fully extend seat belt.
2. Rinse entire length of seat belt by spraying with water from a low pressure hose.
3. Leave belt extended until dry.

Passenger Handhold

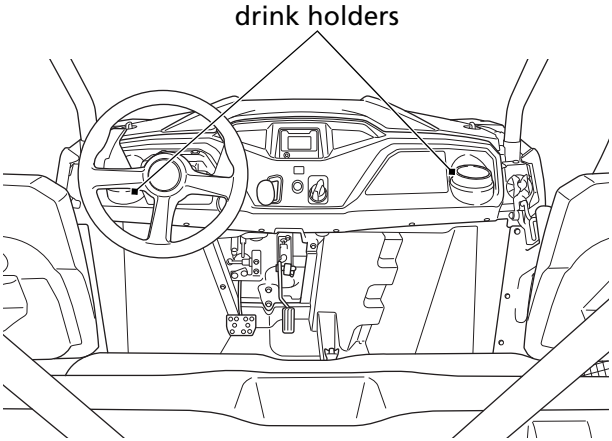
Passenger Handhold

The occupant protective structure (OPS) has a handhold to give a passenger extra support when the vehicle travels over rough or bumpy terrain. The passenger can also brace their feet against the floorboard.



Storage Compartments

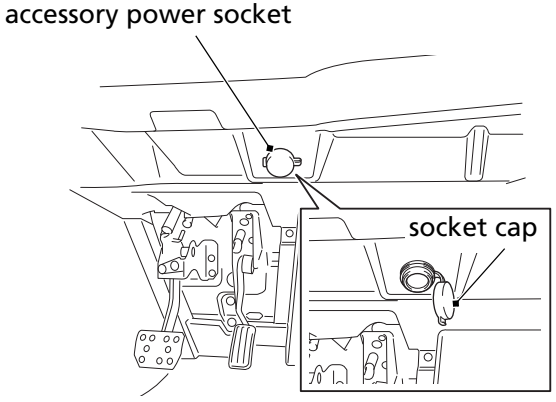
Your Honda SXS has two drink holders.



Accessory Power Socket

The accessory power socket is located in the center of the lower dash. The socket is intended for 12-volt DC accessories rated for 120 watts (10 amps) or less. Exceeding the limit can blow the accessory socket fuse (see page 220).

The socket can be used to power such items as a trouble light, spotlight, CB radio, or cell phone, but not a heat-generating accessory, such as a car cigarette lighter.



To use the accessory power socket, the engine must be on and idling.

NOTICE

Using any heat-generating accessory or improperly rated accessory can damage the socket.

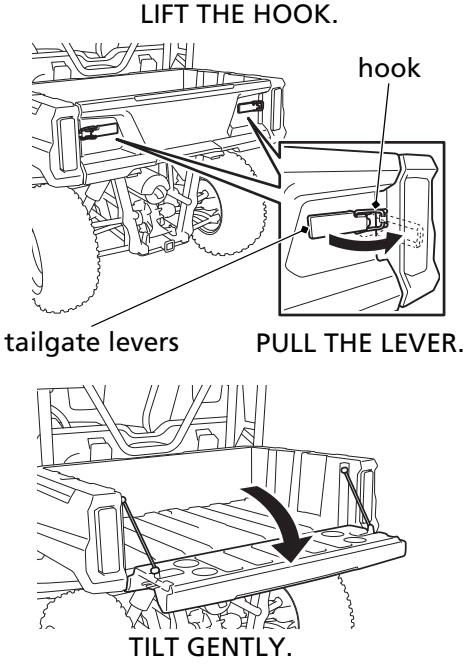
Remember to close the socket cap when you are finished using an accessory, and keep water or other fluids away from the socket.

Cargo Bed Controls (SXS520M2 only)

See page 67 for *Loading Cargo* when driving with cargo in the bed.

Tailgate Levers

Before lowering the tailgate, select a firm level surface and set the parking brake.
To lower the tailgate, pull each tailgate lever out and unhook the hook as shown below. Reverse the process to secure the tailgate in the upright position.

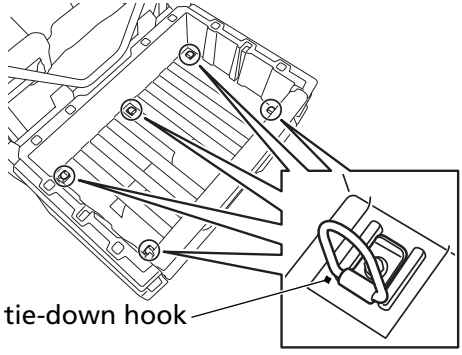


Do not drive the Honda SXS with the tailgate lowered.

Cargo Bed Controls (SXS520M2 only)

Tie-Down Hooks

The cargo bed has tie-down hooks for securing items in the bed. Before using the tie-down hooks, select a firm level surface and set the parking brake.



Cargo Bed Controls (SXS520M2 only)

Tilt Bed Lever

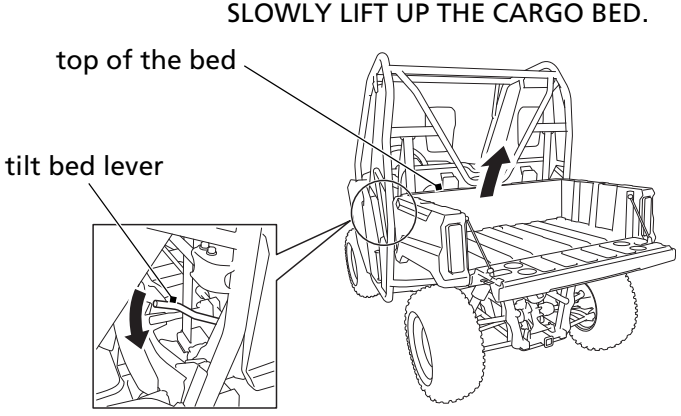
Before raising the cargo bed, select a firm level surface and set the parking brake.
Your Honda SXS has a tilt bed lever, on the left front side of the bed. This lever will allow you to lift the front end of the bed, making it easier to dump items out the rear or to maintain the air cleaner or lubricate the cargo bed pivots and cargo bed strikers.

To raise the front of the cargo bed, first make sure that the tailgate has been unlatched and lowered.

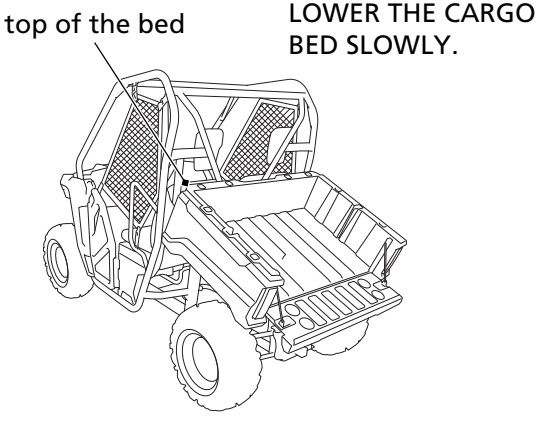
1. Push down the tilt bed lever, then grasp the top of the bed.
2. Raise the front end of the cargo bed.

Do not drive the Honda SXS with the front end of the cargo bed raised.

Cargo Bed Controls (SXS520M2 only)



To lower the cargo bed, make sure that the area under the front of the cargo bed is clear, then manually push down on the top of the bed.
Check that the bed is securely latched.



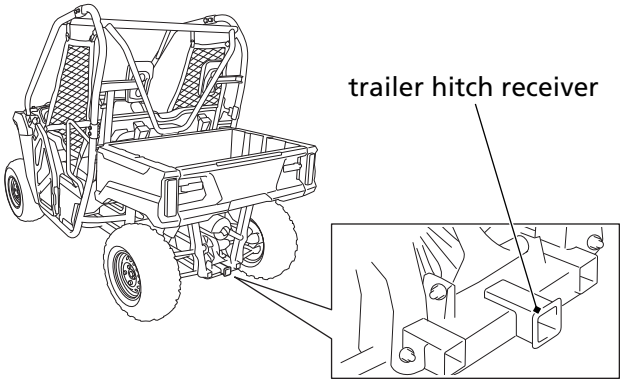
BE SURE THE CARGO BED IS LOCKED IN PLACE.

Trailer Hitch

Your Honda SXS is equipped with a trailer hitch receiver that accepts a 1 1/4 inch drawbar. You can purchase an approved drawbar from your Honda dealer.

See page 69 for page *Towing a Trailer*.

SXS520M2 shown



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Before Driving

Before driving your SXS, you need to make sure you and your vehicle are both ready. This section discusses how to evaluate your driving readiness and what items you should check on your vehicle. It also includes important information about loading cargo.

Are You Ready to Drive?

Before driving your Honda SXS for the first time, we urge you to carefully read this owner's manual and the labels on your vehicle and make sure you understand all the safety information.

Age & Size Recommendations

The driver should be at least 16 years old and tall enough to wear their seat belt properly (page 45) and operate all the controls. A passenger should also be tall enough to wear the seat belt properly and ride with both feet on the floor.

⚠WARNING

Allowing a person who is too young or too small to drive this vehicle or ride as a passenger could result in serious injury or death in a crash.

Follow all instructions and guidelines in this owner's manual regarding the proper age and size for a driver and a passenger.

Protective Apparel

To help prevent head injury from striking an occupant protective structure (OPS) or other hard object, we recommend that occupants always wear a helmet secured with a chin strap.

To protect the eyes from brush and flying objects, we also recommend that occupants wear impact-resistant goggles or a face shield.

For your safety, we also recommend that you always wear boots, gloves, long pants, and a long-sleeved shirt or jacket whenever you drive.

⚠WARNING

Driving or riding in this vehicle without a proper helmet and eye protection can result in serious injury or death in a crash.

Always wear a helmet secured with a chin strap, eye protection (goggles or face shield), gloves, boots, long-sleeved shirt or jacket and long pants when driving or riding in this vehicle.

Are You Ready to Drive?

Get to Know Your Vehicle

Because all vehicles have unique characteristics, it's important to learn how this one operates and handles. We recommend that you take time to practice using the different controls, and get accustomed to how the vehicle accelerates, brakes, and turns in different driving modes, on different surfaces, and on different terrain conditions.

Don't Drink & Drive

It's well known that alcohol and drugs can seriously affect a person's judgment, perception, and ability to safely operate any vehicle. We therefore strongly recommend that you do not drive, or let anyone else drive or ride in this vehicle, after consuming alcohol or drugs.

⚠ WARNING

Operating this vehicle after consuming alcohol or drugs can result in a crash in which you or others can be seriously injured or killed.

Never drive this vehicle after consuming alcohol or drugs.

Is Your Vehicle Ready to Drive?

Before driving your Honda SXS, it's important to inspect the vehicle and correct any problem you find. A pre-drive inspection is a must, not only for safety, but because having a breakdown can be a major inconvenience.

If your vehicle has overturned or been involved in a crash, do not drive it until it has been inspected by your dealer. There may be damage or other problems you cannot see.

⚠ WARNING

Improperly maintaining this vehicle or failing to correct a problem before driving can cause a crash in which you or someone else can be seriously hurt or killed.

Always perform a pre-drive inspection and correct any problems before you operate the vehicle.

Is Your Vehicle Ready to Drive?

Pre-drive Inspection

Check the following items before driving your Honda SXS:

Oil Level	Check the engine oil level and add oil, if needed (page 125). Also check under the vehicle for leaks.
Coolant	Check the coolant level (page 137). If it is low, add a 50/50 mixture of silicate-free coolant and distilled water. Check for leaks.
Fuel Level	Check the fuel gauge (page 24) and add fuel, if needed (page 120). Make sure the fuel fill cap is secure. Also check for the smell of fuel or fumes - if you smell any fuel, turn the ignition switch to OFF (O) immediately, and see your dealer.
Brake Fluid	Check the level (page 169). If it is near MIN, check the brake pads for wear (page 171). If the brake pads are within the specification, check for leaks in the braking system (page 168).
Tires	Check the air pressure of all tires and inflate them to the proper pressure (page 176). Also inspect the tires for damage or excessive wear (page 178). If necessary see your dealer.
Wheels	Make sure the wheel nuts are properly tightened and the wheels are not cracked or deformed (page 183).
Driveshafts	Inspect the driveshafts and boots for damage, tears, or leaks and see your dealer if any are found.

Is Your Vehicle Ready to Drive?

Steering Gearbox and Boots	Check the steering to make sure it turns smoothly in both directions. Check that there is no binding or play in the steering. Check for any tears in the boots. If any tears are found, see your dealer.
Underbody	Check for and remove any debris stuck in the underbody; take extra care in your inspection if the vehicle was last driven in deep grass, brush, a wetland, or flooded area. Check for any visible dents or cracks. If any dents or cracks are found, see your dealer.
Air Cleaner	Inspect the air cleaner element (pages 142, 145) to ensure it is clean and evenly oiled.
Air Cleaner Housing Drain Tube	Check for deposits in the drain tube. If necessary, clean the tube (pages 148, 149) and check the air cleaner housing.
Suspension	Check the condition of all suspension components. Be sure to look for bends or oil leaks in the damper. Check for tears in the boots of the front arm ball joint.
Lights	Make sure the headlights, taillights, and brake lights are working properly.
Controls	Check that all driving controls, including the accelerator pedal, brake pedal, reverse lever, parking brake lever, drive mode select lever, and the shift paddles are operating smoothly.
Tie-rod Ends	The wheels need to be lifted off the ground to correctly check the tie-rod ends, so it cannot be done in the pre-drive inspection. To have the tie-rod ends properly inspected, see your dealer.

(cont'd)

Is Your Vehicle Ready to Drive?

Cargo	Be sure items in the cargo bed (or on the cargo carrier) do not exceed the cargo limit and are properly secured to prevent shifting (pages 67, 68).
Seat Belts	Make sure all seat belts are in good condition and operate properly. The seat belts must move smoothly when pulled out, and retract on their own when released. The latch plates should click securely into the buckles and release when the release buttons are pushed firmly.
Side Nets	Make sure all side nets and their mounting hardware are in good condition and tighten securely.
Exhaust System	Make sure no materials or debris are sticking to, or accumulating around, the exhaust system. If any such debris is found, remove it so there's no chance for it to catch on fire. Start the engine and listen for any leaks.

⚠CAUTION

Exhaust system and catalyst operate at very high temperatures.
You can be burned if you touch the exhaust system or catalyst.
Do not touch the exhaust system or catalyst without letting the system cool down.

NOTICE

Exhaust system and catalyst operate at very high temperatures.
Accumulated debris and vegetation that contact the exhaust/catalyst can catch on fire.
Always conduct a pre-ride inspection and remove accumulated debris.

Remember to take care of any problem you find or have your dealer correct it before you drive your Honda SXS.

Loading Cargo

Your vehicle was designed to carry cargo. However, carrying a load that is too heavy or improperly loaded can adversely affect your vehicle's handling, stability, and stopping distance and make it unsafe. Before carrying any type of cargo, be sure to read the following pages.

Load Limit

See page 86 for guidelines on driving with cargo.

Maximum weight capacity = 882 lb (400 kg)
This includes the weight of cargo, occupants, accessories, and trailer tongue load.

Maximum cargo weight = 450 lb (204 kg)
This includes all items in the cargo bed (or on the cargo carrier), any accessories, and the tongue load if you are towing a trailer (see page 69).

The weight of added accessories will reduce the maximum cargo weight you can carry.

⚠WARNING

Overloading the cargo bed (or the cargo carrier) or failing to secure cargo properly can cause a crash in which you or others could be seriously hurt or killed.

Follow the cargo limits and loading guidelines in this owner's manual.

Loading Cargo

Loading Guidelines

- Make sure the tires are properly inflated (page 176).
- Cargo should only be carried in designated loading areas. Designated areas include the drink holder, cargo bed (or carrier rack), accessory underhood storage, etc.
- Place all items on the floor of the cargo bed (or on the cargo carrier), and as far forward and centered as possible.
- (SXS520M2 only)
  Use the tie-down hooks (page 54) to secure any items that could shift position while you are driving.
- Do not let items extend over the side rails of the bed (or the edges of the carrier), as they could get caught on something.
- Be aware that carrying tall, heavy items will significantly raise the vehicle's center of gravity, increasing the chance of a rollover.
- Never let a passenger ride in the rear cargo area or hang onto the side of the vehicle, even for a short distance. The person could be thrown off the vehicle or cause a crash.

⚠WARNING

Driving with a passenger in the cargo area can result in very serious injury or death if the person is thrown against the vehicle or out of the bed.

A passenger should only ride in the passenger's seat and wear their seat belt properly.

Towing a Trailer

Your vehicle can pull a trailer as well as carry cargo, provided you follow the load limits and guidelines below.

Towing Limits

There are two main types of limits that apply to towing a trailer:

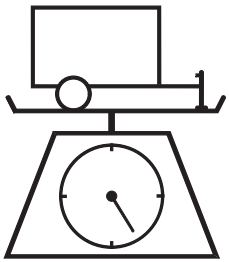
Maximum total trailer weight = 1,000 lb (454 kg)
This includes the weight of the trailer and everything in it or on it.

Maximum tongue load = 100 lb (45 kg)
The weight that the fully loaded trailer places on the tongue.

The tongue load also affects the total weight you can carry in the vehicle and the cargo bed (or the cargo carrier). See "Maximum weight capacity" on page 67.

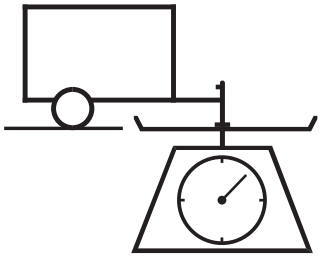
Checking Loads

Total Trailer Weight
Check the weight of a fully loaded trailer or estimate the total by adding the weight of the trailer (as quoted by the trailer maker) with the weight of all items placed in or on the trailer.



Towing a Trailer

To achieve a proper tongue load, start by placing 60 percent of the load toward the front of the trailer and 40 percent toward the rear, then readjust the load as needed.



Loading a Trailer

- Always use a proper trailer hitch. Do not tow by attaching a rope or cable to the vehicle's frame.
- Secure all items inside the trailer so they cannot shift while driving.

⚠WARNING

Exceeding a load limit or improperly towing a trailer can cause a crash in which you can be seriously hurt or killed.

Follow all load limits and towing guidelines in this owner's manual.

Basic Operation & Driving Guidelines

This section gives information on how to start and stop your engine. It also provides guidelines for operating on different types of terrain, driving with cargo, and towing a trailer.

Basic Operation

Starting & Stopping the Engine

For safety, we recommend that you start the engine in a well-ventilated area. If that is not practical, move the vehicle outdoors as soon as possible. The engine's exhaust contains carbon monoxide, a colorless and odorless gas that can cause illness and even death.

⚠WARNING

Running the engine of your vehicle while in an enclosed or even partially enclosed area can cause a rapid build-up of toxic carbon monoxide gas.

Breathing this colorless, odorless gas can quickly cause unconsciousness and lead to death.

Only run your vehicle's engine when it is located in a well ventilated area outdoors.

The starter motor will operate when the transmission is in neutral or the brake pedal is pressed.
You should do the following checks and adjustments before you drive your vehicle.

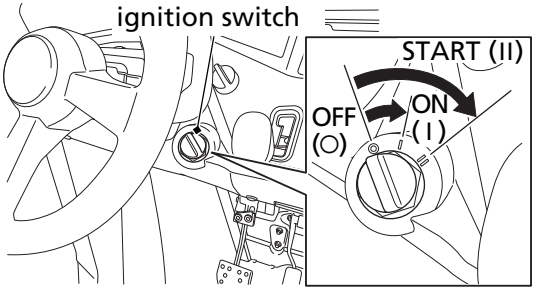
Before START:

1. Make sure the doors, side nets and front hood are securely closed.
2. (SXS520M2 only)
   Make sure the cargo bed is securely lowered.
3. Check that any items you may be carrying are stored properly or fastened down securely.
4. Fasten your seat belt. Check that your passenger has fastened their seat belt as well.
5. When you start the engine, check the indicators in the instrument panel.

Starting the engine:

1. Apply the parking brake.
2. Press on the brake pedal. Insert the key and turn the ignition switch to the ON (I) position. Confirm the transmission is in neutral, and the neutral indicator is on.
3. To start the engine, without touching the accelerator pedal, turn the ignition switch to the START (II) position.
   Immediately after the engine starts, let go of the key. The switch returns to the ON (I) position.
   Do not hold the key in the START (II) position for more than 5 seconds at a time.
   If the engine does not start after 5 seconds, turn the key back to the OFF (O) position and wait about 10 seconds before turning it to START (II) again.
4. If the engine does not start within 5 seconds, or starts but stalls right away, repeat step 3 with the accelerator pedal pressed halfway down.
   If the engine starts, release pressure on the accelerator pedal so the engine does not race.
5. If the engine fails to start, press the accelerator pedal all the way down, and hold it there while starting to clear flooding. If the engine still does not start, return to step 3.

The engine can be started with the transmission in gear. The engine will start in gear if the unit is completely stopped, and the brake pedal is pressed.



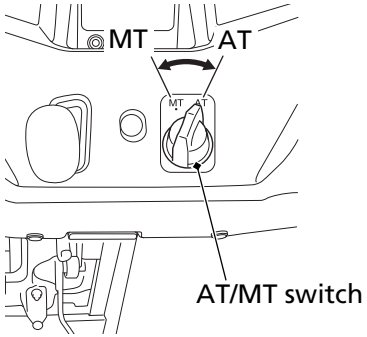
Stopping the engine:
To stop the engine, turn the ignition switch to the OFF (O) position. Remember to apply the parking brake and remove the key if you plan to leave the vehicle.

Shifting Gears

Selecting a AT/MT Mode
Your SXS has two transmission modes: AT and MT.
You can select the desired shift mode with the AT/MT switch.

AT mode
This mode automatically shifts the gears with optimal timing according to your driving conditions.
The gear position indicator shows "D" for forward gears, "N" for neutral, and "R" for reverse. Select the gear position with the right side upshift paddle and left side downshift paddle.

You can temporarily shift up or down by operating the shift paddles while driving in AT mode. The shifted gear will be shown on the gear position indicator.



MT mode

In this mode, the gears are shifted manually through shift paddle operation.

You can select five forward gears, neutral, and reverse by operating the right side upshift paddle and left side downshift paddle.

The gear position indicator will show "1, 2, 3, 4, or 5" for forward gears, "N" for neutral, and "R" for reverse.

- Holding the shift paddle does not continuously shift the gears. To continue shifting, release your fingers from the shift paddle, and then pull the shift paddle again.
- The gears do not shift up automatically in MT mode. Do not allow the engine to exceed the rev limit.
- The gears shift down automatically when you slow down, even in MT mode.

NOTICE

Improper shifting can damage the engine, transmission, and drive train. Also, coasting or towing the SXS for long distances with the engine off can damage the transmission.

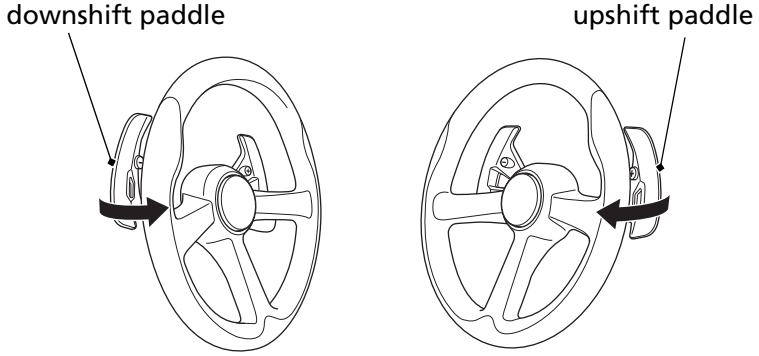
Basic Operation

Driving in AT mode

After starting the engine and letting it warm up, follow these procedures:

1. With the transmission in neutral, release the parking brake (page 40), but continue to press the brake pedal.
2. With the throttle closed, select AT mode, and then pull the right side upshift paddle once to shift into drive (D).
   Make sure the gear position indicator shows "D".
3. Release the pressure from the brake pedal and increase engine speed by gradually pressing the accelerator pedal.

GEAR SHIFTING SEQUENCE



The transmission cannot be upshifted from neutral to D gear when the engine speed is above 3,000 rpm, the ground speed is above 2 mph (3 km/h), or the accelerator pedal is pressed.

If the gear position indicator shows "-", shift the gear by pulling the gearshift paddles.

See *If the Transmission Is Not Functioning Properly* on page 212.

Temporarily changing gears by operating the shift paddle while AT mode is selected

You can temporarily change gears by operating the shift paddles even while AT mode is selected.

When operating the shift paddles while AT mode is selected, the D displayed in the gear position indicator changes to a gear position number (1 – 5).

Because the gear change is temporary, the vehicle automatically returns to normal AT mode under the following conditions:

- When the shift paddles are not operated for a prescribed time
- When the vehicle speed is reduced or increased beyond the automatic shifting speed

Driving in MT mode
To upshift the transmission, pull the right side upshift paddle once. To downshift the transmission, pull the left side downshift paddle once.

After starting the engine and letting it warm up, follow this procedure:

1. With the transmission in neutral, release the parking brake, but continue to press the brake pedal.
2. With the throttle closed, select MT mode and pull the upshift paddle once to shift into 1st gear.
3. Release pressure from the brake pedal and increase engine speed by gradually pressing the accelerator pedal.
4. When speed increases, shift to 2nd gear by pulling the upshift paddle once. Lifting off the throttle is recommended, but not required.
5. Repeat this sequence to progressively upshift to 3rd, 4th, and 5th (top) Gear.
6. To downshift, pull the downshift paddle once. Remember to lift off the throttle each time you shift to a lower gear.

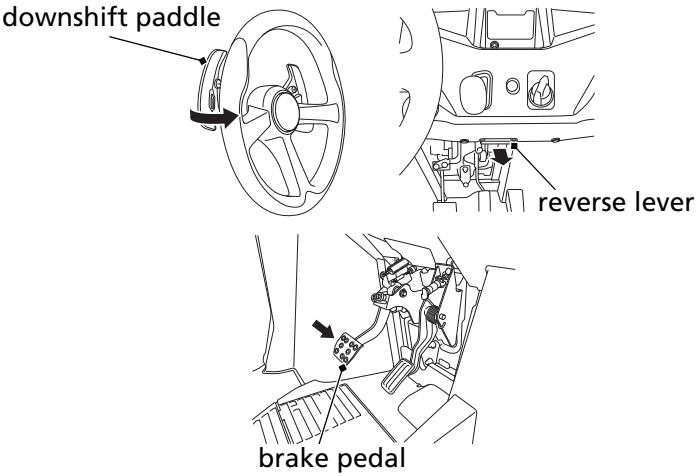
The transmission cannot be upshifted from neutral to 1st gear when the engine speed is above 3,000 rpm, the ground speed is above 2 mph (3 km/h), or the accelerator pedal is pressed.

If the electric shift system malfunctions, the transmission cannot be shifted by pulling the gearshift paddles. See your dealer. (In an emergency, a gear may be selected manually so you may move the vehicle. See *Emergency Gear Selection & Operation* on page 213.)

Driving in Reverse

If you need to drive in reverse, make sure the area behind you is clear and only operate the SXS at low speed.

1. Bring the SXS to complete stop (the transmission cannot be shifted into reverse if the vehicle is moving). Make sure the transmission is in neutral.
2. Be sure there are no obstacles or people in the way.
3. While pulling the reverse lever and depressing the brake pedal, pull the downshift paddle once to shift into "R" (reverse) gear.



4. Make sure that the reverse indicator comes on.
5. Release the brake pedal and reverse lever.
6. Press the accelerator pedal gradually to increase speed.
7. To stop, lift off the accelerator pedal and press the brake pedal.
8. To shift out of reverse and into neutral, pull the upshift paddle once to shift into "N" (neutral) gear. Make sure that the reverse indicator goes off.

(cont'd)

Basic Operation

Selecting a Drive Mode

2WD This mode supplies power to the rear wheels only, this mode is best for surfaces with good traction.

4WD This mode supplies power to the front and rear wheels. Steering will require slightly more effort than with 2WD. This mode is recommended for driving on surfaces with poor traction.

Before using the drive mode select lever to change from one mode to another, be sure the vehicle is stopped and the engine is idling. See page 37 for additional information.

Parking

Look for a level parking area with a firm surface. Avoid parking on a slope or on loose or slippery surfaces when possible. If you must park on a slope, block the wheels to help keep the vehicle from sliding.

After bringing your vehicle to a stop:

1. Keep your foot on the brake pedal while you shift into neutral (N).
2. Set the parking brake.
3. Turn the ignition switch to the OFF (O) position, and remove the key.

Fully push the parking brake lever down when releasing the parking brake.

Driving Guidelines

Your Honda SXS has been designed with many safety features to help protect you. These include a strong occupant protection structure, seat belts, doors, and side nets. However, no safety system can prevent all injuries.

The following pages contain important precautions and driving guidelines to help you make good decisions and operate your vehicle safely.

⚠ WARNING

Failure to follow the driving guidelines in this owner's manual can lead to a crash or overturn in which you or others can be seriously hurt or killed.

Follow all safe-driving guidelines in this owner's manual.

Safe Driving Precautions

Before driving your Honda SXS for the first time, please review the "Driver & Passenger Safety" section (page 1), the "Before Driving" section (page 59), and the precautions below.

We also recommend that you complete the Recreational Off-Highway Vehicle (ROV) E-Course. The free course is available at www.ROHVA.org. The two-hour ROV E-Course is a multi-media, interactive, online safety course that reinforces:

- Key risk factors associated with ROV operation
- Safe driving practices that will reduce risk of injury
- The best resources for learning about your particular vehicle

The ROHVA (Recreational Off-Highway Vehicle Association) also offers the hands-on ROV Basic Driver Course (RBDC). Information on and registration for the RBDC is available at www.ROHVA.org.

Off-highway Use Only

Your Honda SXS was designed for use on a wide variety of terrain and situations. However, it should not be driven on any public road, paved or unpaved, because it is not equipped to legally or safely drive on such roads.

Remember to obey all local off-road regulations, obtain permission before driving on someone else's private property, and respect all "no trespassing" signs.

Control Speed

Driving at excessive speed for the terrain or other conditions increases the chance of a crash or overturn. Always reduce speed when driving on hilly terrain, or when carrying cargo or towing a trailer.

Use Extra Care on Unfamiliar Terrain

When driving in a new area, keep your speed low and check the terrain ahead for possible problems, such as large rocks, bumps, holes, or drop-offs. Don't drive fast on unfamiliar terrain or when visibility is limited. If you drive in an area with other vehicles, be sure to keep a safe distance to avoid a collision.

Do Not Perform Stunts

Keep all four wheels on the ground at all times. Showing off or attempting to perform stunts could lead to a crash or overturn in which the driver, a passenger, or others could be seriously hurt or killed.

Driving Guidelines

Off-road Driving Considerations

Your Honda SXS was designed and intended for off-road use. In the event that you must drive on a paved surface, be aware that your Honda SXS will feel and handle different than it does on dirt. The tires will also wear much faster.

Vehicle Design

The Honda SXS handles somewhat differently from on-highway vehicles due in part to features that allow it to perform its role as an off-highway recreational vehicle. For example, this Honda SXS has a higher center of gravity than cars designed for use only on pavement. It is also equipped with large low-pressure tires that allow good traction in sand, loose dirt, wet grass and other low-traction surfaces.

These advantages come at some cost. Because your vehicle is taller and rides higher off the ground, it can more easily tip or roll over if you make abrupt turns or drive on sloped terrain.

Off-highway Environments

Driving on private property, or in approved off-highway areas, means you leave a generally predictable and orderly world behind. You won't find lane markers or traffic signals, and no one will be there to warn you of trouble ahead. It's up to you to assess situations and drive within limits. The terrain has limits (it may be too steep or bumpy, for example). The vehicle has limits (e.g., traction, stability, and power). And you may be limited by lack of experience.

Surface Considerations

The kind of surface you drive on affect how your vehicle handles. For example, on loose or soft surfaces you'll need more time and distance to accelerate, turn, or brake to a stop.

Avoid any sudden sharp turns, particularly on pavement and other hard surfaces. Always slow down after moving from one type of surface to another until you get accustomed to how your vehicle handles.

Reading the Terrain

Because visual information comes in unpredictable ways off-road, you need to stay alert, constantly survey the terrain, and go slow enough to analyze situations and make good decisions.

As your eyes search the terrain ahead, watch for changes in surface conditions. One minute you can be on firm soil and the next in soft sand or deep mud. A path can quickly change from level to bumpy, slope at a dangerous angle, or disappear in a drop-off. Always keep your eyes open for holes, washouts, or obstacles that could upset or damage the vehicle.

Of course if you cannot see clearly, due to tall grass for example, stop safely, get out of the vehicle, and survey the area for a safe route.

Controlling Speed

Whether you travel off-road or on pavement, the general rule is to keep your speed low. Of course, you'll need enough speed to keep moving forward, but too much speed leads to problems.

When driving off-road at higher speeds, you have less time to read the terrain and make good decisions. The drive can also be more bumpy, and there's a greater chance of the vehicle sliding if you brake or turn quickly on wet soil, gravel, or another slippery surface. Never go faster than conditions allow.

Driving Guidelines

Driving with Cargo or Pulling a Trailer

The added weight of carrying cargo or pulling a trailer will affect how your vehicle accelerates, brakes, and handles. The added weight and length of a trailer will affect your directional control.

Please follow these guidelines whenever you carry cargo or pull a trailer:

- Do not exceed the cargo limit and towing limits (see page 67 for loading cargo and page 69 for towing a trailer).
- Keep speed low, particularly when driving on hills.
- Allow extra distance to accelerate, turn, and slow or stop.
- Do not drive across a steep slope with a trailer.
- Use lower gears when towing a trailer or carrying extra cargo.

Basic Driving

Making Turns

The basic turning technique for Honda SXS is to drive at low speed and gradually adjust the amount of steering to suit the surface. Do not make sudden sharp turns, either off-road or on pavement.

If your vehicle ever skids sideways during a turn, steer in the direction of the skid. Also, avoid hard braking or accelerating until you have regained directional control.

Braking

The best off-road braking technique is to gently step down on the brake pedal, then increase pressure as more braking is needed. Light braking may be all you need on soft surfaces, such as sand or loose dirt. Avoid hard braking on any surface.

Driving on Hills

Hills present some of the greatest challenges and hazards, especially if you are carrying cargo or pulling a trailer. If you are new to off-road driving, start with gentle inclines, take time to learn how your vehicle handles on slopes, and read the information that follows.

Even if you have previous off-road driving experience, the guidelines below should serve as important reminders.

Approaching a Hill

When you approach a hill, you need to decide whether it is one that you, your passenger, your cargo and your vehicle can handle. For example, ask yourself:

- Is the hill too steep? Is the incline constant, or are there places where it gets suddenly steeper? If you run out of power, you may not be able to continue forward.
- Is there enough traction for you to make it to the top without spinning the wheels or sliding backwards?
- Are there obstacles, such as rocks or ruts, that could upset your vehicle and make it roll over?
- If there is no safe predetermined path, can you drive straight up the hill without turning?
- Do you know what is on the other side of the hill?

If you do not know the answers to these questions before beginning an ascent, you should stop and walk up the hill to find out.

Driving Guidelines

Driving Up a Hill

If you decide that it is safe to drive your Honda SXS up a hill:

- Select an appropriate gear and drive mode for the hill.
- Approach the hill with enough speed to smoothly start up the hill.
- Maintain a steady speed as you climb the hill.
- Reduce speed as you approach the top, and watch for other vehicles that may be approaching the top from the other side of the hill.

If You Stall Going Up a Hill

If a hill is steeper than you expected, traction is poor, or you don't maintain sufficient speed, you may begin to stall. If that happens:

- Stop the vehicle and set the parking brake.
- If you have a passenger, you may want to have them get out and move away from the vehicle.
- If you are headed straight up the hill, shift into reverse, release the parking brake, and slowly back straight down the hill, gently using the brake pedal to control speed.

Driving Down a Hill

Before driving down a hill, as with driving up a hill, you need to evaluate whether you can make it safely to the bottom and away from the slope.

Ask yourself:

- Is the hill too steep to maintain speed and steering control?
- Is the surface too rough or too slippery?
- Can you drive straight down without turning?
- Is there a safe exit when you reach the bottom of the hill?

If you decide it is safe to drive down a hill:

- Hold the steering wheel firmly and drive straight back down the hill.
- Gently apply the brakes to help control speed, but do not "ride" the brakes.

Crossing a Hill

Before traversing a hill, consider these facts:

- A hill that you can drive straight up or down can be too steep to drive across.
- When you drive straight up or down a slope, the length of the wheelbase reduces the chance of tipping over backward or forward, but when you drive across a slope, the vehicle's narrower track and higher center of gravity increases the chance of tipping or rolling over.
- If you drive across a slope and an uphill wheel hits a bump, or a downhill wheel drops into a hole, your vehicle will tip downward even more.

If you can't clearly see all terrain conditions (good traction, no bumps, holes or other obstacles, etc.), stop and walk the slope before you drive on it. If you have any doubt whether you can safely drive across a slope, don't do it. Find another route.

Avoiding Obstacles

When driving off-road, always watch for bumps, pot holes, rain ruts and other obstacles. Large bumps and holes can bounce you around and cause you to lose control or get stuck. Slow down whenever you drive on rough terrain.

Driving Guidelines

Driving Through Water

Before driving through water, stop and make sure that:

- The water is not more than about 10 inches (25 cm) deep.
- The water is not flowing too fast. Deep rushing water can sweep you downstream. Even very shallow rushing water can wash the ground from under your tires and cause you to lose traction and possibly roll over.
- Both banks have gradual slopes and good traction, so you can enter the stream and exit safely.
- The surface under the water appears to provide good traction. Remember, the water may hide hazards, such as rocks, holes, mud, or slippery vegetation.

If you decide you can safely cross the water:

- Proceed at a slow, steady speed.
- Watch for submerged obstacles, including slippery rocks and holes.
- Avoid getting the spark plug or air cleaner wet, as this would cause the engine to stop.

Driving at Night

If you drive your Honda SXS at night, always drive slower and more cautiously than you would in daylight.

Servicing Your Honda

To help keep your Honda SXS in good shape, this section includes a Maintenance Schedule for required service and step-by-step instructions for specific maintenance tasks. You'll also find important safety precautions, information on fuels and oils, and tips for keeping your Honda looking good.

For information about replacing fuses, see page 220.

For information about the exhaust emission and noise requirements of the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Environment and Climate Change Canada (ECCC), see page 243.

USA Only

Maintenance, replacement or repair of the emission control devices and systems may be performed by any repair establishment or individual using parts that are "certified" to EPA standards.

Before You Service Your Honda

Service Preparations

(cont'd)

Servicing Your Honda

The Importance of Maintenance

A well-maintained Honda SXS is essential for safe, economical, and trouble-free operation. It will also help reduce air pollution. Careful pre-drive inspections and good maintenance are especially important because your Honda SXS is designed to be driven over rough off-road terrain.

To help you properly care for your Honda SXS, this section of the manual provides a Maintenance Schedule. The service intervals in this schedule are based on average operation conditions.

⚠WARNING

Improperly maintaining this Honda SXS or failing to correct a problem before you drive can cause a crash in which you can be seriously hurt or killed.

Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

Frequent servicing of the air cleaner is especially important to help you avoid a possible costly engine repair.

If your Honda SXS overturns or is involved in a crash, be sure your dealer inspects all major parts, even if you are able to make some repairs.

Maintenance Safety

This section includes instructions on how to perform some important maintenance tasks. If you have basic mechanical skills, you can perform many of these tasks with the tools provided with your Honda SXS.

Other tasks that are more difficult and require special tools are best performed by professionals. Removing the wheels should normally be handled only by a Honda technician or other qualified mechanic. Instructions are included in this manual only to assist in emergency service.

Some of the most important safety precautions follow. However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

⚠ WARNING

Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed.

Always follow the procedures and precautions in this owner's manual.

Maintenance Safety

Important Safety Precautions

- Make sure the engine is off before you begin any maintenance or repairs. This will help eliminate several potential hazards:
  Carbon monoxide poisoning from engine exhaust. Be sure there is adequate ventilation whenever you operate the engine.
  Burns from hot parts. Let the engine and exhaust system cool before touching.
  Injury from moving parts. Do not run the engine unless instructed to do so.
- Read the instructions before you begin, and make sure you have the tools and skills required.
- To reduce the possibility of a fire or explosion, be careful when working around gasoline. Use only non-flammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

Remember that your Honda dealer knows your Honda SXS best and is fully equipped to maintain and repair it. To ensure the best quality and reliability, use only new Honda Genuine Parts or other equivalents for repair and replacement. If you have the tools and skills required for additional maintenance jobs, you can purchase an official Honda Service Manual (page 252).

Maintenance Schedule

The required Maintenance Schedule that follows specifies how often you should have your Honda SXS serviced, and what things need attention. It is essential to have your Honda SXS serviced as scheduled to maintain safe, dependable performance, and proper emission control.

The service intervals in this Maintenance Schedule are based on average driving conditions. Some items will need more frequent service if you drive in unusually wet or dusty areas or at full throttle. Consult your dealer for recommendations applicable to your individual needs and use.

Some items in the Maintenance Schedule can be performed with basic mechanical skills and hand tools. Procedures for these items are provided in this manual. Other items involve more extensive procedures and may require special training, tools, and equipment. We recommend that you have your dealer perform these tasks unless you have advanced mechanical skills and the required tools and equipment. Procedures for such items in this schedule are provided in an official Honda Service Manual available for purchase (page 252).

If you do not feel capable of performing a given task or need assistance, remember that your Honda dealer knows your Honda SXS best and is fully equipped to maintain and repair it. If you decide to do your own maintenance, use only Honda Genuine Parts or their equivalents for repair or replacement to ensure the best quality and reliability.

Maintenance Schedule

Perform the pre-ride inspection (page 64) and owner maintenance in this section at each scheduled maintenance period.

Maintenance Minder Messages on the Multi-function Display

The maintenance minder indicator appears in the multi-function display when the mileage or operating hours on your Honda SXS reaches the maintenance interval specified on the maintenance schedule.

Maintenance Minder Indicators:

	**Initial Maintenance** Appears at 100 miles (150 km) or 20 operating hours, whichever comes first. See *Initial Maintenance* on the maintenance schedule.
	**Regular Maintenance Interval 1** Appears 600 miles (1,000 km) or 100 operating hours after the Initial Maintenance is performed and maintenance minder is reset (page 31). See *Regular Maintenance Interval* for 100, 300, and 500 operating hours (or corresponding mileage interval, whichever comes first) in the maintenance schedule.
	**Regular Maintenance Interval 2** Appears 600 miles (1,000 km) or 100 operating hours after Regular Maintenance Interval 1 is performed and maintenance minder is reset (page 31). See *Regular Maintenance Interval* for 200, 400, and 600 operating hours (or corresponding mileage interval, whichever comes first) in the maintenance schedule.

Maintenance Schedule

- The Initial Maintenance indicator appears only once over the life of the vehicle.
- The Regular Maintenance Interval 1 and 2 indicators will appear alternately over the life of the vehicle.
- Consider the total mileage and operating hours shown on the odometer/hour meter, along with your vehicle maintenance history, to determine the appropriate Regular Maintenance Interval to follow on the maintenance schedule.

Each item on the maintenance schedule requires some mechanical knowledge. Certain items (particularly those marked * and **) may require more technical information and tools. Consult your dealer.

* Should be serviced by your dealer, unless you have the proper tools and service data, and are mechanically qualified. Refer to the official Honda Service Manual (page 252).
** In the interest of safety, we recommend these items be serviced only by your dealer.

Summary of Maintenance Schedule Notes:

NOTES:
Note 1 Service more frequently when operating in dusty areas, sand or snow.
Note 2 Service more frequently when operated in muddy, very wet conditions, or freezing temperatures.
Note 3 Service more frequently when operated in muddy conditions.
Note 4 Check the underbody whenever the under guard has been hit.

Maintenance Schedule

Service the items listed at the indicated distance (or time, if given).												
			Initial maintenance	Regular maintenance interval								
FREQUENCY (Whichever comes first)		×100 mi	1	6	12	18	24	30	36	Note	Refer to page
		×100 km	1.5	10	20	30	40	50	60		
		Hours	20	100	200	300	400	500	600		
ITEMS		Month	1	12							
	Check engine oil and coolant		Check oil and coolant at fuel stop								125, 137
	Check tires		Check inflation and condition once a month								176
	Check side net adjustment and snap hooks		●	●	●	●	●	●	●		42
*	Reverse inhibitor system		●	●	●	●	●	●	●		157
	Check brake fluid		Check fluid level once a month								169
	Replace engine oil and oil filter		●	●	●	●	●	●	●		127
*	Inspect valve clearance		●	Every 600 miles (1,000 km) or 100 operating hours, otherwise adjust only if noisy							—
*	Clean spark arrester			Every 600 miles (1,000 km) or 100 operating hours, whichever comes first							162
	Clean air cleaner elements									1	142, 145
	Check air cleaner housing drain tube									2	148, 149
	Check spark plug										159
*	Inspect idle speed		●								—
*	Check fuel lines and connections				●		●		●		—
	Check front and rear brakes		●			●			●	3	168
	Check front and rear final gear oil		●			●			●		132, 134

* Should be serviced by your dealer, unless you have the proper tools and service data, and are mechanically qualified. Refer to the official Honda Service Manual (page 252).

Note 1 Service more frequently when operating in dusty areas, sand or snow.

Note 2 Service more frequently when operated in muddy, very wet conditions, or freezing temperatures.

Note 3 Service more frequently when operated in muddy conditions.

Maintenance Schedule

Service the items listed at the indicated distance (or time, if given).											
		Initial maintenance	Regular maintenance interval							
FREQUENCY (Whichever comes first)	×100 mi	1	6	12	18	24	30	36	Note	Refer to page
	×100 km	1.5	10	20	30	40	50	60		
	Hours	20	100	200	300	400	500	600		
ITEMS	Month	1	12							
	Lubricate all hinges, latches, and pivots	●	●	●	●	●	●	●		150
	Inspect the following items:									—
**	Suspension components									—
	Wheels									183
	Driveshaft boots									184
	Accelerator and brake pedals				●			●		155, 172
	Brake light switch									174
	Exhaust system									163
	Battery terminal condition									186
	Check parking brake adjustment	●						●		173
	Inspect the following items:									—
**	Tie-rod ends									—
*	Steering gearbox and boots							●		—
*	Brake hoses and lines									—
*	SXS underbody								4	—
*	Inspect evaporative emission control system (USA - 50 states [meets California])		Every 2 years (regardless of mileage)							—
	Replace the following items:									—
	Front and rear final gear oil		Every 2 years (regardless of mileage)							133, 135
*	Engine coolant									139
*	Brake fluid									—

* Should be serviced by your dealer, unless you have the proper tools and service data, and are mechanically qualified. Refer to the official Honda Service Manual (page 252).

** In the interest of safety, we recommend these items be serviced only by your dealer.

Note 4 Check the underbody whenever the under guard has been hit.

Maintenance Record

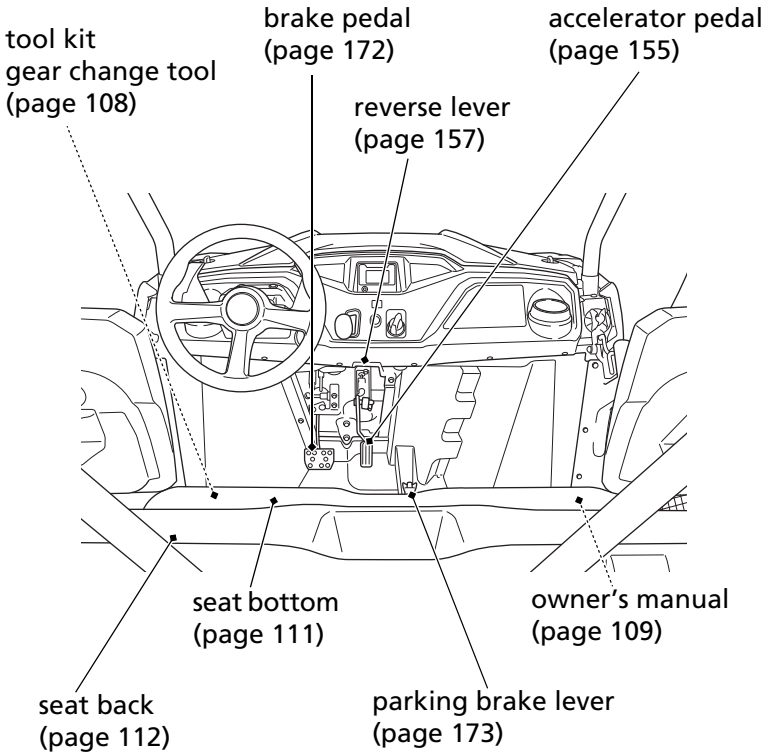
Keeping an accurate maintenance record will help ensure that your Honda SXS is properly maintained. Retain detailed receipts to verify the maintenance was performed. If the Honda SXS is sold, these receipts should be transferred with the Honda SXS to the new owner. Make sure whoever performs the maintenance completes this record. All scheduled maintenance, including the 100-mile (150 km) or 20 hours or 1-month initial maintenance, is considered a normal owner operating cost and will be charged for by your dealer. Use the space under Notes to record anything you want to remind yourself about or mention to your dealer.

Miles (km) or hours	ODO or HOUR	Date	Performed By:	Notes
100 (150) or 20				
600 (1,000) or 100				
1,200 (2,000) or 200				
1,800 (3,000) or 300				
2,400 (4,000) or 400				
3,000 (5,000) or 500				
3,600 (6,000) or 600				
4,200 (7,000) or 700				
4,800 (8,000) or 800				

Maintenance Component Locations

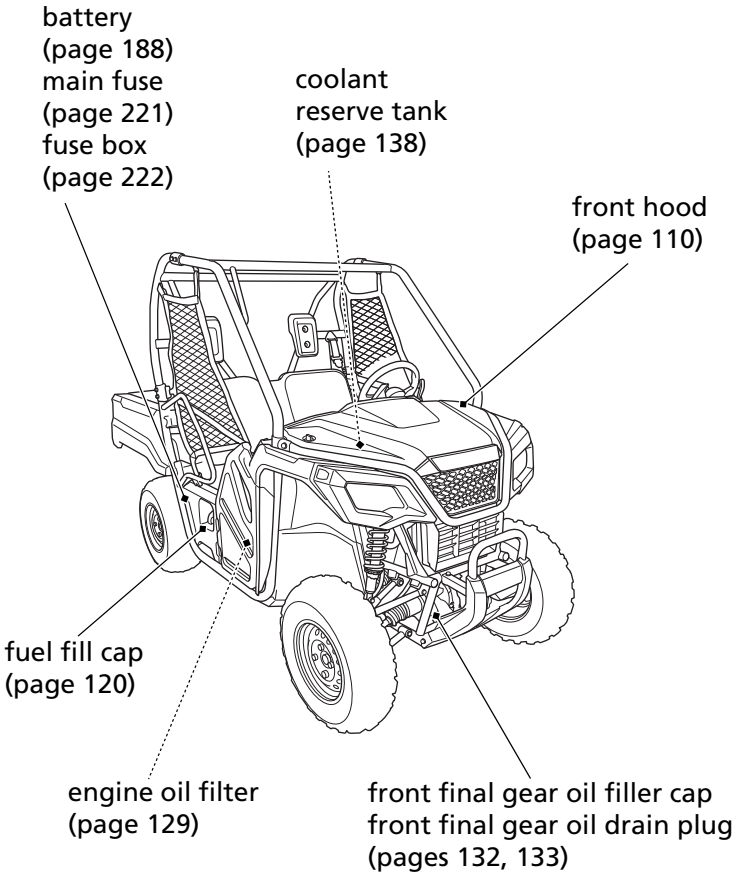
Indicates something visible.

Indicates something concealed.



Maintenance Component Locations

SXS520M2 shown

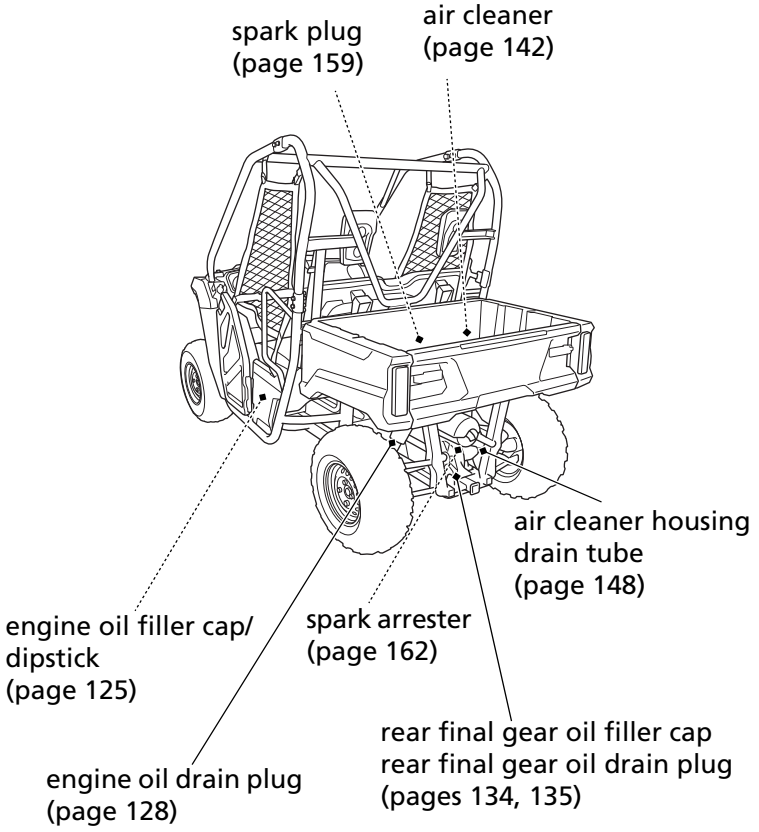


Maintenance Component Locations

SXS520M2 shown

Indicates something visible.

Indicates something concealed.

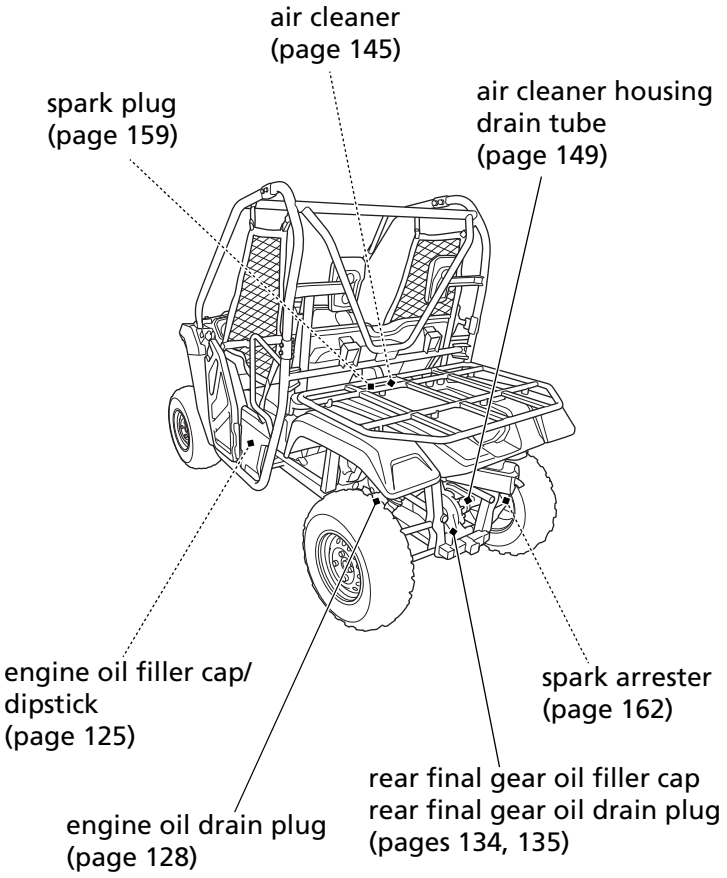


Maintenance Component Locations

SXS500M2 shown

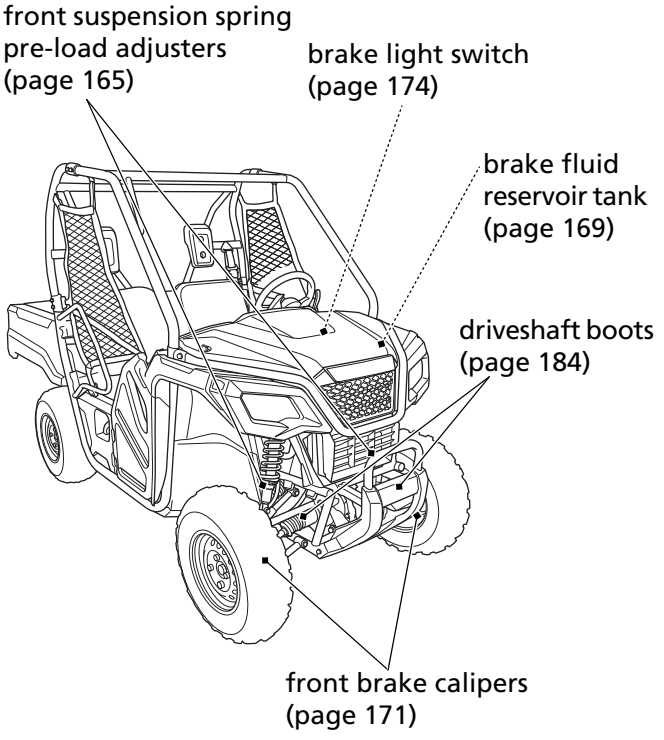
Indicates something visible.

Indicates something concealed.



Maintenance Component Locations

SXS520M2 shown

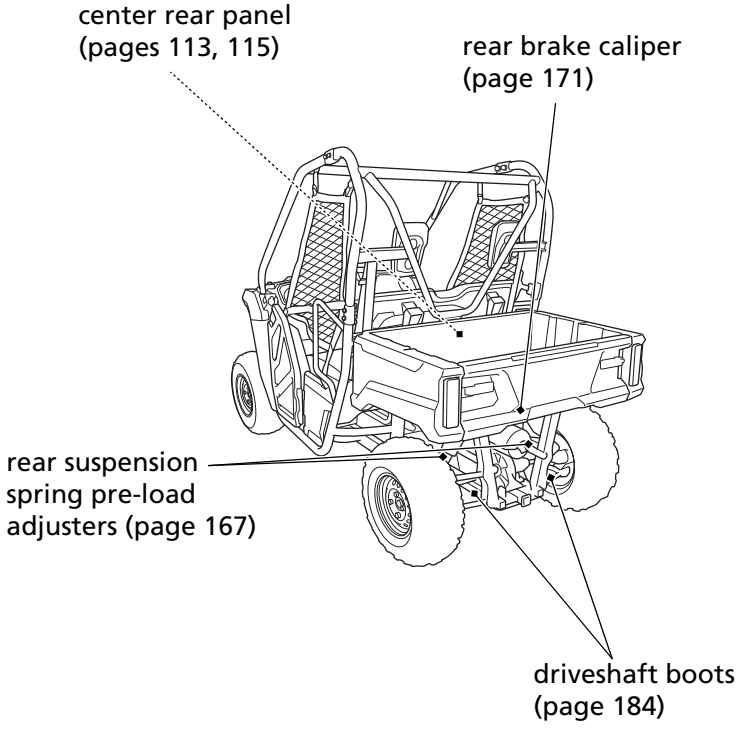


Maintenance Component Locations

SXS520M2 shown

Indicates something visible.

Indicates something concealed.



Tool Kit

The tool kit and the gear change tool are stored in the compartment under the seat bottom.

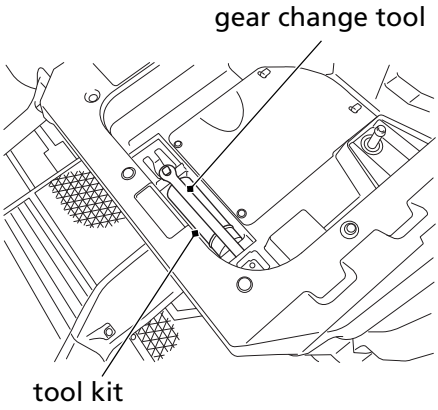
To access the tool kit and the gear change tool, remove the seat bottom (page 111).

The tools in the kit are sufficient to perform routine maintenance and simple repairs. Any extensive work requiring additional tools should be performed by your dealer.

The tool kit includes the following items:
- standard/Phillips screwdriver
- screwdriver handle
- spark plug wrench
- sponge

UNDER SEAT BOTTOM

LEFT SIDE

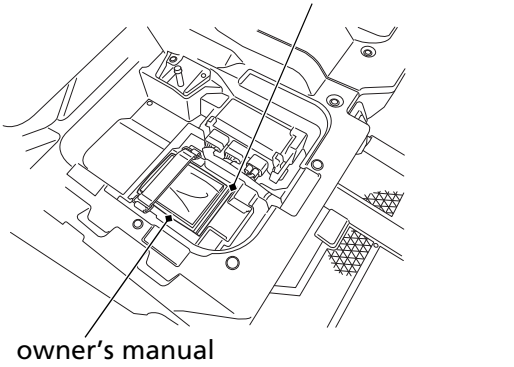


Owner's Manual Storage

Your Honda SXS provides storage for the owner's manual so you'll have it with you for easy reference. Store your owner's manual in the plastic document bag under the seat bottom.

Be careful not to flood this area when washing your Honda SXS.

UNDER SEAT BOTTOM
RIGHT SIDE



Front Hood

Refer to *Safety Precautions* on page 95.

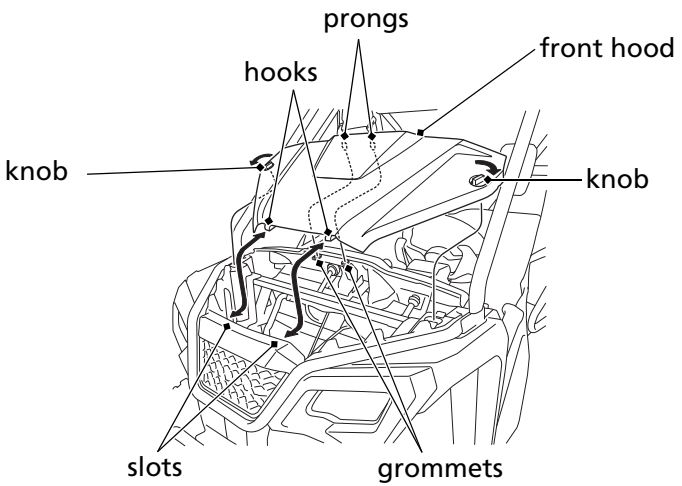
The front hood must be removed to lubricate the drive mode select lever pivot, brake light switch adjustment, reverse inhibitor system adjustment and throttle cable adjustment, to check the coolant level, and for washing the radiator fan area.

Removal

1. Turn the knobs outward.
2. Remove the prongs from the grommets.
3. Remove the front hood.

Installation

1. Insert the hooks into the slots.
2. Install the prongs into the grommets.
3. Turn the knobs inward.



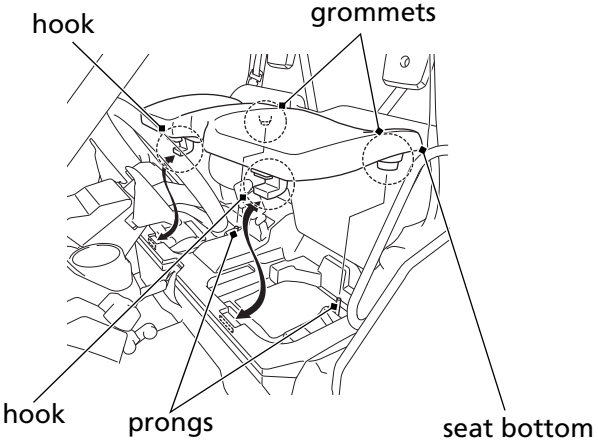
Seat Bottom Removal

Refer to *Safety Precautions* on page 95.

The seat bottom must be removed to check the engine oil level, to add engine oil, to change the engine oil filter, and to access the tool kit, gear change tool, and owner's manual.

Removal

1. Open the doors (page 41).
2. Pull the rear of seat bottom upward then slide it slightly backward.



Installation

Insert the hooks into the frame and the prongs into the grommets of the seat bottom.

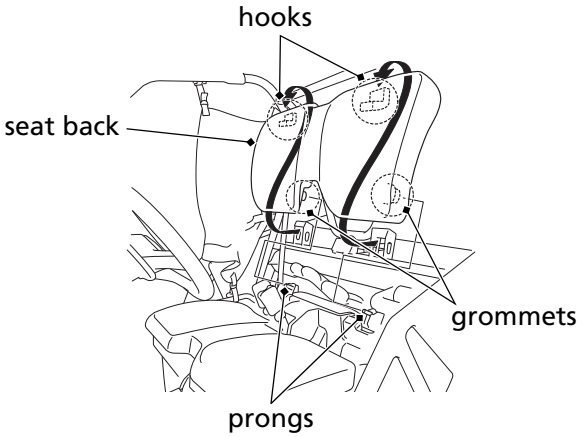
Seat Back Removal

Refer to *Safety Precautions* on page 95.

The seat back must be removed for spark plug maintenance, to change the engine oil filter, to clean the air cleaner, and to remove the center rear panel.

Removal

1. Open the doors (page 41).
2. Pull the bottom of seat back forward then slide it slightly downward.



Installation

Insert the hooks into the frame and the prongs into the grommets of the seat back.

Center Rear Panel Removal

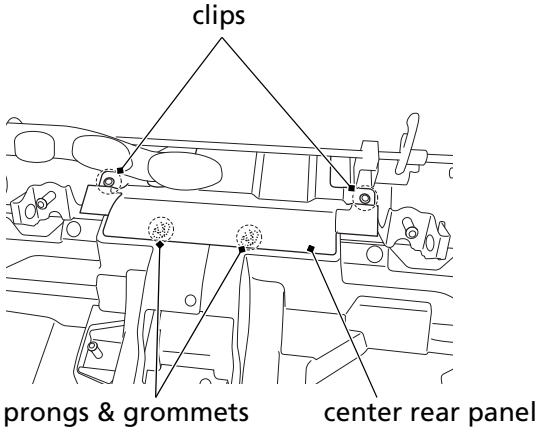
Refer to *Safety Precautions* on page 95.

SXS520M2

The center rear panel must be removed for spark plug maintenance and to change the engine oil filter.

Removal

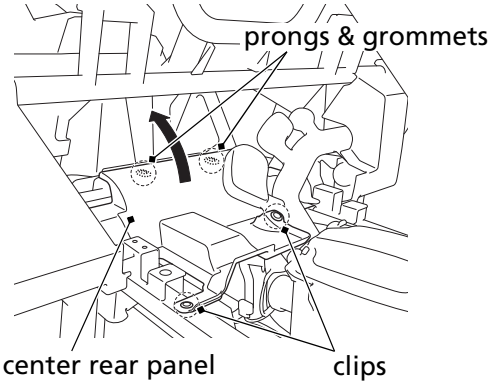
1. Remove the seat back (page 112).
2. Lift the cargo bed (page 55).
3. Remove the clips on the front side (page 117).



(cont'd)

Center Rear Panel Removal

4. Remove the clips on the rear side (page 117).
5. Release the prongs from their grommets.
6. Remove the center rear panel forward.



Installation

1. Install the center rear panel.
2. Install the prongs into their grommets.
3. Install the clips (page 117).
4. Lower the cargo bed.

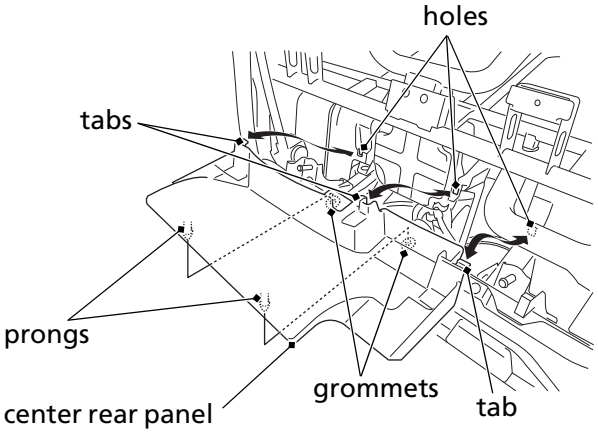
Center Rear Panel Removal

SXS500M2

The center rear panel must be removed for spark plug maintenance, to change the engine oil filter, and to clean the air cleaner.

Removal

1. Remove the seat back (page 112).
2. Release the prongs from their grommets.
3. Pull the center rear panel forward.



Installation

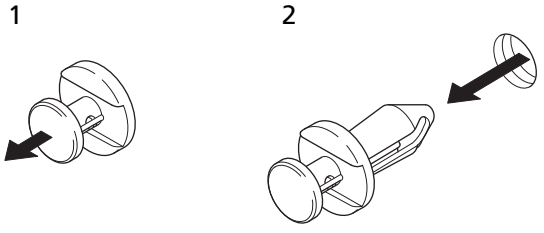
1. Insert the tabs into the holes.
2. Install the prongs into their grommets.
3. Install the center rear panel.

Clip Removal

Clip removal and installation:

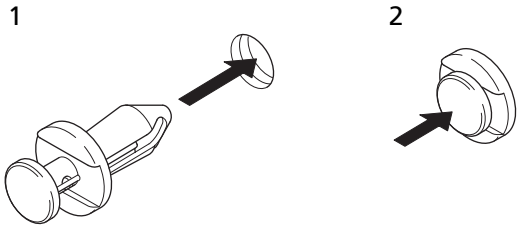
Removal

1. Pull up the center pin to release the lock.
2. Pull out the clip of the hole.



Installation

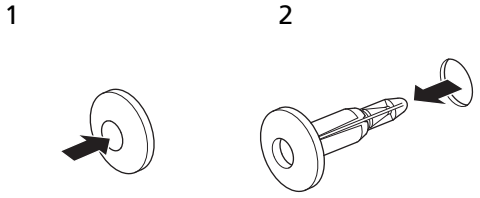
1. Insert the clip into the hole.
2. Press down the center pin securely to lock the clip.



Clip Removal

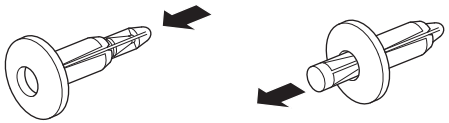
Removal

1. Press down on the center pin to release the lock.
2. Pull out the clip of the hole.



Installation

1. Push the bottom of the center pin.



2. Insert the clip into the hole.
3. Press down on the center pin to lock the clip.

Jack-Up Point & Support Point

Refer to *Safety Precautions* on page 95.

When jacking up and supporting this vehicle, the following jack-up points and support points should be used.

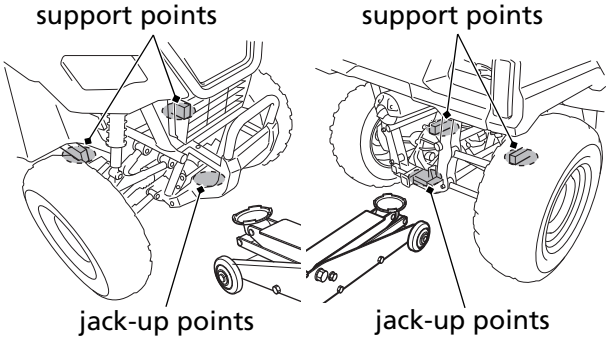
⚠WARNING

The vehicle can easily roll off a jack, seriously injuring anyone underneath.

Follow the directions for changing a tire exactly, and never get under the vehicle when it is supported only by the jack.

When using a jack, always abide by the following instructions.

- Do not leave the engine running.
- Set the drive mode in 4WD mode and set the parking brake securely.
- Use only on a firm level surface.
- Place a jack only at the specified jack-up point.
- Do not leave any person or cargo in the vehicle.
- Do not place any object above or under a jack.



Fuel

Refer to *Safety Precautions* on page 95.

Fuel Recommendation

type	unleaded
pump octane number	86 (or higher)

Use only unleaded fuel in your Honda. The use of leaded fuel will damage the catalytic converter. If you drive your Honda in a country where leaded fuel might be available, take precautions to use only unleaded fuel.

Your engine is designed to use any unleaded gasoline that has a pump octane number of 86 or higher. Gasoline pumps at service stations normally display the pump octane number. For information on the use of oxygenated fuels, see page 247.

Use of lower octane gasoline can cause persistent "pinging" or "spark knock" (a loud rapping noise) which, if severe, can lead to engine damage. Light pinging experienced while operating under a heavy load, such as climbing a hill, is no cause for concern.

If pinging or spark knock occurs at a steady engine speed under normal load, change brands of gasoline. If pinging or spark knock persists, consult your dealer.

Never use stale or contaminated gasoline or an oil/gasoline mixture. Avoid getting dirt, dust, or water in the fuel tank.

Fuel

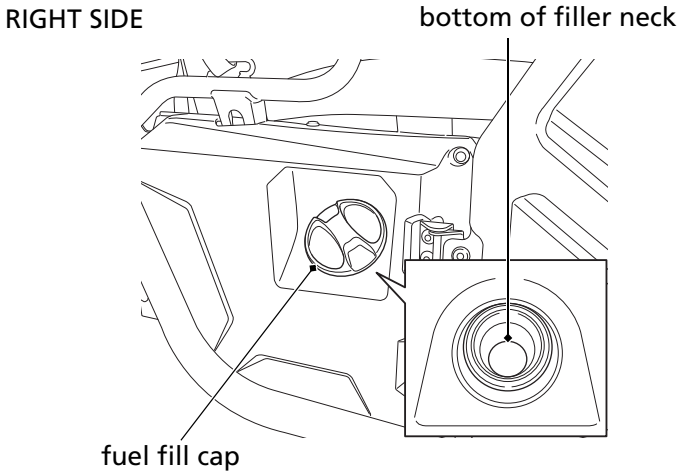
Fuel Capacity

Fuel tank capacity:
4.07 US gal (15.4 ℓ)

When there is only one segment left in the fuel gauge (page 24), fuel will be low and you should refuel as soon as possible.

Refueling Procedure

Refer to *Safety Precautions* on page 95.



1. Turn the fuel fill cap counterclockwise.
2. Add fuel until the level reaches the bottom of the filler neck. Avoid over filling the tank. There should be no fuel in the filler neck.

⚠WARNING

Gasoline is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks and flames away.
- Only handle fuel outdoors.
- Wipe up spills immediately.

3. (Except AC type)
   After refueling, turn the fuel fill cap clockwise securely.
   (AC type)
   After refueling, turn the fuel fill cap clockwise until it clicks.

If you replace the fuel fill cap, use a Honda Genuine replacement part or equivalent.

NOTICE

Gasoline can damage the camouflage coating.
Do not allow spilled gasoline to pool on camouflage colored bodywork. Also, do not allow gasoline soaked rags to be placed on camouflage bodywork.

Engine Oil & Filter

Engine oil quality is a major factor that affects both the performance and the service life of the engine.

Using the proper oil (page 123) and filter, and regularly checking, adding, and changing oil will help extend your engine's life. Even the best oil wears out. Changing oil helps get rid of dirt and deposits in the engine. Operating the engine with old or dirty oil can damage your engine. Running the engine with insufficient oil can cause serious damage to the engine and transmission.

Change the engine oil as specified in the maintenance schedule on page 99. When running in very dusty conditions, oil changes should be performed more frequently than specified in the maintenance schedule.

Oil Recommendation

API classification	SJ or higher except oils labeled as energy conserving or resource conserving on the circular API service label
viscosity (weight)	SAE 10W-30
JASO T 903 standard	MA
suggested oil*	Pro Honda GN4 4-stroke oil (USA & Canada) or Honda 4-stroke oil, or an equivalent motorcycle oil.

* Suggested oils are equal in performance to SJ oils that are not labeled as energy conserving or resource conserving on the circular API service label.

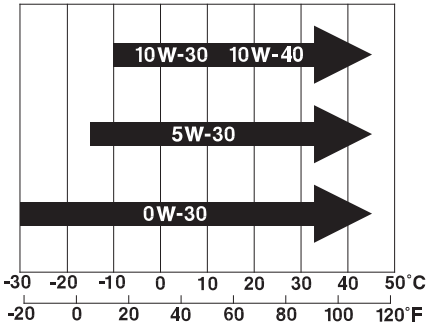
- Your Honda SXS does not need oil additives. Use the recommended oil.
- Do not use oils with graphite or molybdenum additives. They may adversely affect clutch operation.
- Do not use API SJ or higher oils displaying a circular API "energy conserving" or "resource conserving" service label on the container. They may affect lubrication and clutch performance.

Not recommended Recommended

- Do not use non-detergent, vegetable, or castor based racing oils.

Engine Oil & Filter

Other viscosities shown in the following chart may be used when the average temperature in your driving area is within the indicated range.

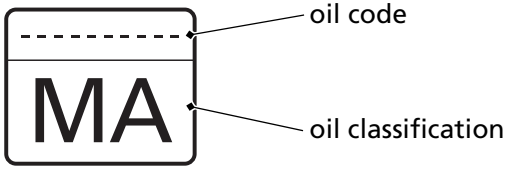


JASO T 903 standard

The JASO T 903 standard is an index for engine oils for 4-stroke motorcycle engines.

There are two classes: MA and MB.

Oil conforming to the standard is labeled on the oil container. For example, the following label shows the MA classification.



Checking & Adding Oil

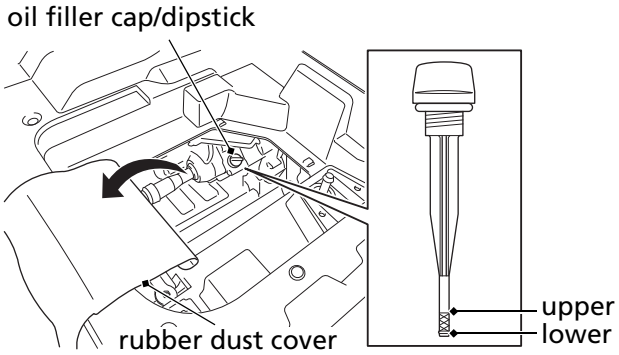
Refer to *Safety Precautions* on page 95.

Check the engine oil level each day before operating your Honda SXS and add, if needed.

1. Park your Honda SXS on a firm, level surface.
2. Start the engine in a well-ventilated area and let it idle for 3 – 5 minutes. Stop the engine and wait 2 – 3 minutes.
3. Remove the seat bottom (page 111) and fold open the rubber dust cover on the left side.
4. Remove the oil filler cap/dipstick from the front crankcase cover and wipe it clean.
5. Insert the oil filler cap/dipstick without screwing it in, then remove the dipstick and check the oil level. The oil level should be between the upper level mark and the lower level mark on the dipstick.

UNDER SEAT BOTTOM

LEFT SIDE



(cont'd)

6. If required, add the specified oil into the fill cap hole, up to the upper level mark on the dipstick. Do not overfill.
7. Reinstall the oil filler cap/dipstick, rubber dust cover, and seat bottom.

NOTICE

Running the engine with an improper oil level can cause serious engine damage.

Changing Engine Oil & Filter

Refer to *Safety Precautions* on page 95.

Your Honda SXS's oil filter has very specific performance requirements. Use a new Honda Genuine oil filter specified for your model or a filter of equal quality.

NOTICE

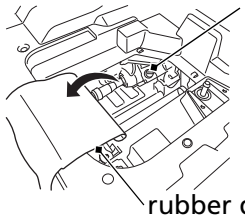
Using the wrong oil filter may result in leaks, premature wear, or engine damage.

This procedure requires mechanical skill and professional tools such as a torque wrench and access from underneath the vehicle, as well as the means for disposing of the drained fluid (page 204). If you do not have the skills or the tools, see your dealer.

Drain the Engine Oil:

1. Make sure the Honda SXS is parked on level ground. Set the parking brake, and jack up and support your Honda SXS (page 118).
2. Remove the seat bottom (page 111) and fold open the rubber dust cover.
3. Remove the oil filler cap/dipstick.

UNDER SEAT BOTTOM
LEFT SIDE

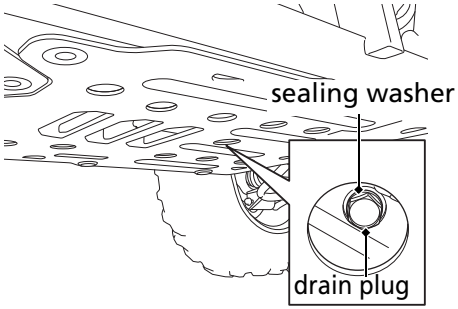


(cont'd)

Engine Oil & Filter

4. Place an oil drain pan under the crankcase.
5. Remove the engine oil drain plug and sealing washer.

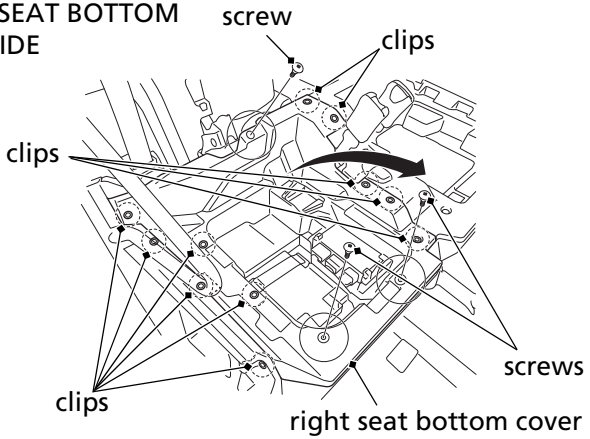
UNDER BODY



Install a New Engine Oil Filter:

6. Remove the seat back (page 112).
7. Remove the center rear panel (pages 113, 115).
8. Remove the clips (page 116) and screws from right seat bottom cover and flip it forward, leaving ECU and wiring in place. The oil filter can be accessed on right side of engine.

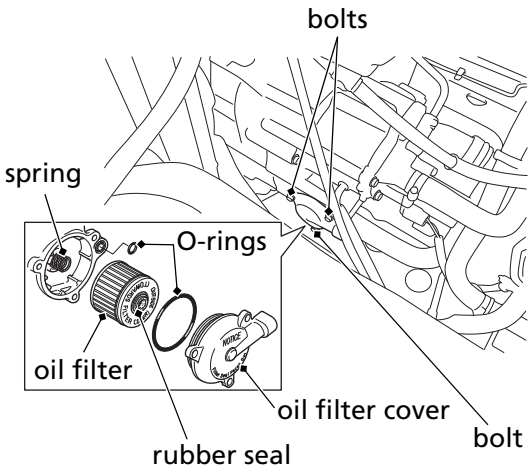
UNDER SEAT BOTTOM
RIGHT SIDE



9. Remove the oil filter cover by removing the bolts. Let the remaining oil drain out. Discard the oil filter in an approved manner.
10. Coat new O-rings with engine oil and install them into each groove in the filter cover and crank case.
11. Reposition the spring to the engine crankcase and install a new oil filter with the rubber seal facing out, away from the engine. You will see the "OUT-SIDE (TOWARD FILTER COVER)" mark on the filter body, near the seal.
    Use only the Honda Genuine oil filter or a filter of equivalent quality specified for your model.
    Using the wrong Honda filter or a non-Honda filter which is not of equivalent quality may cause engine damage.

NOTICE

Improper installation of the oil filter can cause serious engine damage.



(cont'd)

12. Reinstall the oil filter cover, making sure the bolts are tightened to the specified torque:
    9 lbf·ft (12 N·m, 1.2 kgf·m)
13. Pour the drained oil into a suitable container and dispose of it in an approved manner (page 204).

NOTICE

Improper disposal of drained fluids is harmful to the environment.

14. Install the right seat bottom cover by flipping it back. Install the clips. Install the screws and tighten them to the specified torque:
    5.9 lbf·ft (8 N·m, 0.8 kgf·m)
15. Install the center rear panel.
16. Install the seat back.

Add Engine Oil:

17. Reinstall the drain plug with a new sealing washer and tighten the drain plug to the specified torque:
    18 lbf·ft (25 N·m, 2.5 kgf·m)
18. Lower your Honda SXS safely.
19. Fill the crankcase with the recommended oil, approximately:
    3.2 US qt (3.0 ℓ)
20. Reinstall the oil filler cap/dipstick.
21. Reinstall the rubber dust cover.
22. Reinstall the seat bottom.
23. Start the engine and let it idle for 3 – 5 minutes.
24. Remove the seat bottom and fold open the rubber dust cover.
25. Stop the engine and after 2 – 3 minutes, check the oil level. Make sure the oil is between the upper and lower level marks on the dipstick. If necessary, add more oil but do not overfill.
26. Reinstall the oil filler cap/dipstick and rubber dust cover.
27. Reinstall the seat bottom.
28. Check that there are no oil leaks.

If a torque wrench is not used for installation, see your dealer as soon as possible to verify proper assembly.

Front Final Gear Oil

Oil Recommendation

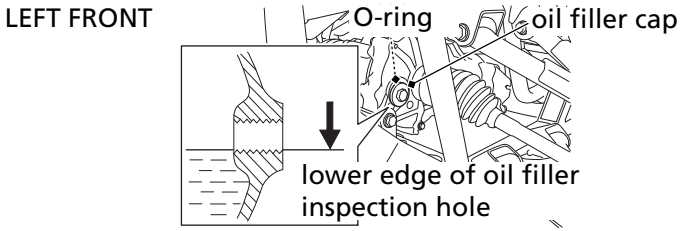
API classification	GL-5
type	hypoid gear oil
viscosity (weight)	SAE 80W-90
suggested oil	Honda shaft drive oil or equivalent

Checking Oil

Refer to *Safety Precautions* on page 95.

Check the final gear oil level every 1,800 miles (3,000 km) or 300 hours of operating your Honda SXS and add, if needed.

1. Park your Honda SXS on a firm, level surface.
2. Remove the oil filler cap.
3. Make sure the oil level is at the lower edge of the oil filler inspection hole.
4. Apply a thin coat of grease to a new O-ring and insert it into the oil filler cap groove.
5. Install and tighten oil filler cap to the specified torque:
   9 lbf·ft (12 N·m, 1.2 kgf·m)



Front Final Gear Oil

Changing Oil

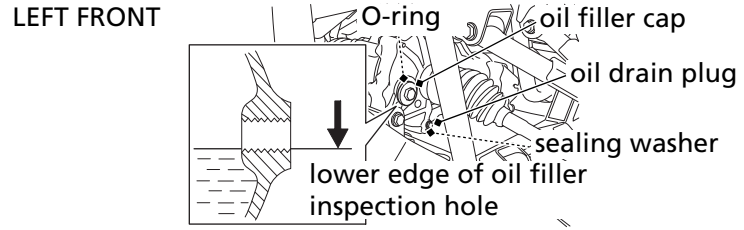
Refer to *Safety Precautions* on page 95.

Change the oil with the front final gear at normal operating temperature to assure complete and rapid draining.

1. Park the Honda SXS on a firm, level surface.
2. Place an oil drain pan under the oil drain plug.
3. Remove the oil filler cap and the drain plug.
4. After the oil has completely drained (3 – 5 minutes), reinstall the drain plug with a new sealing washer and tighten it to the specified torque:
   9 lbf·ft (12 N·m, 1.2 kgf·m)
5. Fill the front final gear with the recommended oil.
   17.2 US oz (510 cm³)
6. Make sure the oil level is at the lower edge of the oil filler inspection hole.
7. Apply a thin coat of grease to a new O-ring and insert it into the oil filler cap groove.
8. Install and tighten oil filler cap to the specified torque:
   9 lbf·ft (12 N·m, 1.2 kgf·m)
9. Pour the drained oil into a suitable container and dispose of it in an approved manner (page 204).

NOTICE

Improper disposal of drained fluids is harmful to the environment.



Rear Final Gear Oil

Oil Recommendation

API classification	GL-5
type	hypoid gear oil
viscosity (weight)	SAE 80W-90
suggested oil	Honda shaft drive oil or equivalent

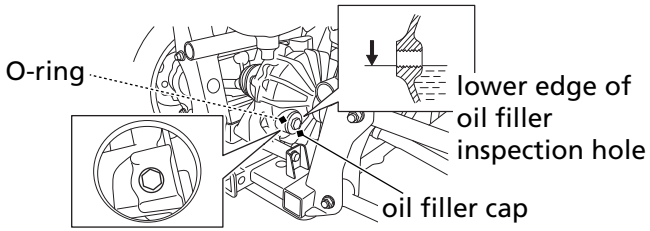
Checking Oil

Refer to *Safety Precautions* on page 95.

Check the rear final gear oil level every 1,800 miles (3,000 km) or 300 hours of operating your Honda SXS, and add if needed.

1. Park your Honda SXS on a firm, level surface.
2. Remove the oil filler cap.
3. Make sure the oil level is at the lower edge of the oil filler inspection hole.
4. Apply a thin coat of grease to a new O-ring and insert it into the oil filler cap groove.
5. Install and tighten oil filler cap to the specified torque:
   9 lbf·ft (12 N·m, 1.2 kgf·m)

RIGHT REAR



Rear Final Gear Oil

Changing Oil

Refer to *Safety Precautions* on page 95.

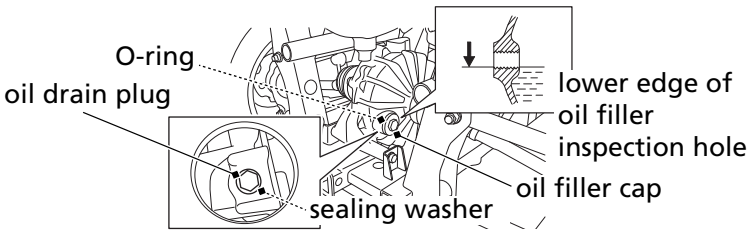
Change the oil with the rear final gear at normal operating temperature to assure complete and rapid draining.

1. Park the Honda SXS on a firm, level surface.
2. Place an oil drain pan under the oil drain plug.
3. Remove the oil filler cap and the drain plug.
4. After the oil has completely drained (3 – 5 minutes), reinstall the drain plug with a new sealing washer and tighten it to the specified torque:
   9 lbf·ft (12 N·m, 1.2 kgf·m)
5. Fill the rear final gear with the recommended oil.
   5.1 US oz (150 cm³)
6. Make sure the oil level is at the lower edge of the oil filler inspection hole.
7. Apply a thin coat of grease to a new O-ring and insert it into the oil filler cap groove.
8. Install and tighten oil filler cap to the specified torque:
   9 lbf·ft (12 N·m, 1.2 kgf·m)
9. Pour the drained oil into a suitable container and dispose of it in an approved manner (page 204).

NOTICE

Improper disposal of drained fluids is harmful to the environment.

RIGHT REAR



Coolant

Your Honda SXS's liquid cooling system dissipates engine heat through the coolant jacket that surrounds the cylinder and cylinder head.

Maintaining the coolant will allow the cooling system to work properly and prevent freezing, overheating, and corrosion.

Coolant Recommendation

Use Pro Honda HP Coolant or an equivalent high-quality ethylene glycol antifreeze containing corrosion protection inhibitors specifically recommended for use in aluminum engines. Check the antifreeze container label.

Use only distilled water as a part of the coolant solution. Water that is high in mineral content or salt may be harmful to the aluminum engine.

NOTICE

Using coolant with silicate inhibitors may cause premature wear of water pump seals or blockage of radiator passages. Using tap water may cause engine damage.

The factory provides a 50/50 solution of antifreeze and distilled water in this Honda SXS. This coolant solution is recommended for most operating temperatures and provides good corrosion protection.

Decreasing the concentration of antifreeze to less than 40% will not provide proper corrosion protection.

Increasing the concentration of antifreeze is not recommended because it decreases cooling system performance. Higher concentrations of antifreeze (up to 60%) should only be used to provide additional protection against freezing. Check the cooling system frequently during freezing weather.

Checking & Adding Coolant

Refer to *Safety Precautions* on page 95.

Check the engine coolant level every day before operating your Honda SXS and add, if needed.

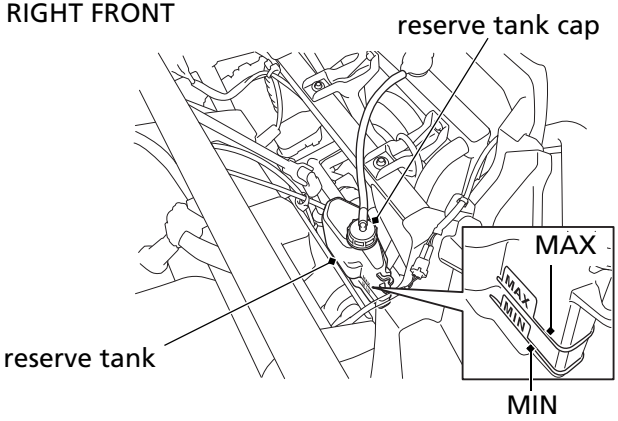
1. Make sure the vehicle is parked on a firm, level surface.
2. Remove the front hood (page 110).
3. With the engine at normal operating temperature, check the coolant level in the reserve tank. It should be between the MAX and MIN level marks.
   If the reserve tank is empty, or if coolant loss is excessive, check for leaks and see your dealer for repair.

(cont'd)

Coolant

4. Remove the reserve tank cap.
   Always add coolant to the reserve tank. Do not attempt to add coolant by removing the radiator cap.

UNDER FRONT HOOD
RIGHT FRONT



5. Add coolant to the reserve tank as required to bring the coolant level to the MAX level mark.
6. After adding coolant, install the reserve tank cap and install the front hood.

Coolant Replacement

Refer to *Safety Precautions* on page 95.

Coolant should be replaced by your dealer, unless you have the proper tools and service data, and are mechanically qualified. Refer to the official Honda Service Manual.

⚠WARNING

Removing the radiator cap while the engine is hot can cause the coolant to spray out, seriously scalding you.

Always let the engine and radiator cool down before removing the radiator cap.

To properly dispose of drained coolant, refer to *You & the Environment*, page 204.

NOTICE

Improper disposal of drained fluids is harmful to the environment.

Coolant

Radiator Core

Refer to *Safety Precautions* on page 95.

Check the air passages for clogging or damage. Remove insects, mud, or any obstruction with low water pressure. Have the radiator checked by your dealer if more than 20% of the radiator surface air flow is restricted.

Clean the radiator core after driving your Honda SXS in mud.

To clean the radiator core:

1. Remove the front hood (page 110).
2. Wash the radiator core with low water pressure.

NOTICE

Do not apply high pressure water directly to the radiator core. High pressure water can damage the radiator core fins.

Air Cleaner

Refer to *Safety Precautions* on page 95.

Proper air cleaner maintenance is very important for off-road vehicles.
A dirty or dry, water-soaked, worn-out, or defective air cleaner will allow dirt, dust, mud, and other impurities to pass into the engine.

Service the air cleaner more frequently if you drive in unusually wet or dusty areas. Your dealer can help you determine the correct service interval for your driving conditions.

Your Honda SXS's air cleaner has very specific performance requirements. Use a new Honda Genuine air cleaner specified for your model or an air cleaner of equal quality.

NOTICE

Using the wrong air cleaner may result in premature engine wear.

Proper air cleaner maintenance can prevent premature engine wear or damage, expensive repairs, low engine power, poor gas mileage, and spark plug fouling.

NOTICE

Improper or lack of proper air cleaner maintenance can cause poor performance and premature engine wear.

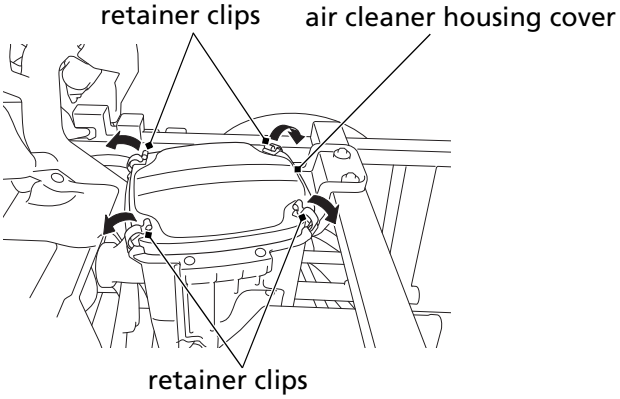
Air Cleaner

Cleaning

SXS520M2

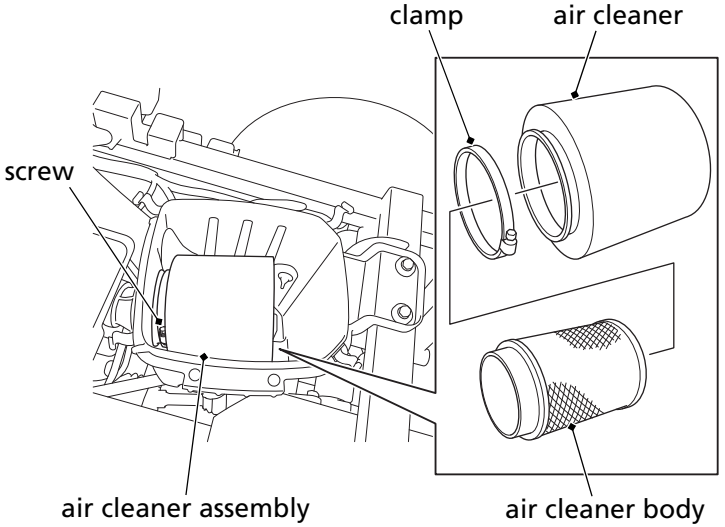
1. Lift the cargo bed (page 55).
2. Unlatch the retainer clips.
3. Remove the air cleaner housing cover.

UNDER CARGO BED



4. Loosen the screw and remove the air cleaner assembly from the air cleaner housing.
5. Unscrew the clamp.
6. Remove the air cleaner from the air cleaner body.
7. Gently wash the air cleaner with the Pro Honda Air Filter cleaner or an equivalent. Do not use kerosene or gasoline. After cleaning, gently squeeze out the remaining solvent. Avoid twisting or wringing the air cleaner. This can tear the foam.
8. Inspect for tears or cracks in the foam or seams of the air cleaner. Replace the air cleaner if it is damaged.

UNDER CARGO BED



(cont'd)

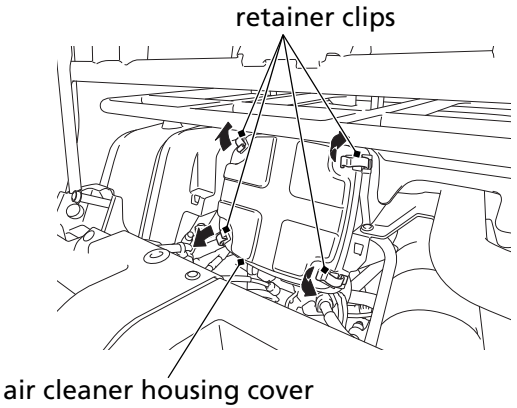
Air Cleaner

9. Allow the air cleaner to dry thoroughly before applying oil. A wet air cleaner will not fully absorb the oil.
10. Pour clean Pro Honda Foam Filter Oil or an equivalent over the entire surface of the air cleaner. Use both hands to evenly spread the oil into the air cleaner. Gently squeeze out any excess oil. (To keep your hands dry, place the air cleaner in a clean plastic bag before spreading the oil into the air cleaner.)
11. Install the air cleaner on the air cleaner body.
12. Install the clamp.
13. Insert the air cleaner assembly into the air cleaner housing.
14. Fasten the screw.
15. Reassemble in the reverse order of removal.
16. Lower the cargo bed.

SXS500M2

1. Remove the seat back (page 112) and center rear panel (page 115).
2. Unlatch the retainer clips.
3. Remove the air cleaner housing cover.

UNDER CARGO CARRIER

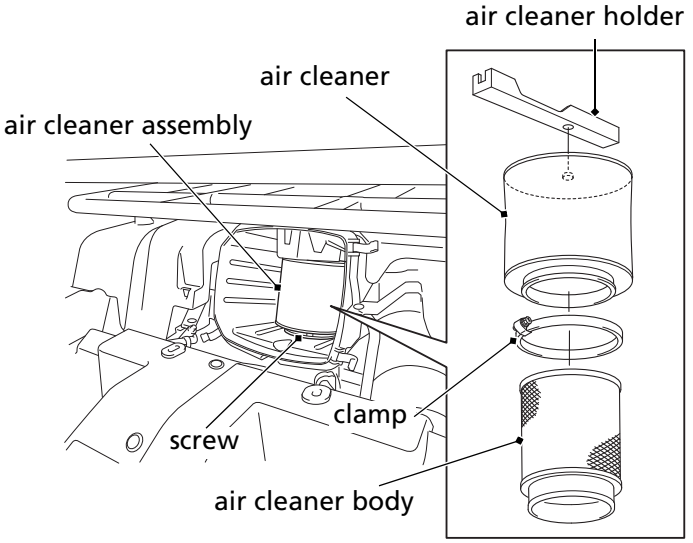


(cont'd)

Air Cleaner

4. Remove the air cleaner holder.
5. Loosen the screw and remove the air cleaner assembly from the air cleaner housing.
6. Unscrew the clamp.
7. Remove the air cleaner from the air cleaner body.
8. Gently wash the air cleaner in clean, non-flammable (high flash point) solvent such as kerosene. Do not use gasoline. After cleaning, gently squeeze out the remaining solvent. Avoid twisting or wringing the air cleaner. This can tear the foam.
9. Inspect for tears or cracks in the foam or seams of the air cleaner. Replace the air cleaner if it is damaged.

UNDER CARGO CARRIER



10. Allow the air cleaner to dry thoroughly before applying oil. A wet air cleaner will not fully absorb the oil.
11. Pour clean Pro Honda Foam Filter Oil or an equivalent over the entire surface of the air cleaner. Use both hands to evenly spread the oil into the air cleaner. Gently squeeze out any excess oil. (To keep your hands dry, place the air cleaner in a clean plastic bag before spreading the oil into the air cleaner.)
12. Install the air cleaner on the air cleaner body.
13. Install the clamp.
14. Insert the air cleaner assembly into the air cleaner housing.
15. Fasten the screw.
16. Install the air cleaner holder.
17. Reassemble in the reverse order of removal.

Air Cleaner

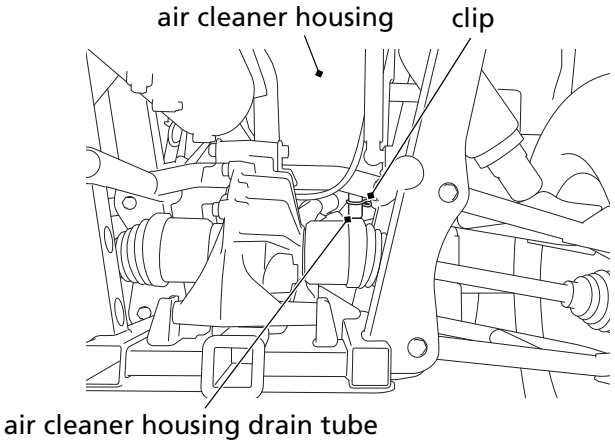
Air Cleaner Housing Drain Tube

The air cleaner housing drain tube should be serviced in accordance with the Maintenance Schedule. (Driving through water may require more frequent inspection.) If deposits can be seen in the drain tube, the tube must be cleaned before starting the vehicle.

SXS520M2

1. Remove the air cleaner housing drain tube by removing the clip under the air cleaner housing.
2. Drain the deposits.
3. Reinstall the air cleaner housing drain tube, securing it with the clip.

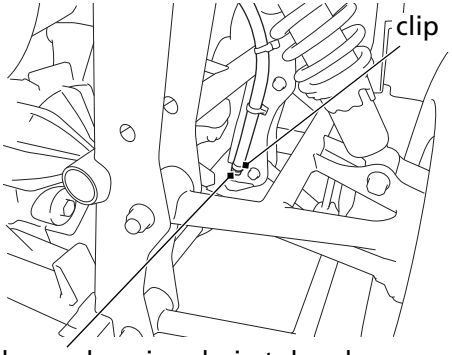
RIGHT REAR



SXS500M2

1. Remove the air cleaner housing drain tube plug by removing the clip.
2. Drain the deposits.
3. Reinstall the air cleaner housing drain tube plug, securing it with the clip.

RIGHT REAR



Lubrication

To keep moving parts functioning properly, coat them with a multipurpose grease (without Teflon or molybdenum additives, such as CRC 6-56 or equivalent).

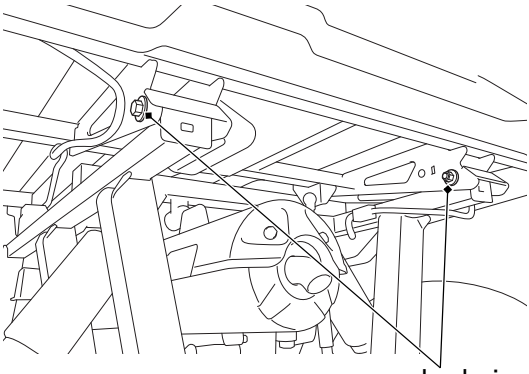
Provide lubrication when moving parts do not work smoothly. Also lubricate according to the maintenance schedule (page 100).

Consult your dealer for more information about lubrication procedures.

Apply grease to each pivot to prevent corrosion. Check for smooth movement after lubrication. If the movement is not smooth after applying grease, see your dealer.

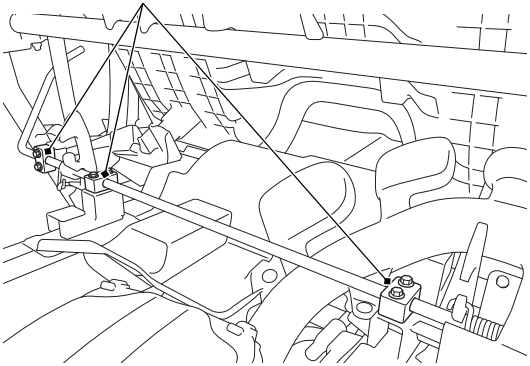
Lubrication Points

SXS520M2
Lubricate the cargo bed pivots as shown in the following illustration.



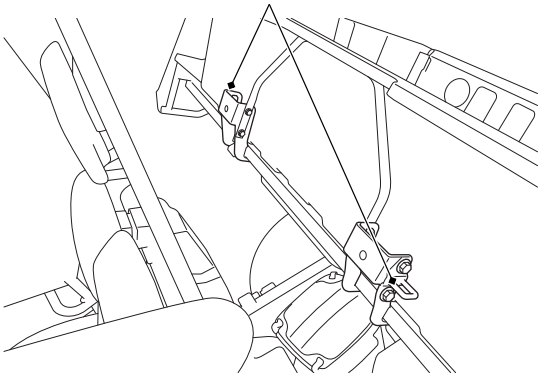
SXS520M2
Lubricate the cargo bed latch pivots as shown in the following illustration.
Lift the cargo bed (page 55).

cargo bed latch pivots



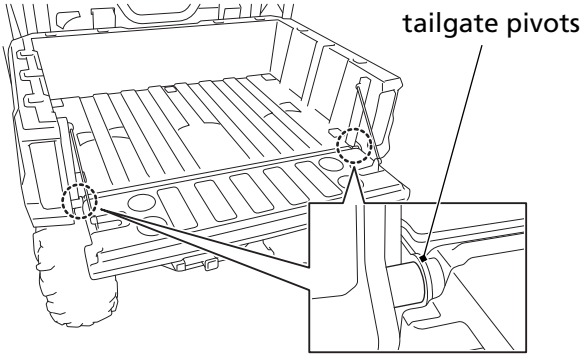
SXS520M2
Lubricate the cargo bed strikers as shown in the following illustration.
Lift the cargo bed (page 55).

cargo bed strikers

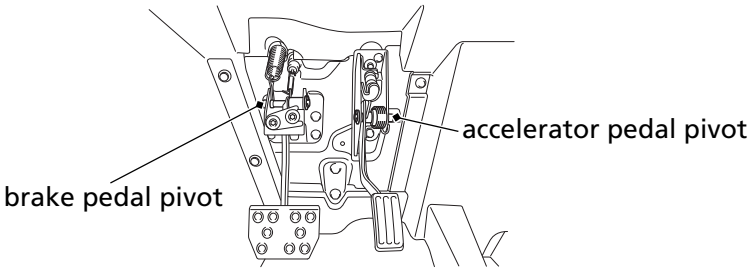


Lubrication

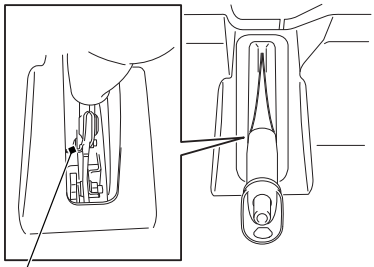
SXS520M2
Lubricate the tailgate pivots as shown in the following illustration.
Open the tailgate (page 53).



ALL MODELS
Lubricate the brake pedal pivot and accelerator pedal pivot as shown in the following illustration.

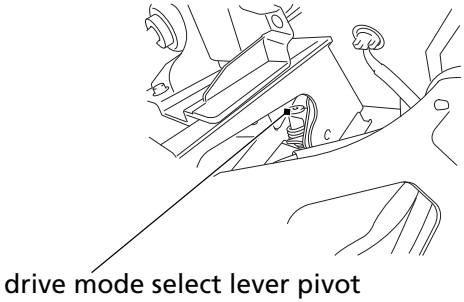


ALL MODELS
Lubricate the parking brake pivot as shown in the following illustration.
Remove the dust cover.



ALL MODELS
Lubricate the drive mode select lever pivot as shown in the following illustration.
Remove the front hood (page 110).

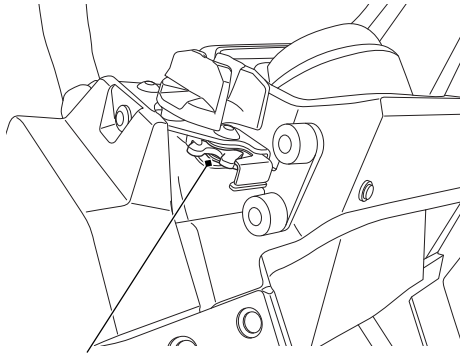
UNDER FRONT HOOD



Lubrication

ALL MODELS
Lubricate the door latch spring as shown in the following illustration.
Open the door (page 41).
The left and right door latch springs can be lubricate in the same manner.

LEFT SIDE

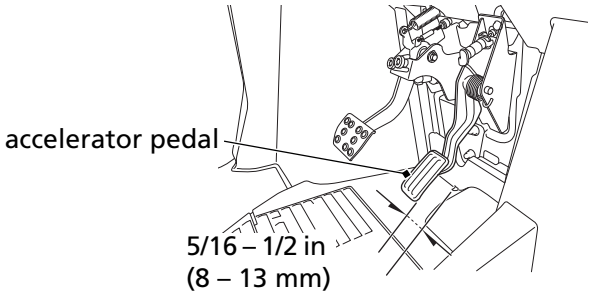


Accelerator Pedal Inspection

Refer to *Safety Precautions* on page 95.

If the accelerator pedal has excessive play due to cable stretch or incorrect adjustment, it will cause a delay in throttle response, especially at low engine speed. Also, the accelerator may not open fully.
If the accelerator pedal has no play, the accelerator may be hard to control, and the idle speed may be erratic.
Check the accelerator pedal play periodically in accordance with the Periodic Maintenance Chart, and adjust the play if necessary.
Refer to the maintenance schedule on page 100.

Inspection
Check freeplay of the accelerator pedal.
Freeplay:
5/16 – 1/2 in (8 – 13 mm)

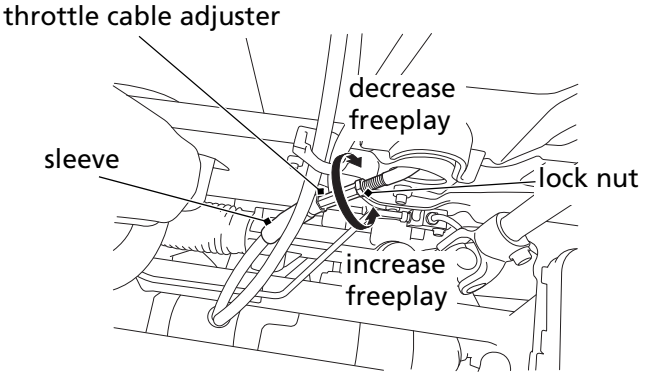


Accelerator Pedal

Adjustment

1. Remove the front hood (page 110).
2. Slide the sleeve back to expose the throttle cable adjuster.
3. Loosen the lock nut.
4. Turn the adjuster to obtain the correct freeplay.
5. Tighten the lock nut and reinstall the sleeve.
6. After adjustment, check for smooth operation of the accelerator pedal.
7. Install the remaining parts in the reverse order of removal.

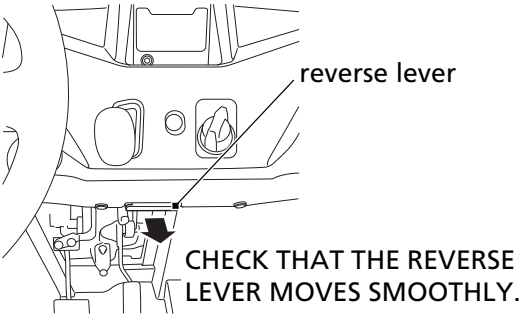
UNDER FRONT HOOD
LEFT FRONT



Reverse Lever Inspection

Refer to *Safety Precautions* on page 95.

Check that the reverse lever moves smoothly and allows for proper reverse gear selection, and adjust the play if necessary. Refer to maintenance schedule on page 99.

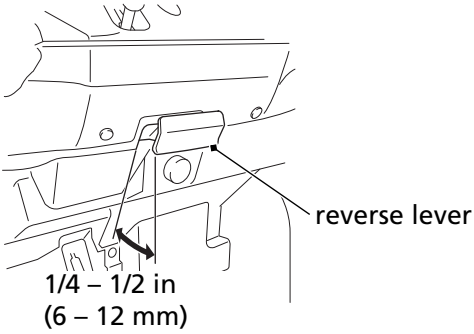


Inspection

Check freeplay of the reverse lever.

Freeplay:

1/4 – 1/2 in (6 – 12 mm)

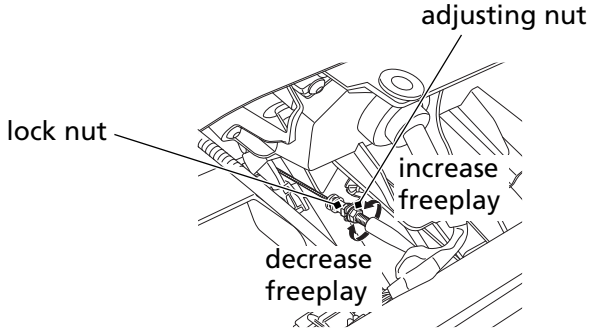


Reverse Inhibitor System

Adjustment

1. To adjust, remove the front hood (page 110), loosen the lock nut, and turn the adjusting nut.
   After adjustment, tighten the lock nut securely and check for smooth operation of the reverse lever.
2. Install the remaining parts in the reverse order of removal.

UNDER FRONT HOOD



Spark Plug

Spark Plug Recommendation

standard spark plug	BKR5E-11 (NGK) or K16PR-U11 (DENSO)

Use only the recommended type of spark plug in the recommended heat range.

NOTICE

Using spark plugs with an improper heat range can cause engine damage.

Spark Plug Inspection & Replacement

Refer to *Safety Precautions* on page 95.

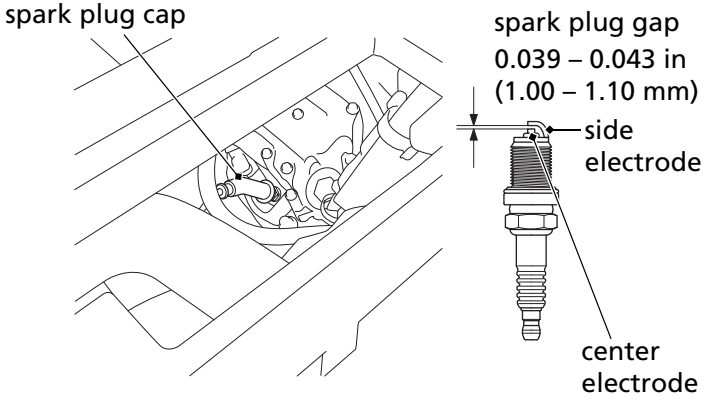
1. Remove the seat back (page 112) and center rear panel (pages 113, 115).
2. Clean any dirt from around the spark plug base.
3. Disconnect the spark plug cap. Take care to avoid damaging the spark plug wire when disconnecting the cap.
4. Using a spark plug wrench provided in the tool kit, remove the spark plug.
5. Inspect the electrodes and center porcelain for deposits, corrosion, or carbon fouling. If the corrosion or deposits are heavy, replace the plug. Clean a carbon or wet-fouled plug with a plug cleaner, if available, or a wire brush. Inspect the spark plug electrodes for wear. The center electrode should have a flat tip and sharp edges, and the side electrode should not be eroded. If the electrodes and insulator tip appear unusually fouled or burned, we suggest that you contact your dealer.

(cont'd)

Spark Plug

6. Discard the spark plug if there is apparent wear or if the insulator is cracked or chipped.
7. Using a wire-type feeler gauge, check the spark plug gap. If adjustment is necessary, bend the side electrode carefully.
   The gap should be:
   0.039 – 0.043 in (1.00 – 1.10 mm)

UNDER SEAT BACK CENTER



8. With the plug washer attached, thread the spark plug in by hand to prevent cross-threading.
9. Tighten the spark plug:
   - If the old plug is good:
     1/8 turn after it seats.
   - If installing a new plug, tighten it twice to prevent loosening:
     a) First, tighten the plug:
        NGK: 3/4 turn after it seats.
        DENSO: 1/2 turn after it seats.
     b) Then, loosen the plug.
     c) Next, tighten the plug again:
        1/8 turn after it seats.

NOTICE

An improperly tightened spark plug can damage the engine. If a plug is too loose, the piston may be damaged. If a plug is too tight, the threads may be damaged.

10. Connect the spark plug cap. Take care to avoid pinching any cables or wires.
11. Install the center rear panel and seat back.

Spark Arrester

Refer to *Safety Precautions* on page 95.

The spark arrester must be serviced every 600 miles (1,000 km) or 100 operating hours to maintain its efficiency.

Regular servicing prevents carbon build up (which can diminish engine performance) and also complies with USDA regulations for regular maintenance to assure proper function. The spark arrester prevents random sparks from the combustion process in your engine from reaching the environment.

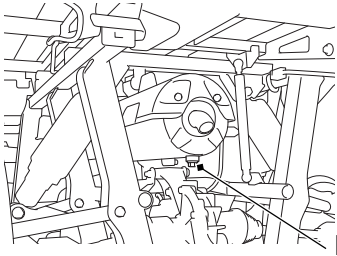
The use of safety glasses is recommended for this procedure.

Because of the possible fire hazard, check that there are no combustible materials in the area before purging the spark arrester.

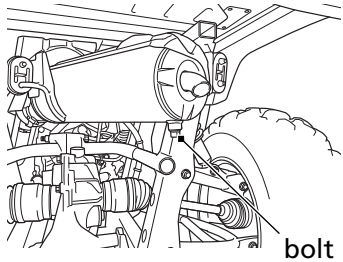
1. Select a well-ventilated area free of combustible materials and make sure the exhaust pipe is cool.
2. Remove the bolt.
3. Start the engine and rev it up approximately twenty times while momentarily creating exhaust system back pressure by blocking the end of the muffler with a shop towel.
4. Stop the engine and allow the exhaust pipe to cool.
5. Reinstall the bolt securely.

REAR

SXS520M2



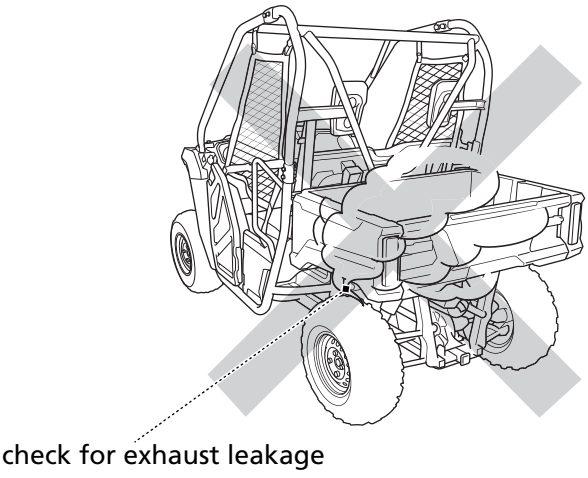
SXS500M2



Exhaust System Inspection

Stop the engine and check for any sign of exhaust gas leakage. Listen for exhaust leaks near the muffler, which is located by the left rear wheel well.

SXS520M2 shown



Suspension

Your front and rear suspension systems use springs and hydraulic damping devices that suspend your weight and most of the weight of your Honda SXS.

The oil damper systems hydraulically control the natural compression and rebound of the suspension springs so that traction and comfort are maintained as the wheels ride over rough terrain.

The spring pre-loads for your front and rear suspension systems adjust the amount of force required to begin compression of the spring.
You may adjust the spring pre-load of both suspension systems.

Consider adjusting your suspensions pre-load whenever you change your normal load, by adding cargo or accessories, or when driving conditions change.

The way you drive your Honda SXS and the type of ride you want to experience can also influence your suspension needs.

Lower spring pre-load provides a softer ride and is usually preferred for light loads and smooth terrain. Higher spring pre-load provides a firmer ride and is recommended for heavy loads and rough terrain.

Front Suspension Adjustment

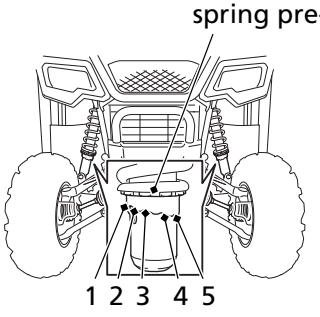
Using a pin spanner, which is available from your dealer, the front suspension can be adjusted for driver and passenger weight and driving conditions.

Do not attempt to disassemble, service, or dispose of the damper; see your dealer. The instructions found in this owner's manual are limited to adjustments of the shock assembly only.

Front Suspension Spring Pre-Load

Refer to *Safety Precautions* on page 95.

FRONT
SXS520M2 shown



The spring pre-load adjuster has 5 positions for different loads or driving conditions. Before adjusting the spring pre-load, jack up your Honda SXS (page 118) to avoid damaging the adjusters.

Use the pin spanner to adjust the shock spring pre-load.
Pin spanner part number: 07702-0020001
Available through your dealer.

Suspension

Position 1: for a light load and smooth terrain.
Position 2: standard position.
Positions 3 to 5: for when the SXS is more heavily loaded. (Also increase spring pre-load for stiffer suspension.)
Make sure that both shock absorbers are adjusted to the same position.
Always adjust the shock absorber position in sequence (1-2-3-4-5 or 5-4-3-2-1). Attempting to adjust directly from 1 to 5 or 5 to 1 may damage the shock absorber.

Rear Suspension Adjustment

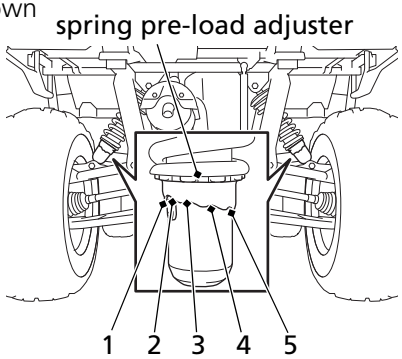
Using a pin spanner, which is available from your dealer, the rear suspension can be adjusted for carrying heavier cargo.

Do not attempt to disassemble, service, or dispose of the damper; see your dealer. The instructions found in this owner's manual are limited to adjustments of the shock assembly only.

Rear Suspension Spring Pre-Load

Refer to *Safety Precautions* on page 95.

REAR
SXS520M2 shown



The spring pre-load adjuster has 5 positions for different loads or driving conditions. Before adjusting the spring pre-load, jack up your Honda SXS (page 118) to avoid damaging the adjusters.

Use the pin spanner to adjust the shock spring pre-load.
Pin spanner part number: 07702-0020001
Available through your dealer.

Position 1: for a light load and smooth terrain.
Position 2: standard position.
Positions 3 to 5: for when the SXS is more heavily loaded. (Also increase spring pre-load for stiffer suspension.)
Make sure that both shock absorbers are adjusted to the same position. Always adjust the shock absorber position in sequence (1-2-3-4-5 or 5-4-3-2-1). Attempting to adjust directly from 1 to 5 or 5 to 1 may damage the shock absorber.

Brakes

The hydraulic disc braking system on your Honda SXS dissipates the heat generated by the friction of the brake pads on the disc as the wheels are slowed.

As the front and rear brake pads wear, the brake fluid level will drop. A leak in the system will also cause the level to drop.

There are no adjustments to perform, but fluid level and pad wear must be inspected periodically. The system must also be inspected frequently to ensure there are no fluid leaks.

If the brake pedal freeplay seems abnormal or the pedal feels spongy, see your dealer to have the air bled from the system.

Brake Operation Check

Refer to *Safety Precautions* on page 95.

Push down on the brake pedal to check that the controls operate normally.
Check for damage to the brake pads and disc plate.

Brake Fluid Recommendation

brake fluid	Honda DOT 4 Brake Fluid

The recommended brake fluid is Honda DOT 4 Brake Fluid, or any brake fluid of equal quality and performance. Use fresh brake fluid from a sealed container. Be sure to read the label before opening the sealed container. An opened container may be contaminated or may have absorbed moisture from the air.

Fluid Level Inspection

Refer to *Safety Precautions* on page 95.

Brake Fluid Level

If your inspection indicates a low fluid level, have your dealer inspect the brake system for possible leaks or worn brake pads.

The brake fluid level will drop as the brake pads wear.

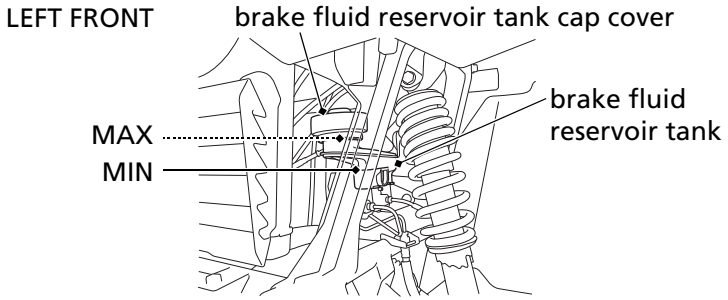
Do not add or replace brake fluid, except in an emergency. If you do add fluid, have your dealer check the system as soon as possible.

NOTICE

Brake fluid can damage plastic and painted surfaces. Handle with care.

Check the fluid level on level ground.

1. Slide the brake fluid reservoir tank cap cover up a little to reveal the MAX level mark. Do not remove the brake fluid reservoir tank cap cover.



It should be between the MIN and MAX level marks. If the level is at or below the MIN level mark, check the brake pads for wear (page 171).

(cont'd)

2. Return the brake fluid reservoir tank cap cover to its normal position.

Worn brake pads should be replaced. If the pads are not worn, have your brake system inspected for leaks.

Wipe up spills immediately. Avoid contact with skin or eyes.
If brake fluid comes in contact with your eyes, wash them out with clean water and immediately call a doctor.
If brake fluid comes in contact with your skin, wash with clean water and, if necessary, call a doctor.

Other Inspections

- Make sure there are no fluid leaks.
- Check for deterioration or cracks in the hoses and fittings. If the hoses are worn or cracked, have them replaced by your dealer.

Brake Pad Wear

Refer to *Safety Precautions* on page 95.

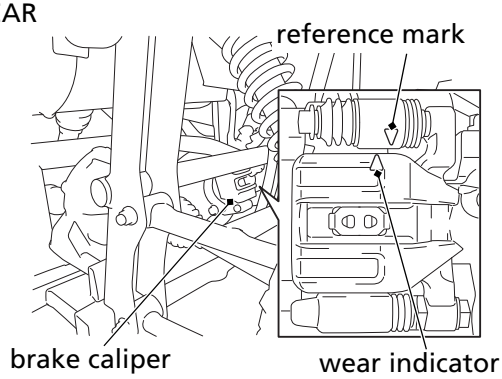
Brake pad wear will depend upon the severity of usage and driving conditions. The pads will wear faster in wet, sandy, or muddy conditions. Inspect the pads during all regular service intervals to determine the pad wear.

Note that the pads are designed to make a metallic noise during braking when they reach the wear limit.

Front:
If you hear a continuous metallic friction sound when applying the brakes, the brake pads need to be replaced. Have the vehicle checked by a dealer.

Rear:
Check the wear indicator. If the wear indicator aligns with the reference mark, replace both pads as a set. See your dealer for this service.

RIGHT REAR

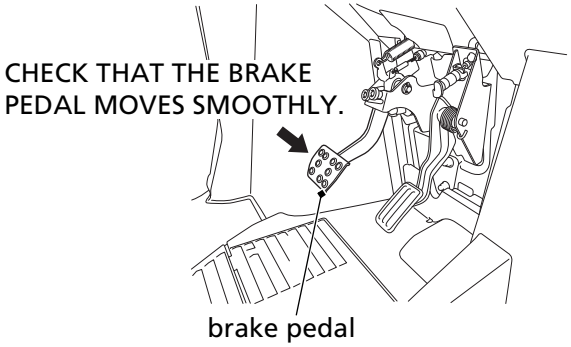


Brakes

Brake Pedal Inspection

Refer to *Safety Precautions* on page 95.

Check that the brake pedal moves smoothly and does not feel abnormally spongy. Refer to the maintenance schedule on page 100.



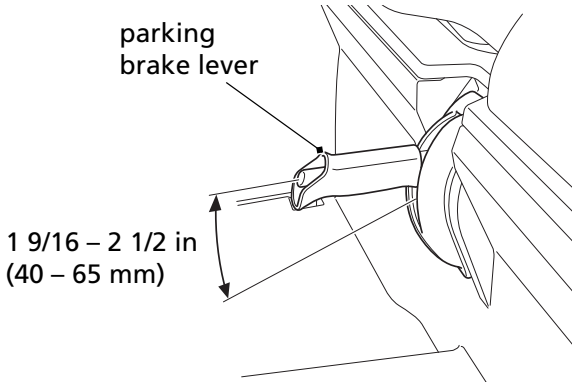
Parking Brake Lever Freeplay

Refer to *Safety Precautions* on page 95.

Inspection

Measure the freeplay of the parking brake.
Freeplay is measured from the lever fully disengaged (at stopper) to when the lever is pulled up and resistance is felt in the lever.
Parking brake lever freeplay is:

1 9/16 – 2 1/2 in (40 – 65 mm)



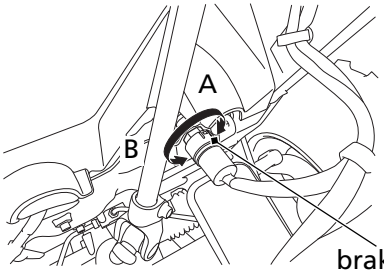
If adjustment is necessary, have the parking brake adjusted by your dealer.

Brake Light Switch Adjustment

Refer to *Safety Precautions* on page 95.

Periodically check the operation of the brake light switch. It is located under the front hood (page 110), just above -- and slightly behind -- the brake fluid reservoir.
The brake light should turn on just before the brake works. Adjustment is done by holding the switch body and turning the adjusting nut. Turn the nut in direction (A) if the switch operates too late, and in direction (B) if the switch operates too soon.

UNDER FRONT HOOD
LEFT SIDE



Tires

To safely operate your Honda SXS, your tires must be the proper type and size, in good condition with adequate tread, and correctly inflated.

⚠WARNING

Using tires that are excessively worn, improperly inflated, damaged, or overloaded can cause a crash in which you can be seriously hurt or killed.

Follow all instructions in this owner's manual regarding tire inflation and maintenance.

The following pages give detailed information on how and when to check your air pressure, how to inspect your tires for wear and damage, and our recommendations for tire repair and replacement.

Tires

Air Pressure

Refer to *Safety Precautions* on page 95.

Properly inflated tires provide the best combination of handling, tread life, and driving comfort. Generally, underinflated tires wear unevenly, adversely affect handling, and are more likely to fail from being overheated. Overinflated tires make your Honda SXS drive harshly, are more prone to damage from surface hazards, and wear unevenly.

Make sure the valve stem caps are secure. If necessary, install new caps.

Tires

Always check air pressure when your tires are "cold." If you check air pressure when your tires are "warm" — even if your Honda SXS has only been driven for a few miles — the readings will be higher. If you let air out of warm tires to match the recommended cold tire pressures, the tires will be underinflated. Be sure to check tire pressure at the driving site, since changes in altitude and temperature can affect air pressure.

The recommended "cold" tire pressures are:

FRONT	10 psi (70 kPa)
REAR	10 psi (70 kPa)

Tires

A manually operated tire pump should be used rather than the high pressure system found in service stations. This will minimize the possibility of tire damage from overinflation. If you use a high pressure system at a service station, add air in small amounts and check the pressure increase frequently to prevent possible tire damage from overinflation.

⚠WARNING

Operating this Honda SXS with improper tires, uneven tire pressure, damaged tires, or overloading the tires may cause loss of control, and you could be seriously injured or killed.

- Always use the size and type of tires specified in this owner's manual for this vehicle.
- Always maintain proper tire pressure as described in this owner's manual.

Inspection

Refer to *Safety Precautions* on page 95.

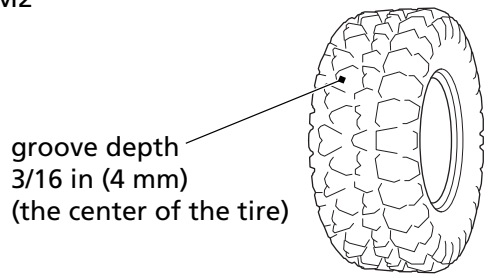
Whenever you check the tire pressures, you should also look for:

- Bumps or bulges in the side of the tire or the tread. Replace any tire that has a bump or bulge.
- Cuts, slits, or cracks in the tires. Replace the tire if you can see fabric or cord.
- Nails or other foreign objects embedded in the side of the tire or tread.
- Excessive tread wear.

Also, if you hit a hard object or obstacle while driving, stop as soon as you safely can and carefully inspect the tires for damage.

Tread Wear

SXS520M2



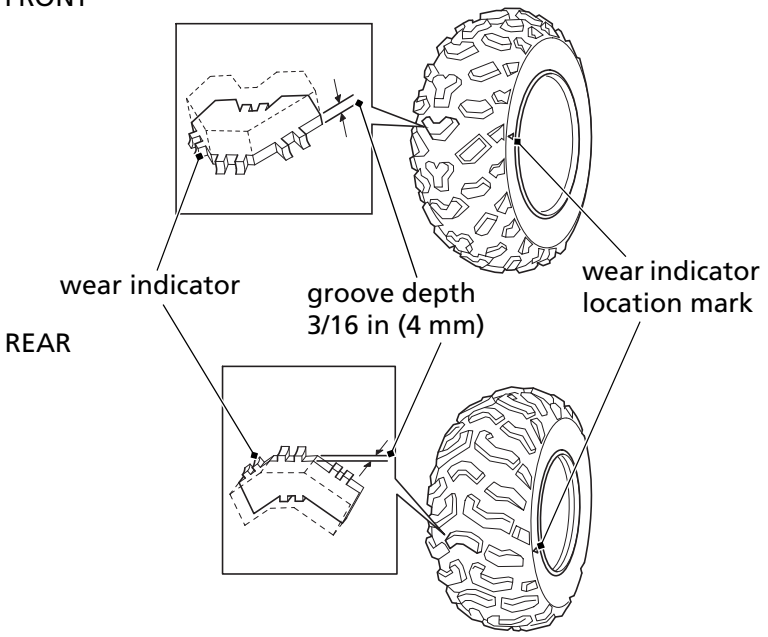
To check the condition of a tire tread, measure the groove depth in the center of the tire.
For best performance, you should replace a tire before the tread depth at the center reaches the following limits:

front	3/16 in (4 mm)
rear	3/16 in (4 mm)

Tires

SXS500M2

FRONT



To check the condition of a tire tread, measure the groove depth in the center of the tire, or check the wear indicator.
For best performance, you should replace a tire before the tread depth at the center reaches the following limits:

front	3/16 in (4 mm)
rear	3/16 in (4 mm)

Tire Repair

Refer to *Safety Precautions* on page 95.

We strongly recommend that you replace, not repair, any tire that is punctured or damaged. As discussed below, a tire that is repaired, either temporarily or permanently, will have lower speed and performance limits than a new or undamaged tire.

A temporary repair can sometimes be made in an emergency situation. However, since a temporary repair may not hold, you must drive very slowly, preferably without any cargo, and have the tire replaced or permanently repaired as soon as possible. (For more information on temporary repairs, see *If You Have a Flat Tire*, page 215.)

A permanent repair, such as an internal plug patch, can be made if a tire has only a small puncture in the tread area. With such a repair, you should drive very slowly for the first 24 hours. However you may not be able to safely carry as much weight. If you choose to have a tire repaired, be sure the repair work is performed by a professional.

If you have a tire professionally repaired at a non-Honda facility, we recommend that you have the work checked by your Honda dealer.

Tires

Tire Replacement

Refer to *Safety Precautions* on page 95.

The tires that came on your Honda SXS were designed to match the performance capabilities of the vehicle and provide the best combination of handling, braking, and comfort.

It is best to replace all four tires. However, if that is not possible, you must replace the tires in pairs (front or rear) with tires of the same size and type as the originals. Never replace just one tire.

⚠ WARNING

Installing improper tires on your Honda SXS can affect handling and stability. This can cause a crash in which you can be seriously hurt or killed.

Always use the size and type of tires recommended in this owner's manual.

The recommended tires for your Honda SXS are:

SXS520M2

front	24X8.00-12 NHS Vee Rubber V-392
rear	24X10.00-12 NHS Vee Rubber V-392

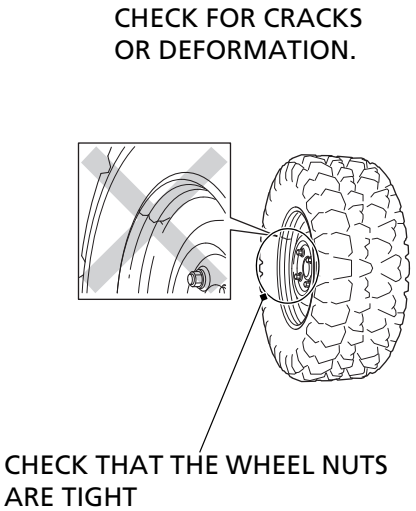
SXS500M2

front	24X8.00-12 NHS MAXXIS M977H
rear	24X10.00-12 NHS MAXXIS M978H

When you replace a tire, remember:
Have the tire replaced by your Honda dealer, if possible.
If you have a tire professionally replaced at a non-Honda facility, we recommend that you have the work checked by your Honda dealer.

Inspection

Check that the wheel nuts are tight and there are no cracks or deformation in the wheel.

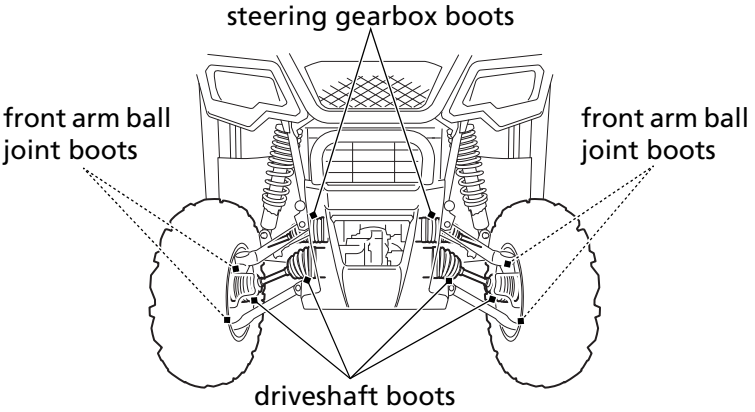


Driveshaft Boots

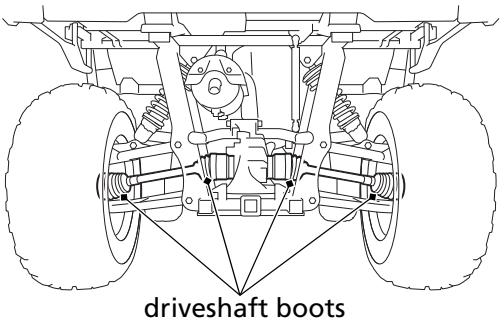
Refer to *Safety Precautions* on page 95.

Check the boots for tears or traces of splattered grease.
If necessary, have your dealer replace them.

FRONT
SXS520M2 shown



REAR
SXS520M2 shown



Battery

Your Honda SXS has a maintenance-free type battery. You do not have to check the battery electrolyte level or add distilled water as you would with a conventional-type battery.

NOTICE

Your battery is a maintenance-free type and can be permanently damaged if the cap strip is removed.

Electrical accessories use current from the battery, some even when the ignition is OFF (O). Limited operation of your Honda SXS also allows the battery to discharge. If you have electrical accessories on your Honda SXS, or do not drive frequently, we recommend that you charge the battery frequently (see *Battery Charging*, page 189).

If you do not expect to drive your Honda SXS for at least two weeks, we recommend you remove the battery, or at least disconnect the battery cables (negative cable first).

If you plan to store your Honda SXS, see *Battery Storage*, page 186.

If your battery seems weak and/or is leaking electrolyte (causing slow starting or other electrical problems), see your dealer.

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds. **Wash your hands after handling.**

Battery

Battery Storage

Refer to *Safety Precautions* on page 95.

If you plan to store your Honda SXS, we recommend you remove the battery and store it where it can be charged every 30 days to maintain its service life.

If you do not remove the battery, we recommend disconnecting the battery cables (negative cable first).

Check the terminals for corrosion (a white or yellowish powder). To remove it, cover the terminals with a solution of baking soda and water. It will bubble up and turn brown. When this stops, wash it off with plain water. Dry off the battery with a cloth or paper towel.

You will get the best storage results from removing the battery and slow charging it every 30 days (see *Battery Charging*, page 189). Before you remove the battery, be sure to read all the information that follows, as well as the information on the battery label.

⚠WARNING

The battery gives off explosive hydrogen gas during normal operation.

A spark or flame can cause the battery to explode with enough force to kill or seriously hurt you.

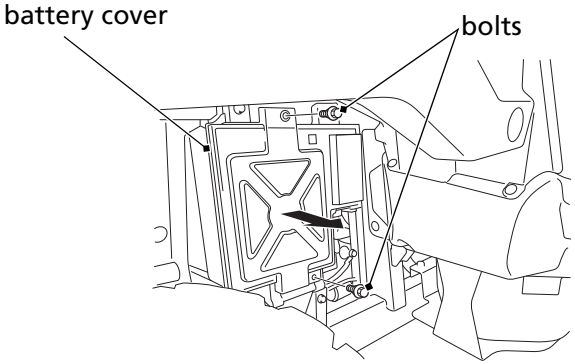
Wear protective clothing and a face shield, or have a skilled mechanic do the battery maintenance.

Battery

The battery is located under the right side of cargo bed (or under the right side of rear fender).

Removal

1. Make sure the ignition switch is OFF (○).
2. Remove the bolts and battery cover.
3. Release the ring and remove the rubber band.
4. Disconnect the negative (-) terminal lead from the battery first, then disconnect the positive (+) terminal lead.
5. Remove the battery from the battery box.
6. Charge the battery (see the following section), unless you have been driving regularly.
7. Store your battery in an easy-to-reach location off the floor, in an area protected from freezing temperature and direct sunlight.
8. Clean the battery box after removing the battery for storage. Dry the battery box.
9. Slow charge the battery (see following section) once every 30 days.



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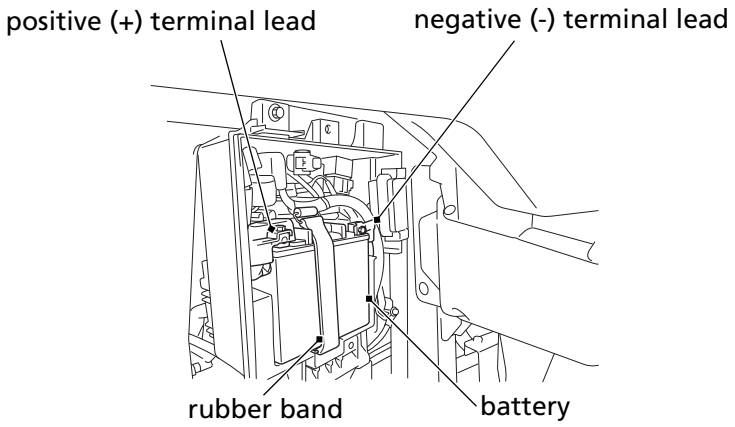
Battery



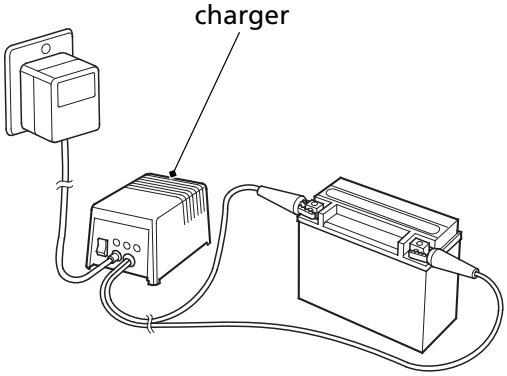
Installation

Reinstall in the reverse order of removal.
Be sure to connect the positive (+) terminal first, then the negative (-) terminal.

Make sure the clock is set to the proper time after the battery is reconnected (page 26).

Battery Charging

Refer to *Safety Precautions* on page 95.



Be sure to read the information that came with your battery charger and follow the instructions on the battery. Improper charging may damage the battery.

We recommend using a charger designed specifically for your Honda, which can be purchased from your dealer. These units can be left connected for long periods without risking damage to the battery. However, do not intentionally leave the charger connected longer than the time period recommended in the charger's instructions.

Avoid using an automotive-type battery charger. An automotive charger can overheat a Honda SXS battery and cause premature damage.

Appearance Care

Frequent cleaning and polishing will keep your Honda looking newer longer.
Frequent cleaning also identifies you as an owner who values their Honda SXS. A clean Honda SXS is also easier to inspect and service.

General Recommendations

Refer to *Safety Precautions* on page 95.

- To clean your Honda SXS, you may use:
  – water
  – Hondabrite
  – a mild, neutral detergent and water
  – a mild spray and wipe cleaner/polisher
  – a mild spray and rinse cleaner/degreaser and water
- Avoid products that contain harsh detergents or chemical solvents that could damage the metal, paint, plastic, and camouflage coating on your Honda SXS.
- If your Honda SXS is still warm from recent operation, give the engine and exhaust system time to cool off.
- Park in a shady area. Washing your Honda SXS in bright sunlight may cause the finish to fade because water droplets intensify the sun's brightness. Spotting is also more likely because surface water can dry before you have time to wipe it off.
- Clean your Honda SXS regularly to protect surface finishes.
- We recommend the use of a low pressure garden hose to wash your Honda SXS. High pressure washers (like those at coin-operated car washers) can damage certain parts of your Honda SXS.

NOTICE

High pressure water (or air) can damage certain parts of your Honda SXS.

- After cleaning, inspect for damage, wear, and leaks (fuel, oil, coolant, and brake fluid).

Washing Your Honda SXS with a Mild Detergent

Refer to *Safety Precautions* on page 95.

1. Rinse your Honda SXS thoroughly with cool water to remove loose dirt.
2. Fill a bucket with cool water. Mix in a mild, neutral detergent, such as dish washing liquid or a product made especially for washing motorcycles or automobiles.
3. Wash your Honda SXS with a sponge or soft towel. As you wash, check for heavy grime. If necessary, use a mild cleaner/degreaser to remove the grime.
4. After washing, rinse your Honda SXS thoroughly with plenty of clean water to remove any residue. Detergent residue can corrode alloy parts.
5. Dry your Honda SXS with a chamois or a soft towel. Leaving water on the surface to air dry can cause dulling and water spots. As you dry, inspect for chips and scratches.
6. Start the engine and let it idle for several minutes. The engine heat will help dry moist areas.
7. As a precaution, drive your Honda SXS at a slow speed and apply the brakes several times. This will help dry the brakes and restore normal braking performance.
   The headlights' inside lens may fog temporarily after washing or while driving in the rain. This does not impact the headlight function.

   Any condensation inside the headlight should dissipate after a few minutes of running the engine with the headlight(s) on. However, if you see a large amount of water or ice accumulated inside the lens(es), have your vehicle inspected by your dealer.

Appearance Care

Spray Cleaning Your Honda SXS

Refer to *Safety Precautions* on page 95.

Avoid using spray cleaner products on the tires or suspension components.

Suggestions for using spray cleaners:

Honda SXS condition	Recommended Cleaning
Dust and fingerprint smudges.	Apply a spray cleaner/polish and wipe paint, chrome, glass, and clear plastic.
Light road grime.	Spray any difficult-to-reach or very dirty areas with a spray cleaner/degreaser. Rinse and dry. Apply a spray cleaner/polish and wipe with a non-abrasive cloth.
Heavy grime. Oil leaks. Brake dust.	Use a spray cleaner/degreaser. If necessary, rub with a sponge. Rinse and dry. Apply a spray cleaner/polish and wipe with a non-abrasive cloth.
Dull, corroded chrome or aluminum.	Apply a high quality chrome/ aluminum polish and wipe with a non-abrasive cloth.

Finishing Touches

Refer to *Safety Precautions* on page 95.

After washing your Honda SXS, consider using a commercially available spray cleaner/polish or quality liquid or paste wax to finish the job. Use only a non-abrasive polish or wax made specifically for motorcycles or automobiles. Apply the polish or wax according to the instructions on the container.

If a surface on your Honda SXS is chipped or scratched, your dealer has touch-up paint to match your Honda SXS's color. Be sure to use your Honda SXS's color code (page 233) when you buy touch-up paint.

If the frame has a chip that exposes the metal, first apply primer (to prevent corrosion) and then apply the touch-up paint. Several thin layers of touch-up paint are better than one thick coat.

Exhaust Pipe and Muffler Maintenance

Refer to *Safety Precautions* on page 95.

The exhaust pipe and muffler are stainless steel but may become stained by mud or dust. Make sure no flammable materials or debris are sticking to the exhaust system. If any flammable materials or debris is found, remove it.

To remove mud or dust, use a wet sponge and a liquid kitchen abrasive, then rinse well with clean water. Dry with chamois or a soft towel.

If necessary, remove heat stains by using a commercially available fine texture compound. Then, rinse by the same manner as removing mud or dust.

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Tips

Here's some helpful advice on how to prepare for an off-road adventure, how to transport and store your Honda, and how to be an environmentally responsible Honda SXS owner.

Preparing for a Drive

A safe and enjoyable drive begins with good planning and preparation. Always drive with at least one other person in case you have trouble, and let someone know where you're going and when you expect to return.

Before driving in an unfamiliar area, find out in advance if you need special permits, get maps so you can study the terrain, and talk to other drivers who know the area. The Forest Service and the Bureau of Land Management (USA only), the Ministry of Natural Resources (Canada only), driver's clubs, and off-road magazines are good sources of information.

What to Take to the Operating Area

Along with your Honda SXS and personal safety gear, you should take along some tools and supplies in case you have a problem. For some of the difficulties you might encounter, see *Taking Care of the Unexpected*, which begins on page 205.

We recommend that you always take water, food, a first aid kit, and your owner's manual. Other items you should consider taking along include:

- a tool kit
- tire repair supplies and tools
- wire, duct tape, and rope
- extra gasoline and a fire extinguisher

What to Take on the Trail

What you take with you during a ride depends on the kind of terrain, how long you expect to drive, how far you might go from help, and how experienced you or your companions are in making repairs.

If you decide to take some tools, spare parts, or other supplies on the trail, be sure you can carry them safely and know how to use them. Also, be sure to follow the loading guidelines and weight limits (page 67).

Transporting Your Honda

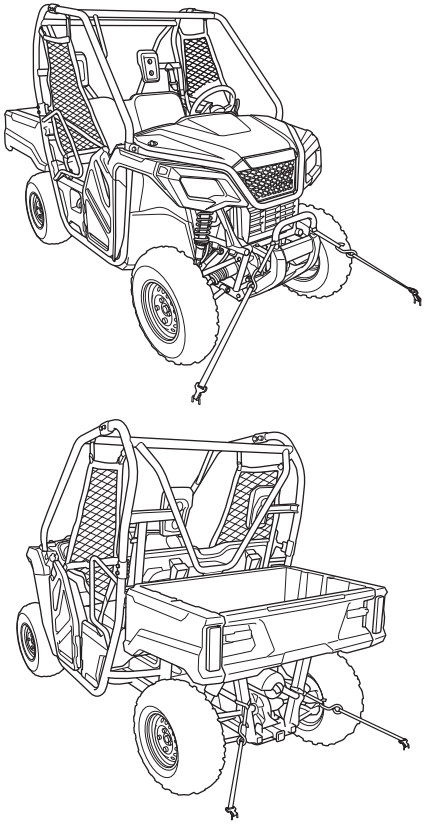
Do not tow your Honda SXS behind a car or other vehicle except on a trailer.

Follow these procedures for SXS520M2 and SXS500M2:

1. Set the parking brake, and the drive mode select lever in 4WD.
2. Secure the vehicle with tie-down straps in the areas shown.
   - Suitable tie-down straps are available from your dealer.
   - Ordinary rope is not recommended because it can stretch under load.
   - Using tie-down straps in any other areas can damage your Honda SXS.
3. Rock the vehicle back and forth to make sure the tie-down straps are tight and the vehicle is secure.

Transporting Your Honda

SXS520M2 shown



Storing Your Honda

If you won't be driving for an extended period, such as during the winter, thoroughly inspect your Honda SXS and correct any problem before storing it. That way, needed repairs won't be forgotten and it will be easier to get your Honda SXS running again.

(USA only)
For more information about storage, refer to the Honda Winter Storage Guide, available from your dealer.

(Canada only)
For more information about storage, visit our website at www.honda.ca and look up "Storage Tips" under the "Honda Warranty" in the Warranty tab for your Model.

We suggest you perform the following procedures to keep your Honda SXS in top condition. These storage procedures will reduce the deterioration that can occur during storage.

Preparation for Storage

Refer to *Safety Precautions* on page 95.

1. Change the engine oil and filter (page 127).
2. Make sure the cooling system is filled with a 50/50% antifreeze solution (page 136).
3. Add Pro Honda Fuel Stabilizer or equivalent to the fuel tank before filling it with fuel. Fill the fuel tank. Make sure the fuel fill cap is properly installed. Run the engine so that the treated fuel will circulate into the fuel injector.
4. To prevent rusting in the cylinder, perform the following:
   - Remove the seat back (page 112) and center rear panel (pages 113, 115), and disconnect the spark plug cap from the spark plug.
   - Remove the spark plug.
     Do not connect the spark plug to the spark plug cap.
   - Pour a tablespoon (15 – 20 cc) of clean engine oil into the cylinder and cover the spark plug hole with a piece of cloth.
   - Turn the ignition switch to the START (**II**) position and crank the engine several times to distribute the oil.
   - Reinstall the spark plug, spark plug cap, center rear panel, and seat back.

(cont'd)

Storing Your Honda

5. Remove the battery and charge it fully. Store it in an area protected from freezing temperatures and direct sunlight. Slow charge the battery (page 189) once a month.

⚠WARNING

The battery gives off explosive hydrogen gas during normal operation.

A spark or flame can cause the battery to explode with enough force to kill or seriously hurt you.

Wear protective clothing and a face shield, or have a skilled mechanic do the battery maintenance.

6. Wash and dry your Honda SXS. Wax all painted surfaces.
7. Inflate the tires to their recommended pressures (page 177).
8. Store your Honda SXS in an unheated area, free of dampness, away from sunlight, with a minimum of daily temperature variation.
9. Place your Honda SXS on blocks to lift all tires off the floor.
10. Cover your Honda SXS with a porous material. Avoid using plastic or similar non-breathing, coated materials that restrict air flow and allow heat and moisture to accumulate.

Removal from Storage

Refer to *Safety Precautions* on page 95.

1. Uncover and clean your Honda SXS.
2. If your Honda SXS has been stored for more than four months — change the engine oil (page 127).
3. If your Honda SXS has been stored for more than two months — ask your dealer to drain and replace the fuel.
4. Charge the battery (page 189) as required. Install the battery.
5. Perform a pre-ride inspection (page 64), then test-ride your Honda SXS at low speeds.

You & the Environment

Owning and operating a Honda SXS can be enjoyable, but you must do your part to protect nature. When you show respect for the land, wildlife, and other people, you also help preserve off-road driving.

Following are tips on how you can be an environmentally responsible Honda SXS owner.

- **Tread Lightly.** Stay on existing paths and trails, avoid surfaces that are easily damaged, and drive only in areas approved for off-road vehicles.
- **Keep the Noise Down.** Loud vehicles can be offensive. Drive as quietly as possible, don't remove your spark arrester, and don't modify the muffler or any other part of your air intake and exhaust systems. Such modifications not only increase noise, they also reduce engine performance and may be illegal.
- **Choose Sensible Cleaners.** Use a biodegradable detergent when you wash your Honda SXS. Avoid aerosol spray cleaners that contain chlorofluorocarbons (CFCs) which damage the atmosphere's protective ozone layer. Don't throw cleaning solvents away; see the following guidelines for proper disposal.
- **Recycle Wastes.** It's illegal and thoughtless to put used engine oil in the trash, down a drain, or on the ground. Used oil, gasoline, and cleaning solvents contain poisons that can hurt refuse workers and contaminate our drinking water, lakes, rivers, and oceans. Before changing your oil, make sure you have the proper containers. Put oil and other toxic wastes in separate sealed containers and take them to a recycling center. Call your local or state office of public works or environmental services to find a recycling center in your area and to get instructions on how to dispose of non-recyclable wastes.

Taking Care of the Unexpected

With all the challenges you can encounter off-road, there's a chance that sometime something may go wrong. This section gives practical advice to help you deal with a wide range of problems. Take time to read this section before you drive. Also review the tips in *Preparing for a Drive* (page 196).

Taking Care of the Unexpected

General Guidelines

Keeping your Honda SXS well-maintained is the best way to reduce the possibility of having a problem while driving. However, problems can arise even with well-maintained machines.

Remember to take along your owner's manual, the tool kit that came with your Honda SXS, and any other items (such as tire repair supplies and additional tools) that might help you solve a problem on your own.

If something goes wrong during a drive, the first thing to do is stop as soon as you safely can. Do not continue driving if you have a flat tire, or you hear an unusual noise, or your Honda SXS just doesn't feel right. If you continue driving, you could cause more damage and endanger your own safety.

After stopping, take time to assess the situation. Carefully inspect your Honda SXS to identify the problem, then consider your options before you decide what to do.

If a problem is relatively minor and you have the tools, supplies, and skills to make a permanent repair, you may be able to fix it on the trail and continue driving.

When a problem is more serious — or you don't have the tools, supplies, experience, or time to deal with it — you need to choose the safest way to get yourself and your Honda SXS back home.

Taking Care of the Unexpected

Should you ever have a problem while driving, please follow these guidelines:

- Always put personal safety first.
- Take time to assess the situation and your options before deciding what to do.
- If the problem is relatively minor and you have the tools, supplies, and skills to make a temporary repair, be sure to have permanent repairs made as soon as possible.
- Do not continue driving if you are hurt or your Honda SXS is not in safe driving condition.

Additional recommendations for specific problems follow.

If Your Engine Quits or Won't Start

Proper operation and maintenance can prevent starting and engine performance problems. In many cases, the cause of the problem may be a simple operational oversight.

If you have a problem starting the engine — or experience poor engine performance — the following information may help you. If you can't correct the problem, see your dealer.

If your SXS won't start, listen as you turn the ignition key to the START (II) position. If you don't hear the starter motor turning, refer to the *Starter motor doesn't operate* symptom. If you can hear the starter motor working normally, refer to the *Starter motor works, but the engine won't start* symptom.

SYMPTOM: **Starter motor doesn't operate.**	
POSSIBLE CAUSE	WHAT TO DO
transmission not in neutral	Shift into neutral or press on the brake pedal.
blown fuse	Replace with a new fuse of the same rating (page 220).
battery lead loose	Tighten the battery lead.
low battery	Charge the battery (page 189). If charging doesn't help, see your dealer.
faulty starter motor	If all possible causes are negative, the starter motor may be faulty. See your dealer.

SYMPTOM: **Starter motor works, but the engine won't start.**	
POSSIBLE CAUSE	WHAT TO DO
out of fuel	Fill the fuel tank.
flooded engine	See starting the engine step 5 (page 73).
loose or unconnected spark plug cap	Install the spark plug cap securely. If the engine still won't start, see your dealer.
loose battery cables	Tighten the battery terminal bolts.
weak battery	Charge the battery (page 189). If charging doesn't help, see your dealer.

If Your Engine Quits or Won't Start

SYMPTOM: **Engine starts, but runs poorly.**	
POSSIBLE CAUSE	WHAT TO DO
high coolant temperature	Check the high coolant temperature indicator. Refer to *If the High Coolant Temperature Indicator Lights*, page 218.
runs erratically, misfires	May damage catalytic converter. See your dealer.
blubbers (rich fuel mixture)	See your dealer.
sooty exhaust (rich fuel mixture)	See your dealer.
detonates or pings under load	If applicable, switch to the recommended octane gasoline (page 119) or change your brand of gasoline. If the problem persists, see your dealer.
afterfires (backfires)	May damage catalytic converter. See your dealer.
pre-ignition (runs on after ignition switched OFF)	May damage catalytic converter. See your dealer.

SYMPTOM: **Engine starts, but runs poorly or dies when hot.**	
POSSIBLE CAUSE	WHAT TO DO
poor or inadequate fuel flow due to clogged fuel filter	See your dealer. (ensure clean fuel supply)

If the Shift Paddles Do Not Function

If one or both shift paddles do not function, see the following instructions. If proper function cannot be restored, see your dealer.

1. If the engine is running, stop the SXS.
2. Turn the ignition switch to the "OFF" (O) position.
3. After the engine stops, turn the ignition switch to the "ON" (I) position.
4. Pull the upshift paddle then the downshift paddle and check that they are functioning.
5. If both paddles are functioning, shift into neutral and restart the engine.
   If one or both paddles are not functioning, see *Emergency Gear Selection & Operation*, page 213.

When the battery is low:

- See *If the Battery Is Low*, page 226.

If the Transmission Is Not Functioning Properly

When the transmission is not shifting properly, the gear position indicator will show "–" and blink or the gear position ("1", "2", "3", "4", "5", "N"or "R") is blinking.

See your dealer to check and restore the transmission.

If the gear position indicator shows "–" and blinks or the gear position ("1", "2", "3", "4", "5", "N" or "R") is blinking while driving, perform the following:

1. Stop the SXS.
2. Turn the ignition switch to the OFF (O) position.
3. After the engine stops, turn the ignition switch to the ON (I) position.
4. Check the gear position indicator.

If these efforts do not restore proper operation, have your SXS inspected by your dealer.

When the "–" is blinking or the gear position ("1", "2", "3", "4", "5", "N" or "R") is blinking in the gear position indicator:

Restart the engine; drive the SXS by operating the shift paddles to a location where it can be loaded and transported to your dealer. We recommend that you drive slowly in 1st gear.

When the display on the gear position indicator returns to normal:

You may drive on the SXS as usual after restarting the engine. However, we urge you to have your SXS inspected by your dealer.

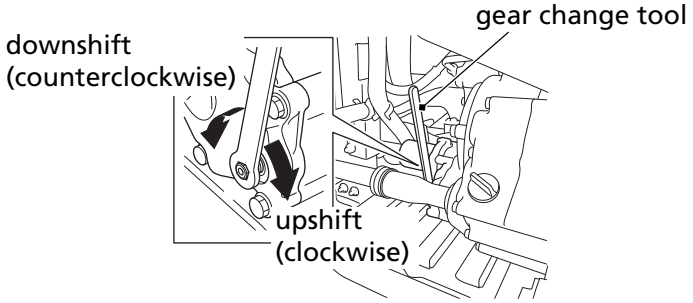
Emergency Gear Selection & Operation

If the shift paddles do not operate, use the following procedure to manually select a gear so you may drive the vehicle to a location where it can be loaded and transported to a dealer.

1. Make sure unit is on level ground.
2. Turn the ignition switch to the "ON" (I) position.
3. Remove the seat bottom (page 111).
4. The gear change tool is located under the seat bottom on the left side.
5. Check the neutral indicator:
   If the transmission is in neutral, go to step 6.
   If the transmission is not in neutral, fold open the rubber dust cover and use the gear change tool to shift to neutral so you will be able to start the engine. Refer to *How to Shift Gears Manually:* (page 214).
6. Apply the parking brake.
7. Turn the key to start the engine.
8. Select the gear you want. For running on level ground: 3rd or 4th gear position. For mountain roads: 2nd or 3rd gear. Refer to *How to Shift Gears Manually:* (page 214).
9. Return the gear change tool to its holder under the seat bottom.
10. Install the rubber dust cover.
11. Install the seat bottom.
12. Get into the SXS. Drive it at a safe speed to a place where it can be repaired or serviced.

Emergency Gear Selection & Operation

How to Shift Gears Manually:



- With the SXS unoccupied, align the hexagonal hole of the gear change tool with the hexagonal end of the secondary spindle which is located on the front crankcase.
- To downshift, turn the gear change tool counterclockwise. To upshift, turn the gear change tool clockwise.
- If the transmission does not shift, rock the vehicle back and forth and try again. If the transmission still will not shift, invert the gear change tool and try again.
- Return the gear change tool to its under seat bottom on the left side.

Do not attempt to shift gears manually using the gear change tool while driving.
If the transmission is shifted manually when the electric shift system is functioning, the system will shutdown automatically and the shift paddles will not operate. To reactivate the system, turn the ignition switch to the "OFF" (O) position, then turn it back to the "ON" (I) position.

If You Have a Flat Tire

How you handle a flat tire on the trail depends on how serious the tire damage is, and what tools and supplies you have with you.

If you have a slow leak or a minor puncture, use the plug method to make a temporary repair. (The plug method is applied from the outside of the tire and is the same as that for conventional tubeless tires.)

A plug-type repair kit, available at most auto parts stores or service stations, provides a plug, an installation tool, tire cement, and an instruction sheet. Follow the instructions provided with the repair kit to make a temporary repair.

As soon as possible, have the tire permanently repaired by your dealer.
Any tire that cannot be repaired should be replaced.

Whenever the Honda SXS is to be operated far from service facilities or available transportation, we recommend that you carry a tire pump and a repair kit with the vehicle.

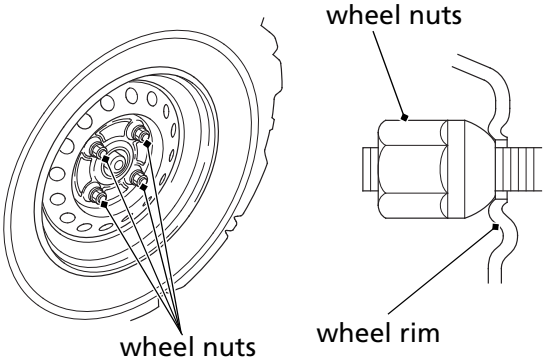
If the leak is more serious, or a temporary repair doesn't hold, the tire must be replaced. The tire will also need to be replaced if it is damaged (page 178). Replacing a tire involves removing and re-installing the wheel (page 216).

If you are unable to repair a flat tire on the trail, you will need to send for help. We strongly recommend that you do not try to drive with a flat tire. The Honda SXS will be hard to handle, and if the tire comes off the rim, it may lock up the wheel and cause you to crash or overturn.

If You Have a Flat Tire

Emergency Wheel Removal/Installation

Refer to *Safety Precautions* on page 95.



Removal

1. Park your Honda SXS on a firm, level surface.
2. Loosen — but do not remove — the wheel nuts.
3. Raise the front (or rear) wheels off the ground (page 118).
4. Remove the wheel nuts.
5. Remove the wheel.
   - Avoid getting grease, oil, or dirt on the disc or pad surfaces when removing and installing each wheel. Any contamination can cause poor brake performance or rapid pad wear after reassembly.

Installation

1. Thoroughly clean hub and wheel.
2. Position the wheel.
3. Position the wheel nuts so that the tapered sides face the wheel rim.
4. Hand-tighten the wheel nuts on the wheel, then lower the Honda SXS to the ground before tightening the nuts in a crisscross (rather than circular) pattern to the specified torque:
   98 lbf·ft (133 N·m, 13.6 kgf·m)

If a torque wrench was not used for installation, see your dealer as soon as possible to verify proper assembly. Improper assembly may lead to loss of control and braking capability.

If the High Coolant Temperature Indicator Lights

Normally, the high coolant temperature indicator will only light momentarily when you turn the ignition ON (I). Occasionally, it may flicker at or near idling speed.

High coolant temperature may be caused by restriction of air flow to the radiator (such as mud caked on the radiator), extended idling, an oil leak, a coolant leak, a low oil level, a low coolant level, or extended operation under adverse conditions.

If the all sections of the coolant temperature gauge including segment H and high coolant temperature indicator are on while you're driving, don't ignore it. Pull safely to a stop. Stop the engine as soon as it's safe to do so, and let it cool.

NOTICE

Continuing to drive with high coolant temperature or an overheated engine can cause serious engine damage.

- A steaming engine indicates a coolant leak. Shut the engine off and wait until the steaming stops. Look for a leak, but don't touch the engine or radiator system. Let everything cool off first.
- Check for any restriction of air flow to the radiator.
- If there's no obvious problem, leave the engine on so the fan and coolant circulating system can continue working. Monitor the coolant temperature gauge and high coolant temperature indicator. The coolant temperature gauge and indicator may return to normal after a brief stop with no load on the engine.
- Check the radiator fan.
  If the fan is not working, turn the engine off. Open the fuse box (page 221) and check the radiator fan fuse. If the fuse is blown, replace it with the proper (same rating) spare fuse. Start the engine. If all sections of the coolant temperature gauge including segment H and high coolant temperature indicator stay on, turn the engine off.
  If the radiator fan is working, visually check the coolant level in the reserve tank located under the front hood. It isn't necessary to touch the radiator system.

If the High Coolant Temperature Indicator Lights

- If the reserve tank is low or empty, don't drive without adding coolant (page 137). After adding coolant, turn the engine on and check the coolant temperature gauge and high coolant temperature indicator.
  If the indicator doesn't turn off, do not drive. The engine needs repair.
  Transport your Honda SXS to a dealer (page 198).
  If the temperature drops to normal, check the coolant level. If it has gone down, add more coolant.
- Check for an oil leak.
- Check the oil level. If necessary, add the recommended oil (page 123) to the upper level mark. If you must leave your Honda SXS to get oil, secure it as much as possible.
- Start the engine, and check that the coolant temperature gauge and high coolant temperature indicator are normal.

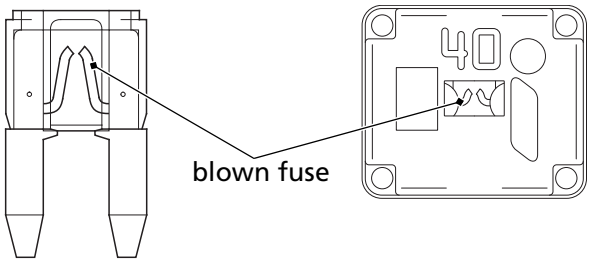
If the coolant temperature gauge and indicator return to normal, resume driving. If there is a leak, do not drive the SXS until the leak is repaired by your dealer.

If there's a mild coolant leak, you can drive for a while, carefully watching the coolant temperature gauge and indicator. Be prepared to stop and add more coolant or water. If the leak is bad, transport your Honda SXS to your dealer (page 198).

If a Fuse Blows

All of the electrical circuits on your Honda SXS have fuses to protect them from damage caused by excess current flow (short circuit or overload).

If something electrical on your Honda SXS stops working, the first thing you should check for is a blown fuse.



Check all the fuses before looking elsewhere for another possible cause of the problem. Replace any blown fuses and check component operation.

The main fuse and the circuit fuses are located in the battery box under the right side of rear fender.

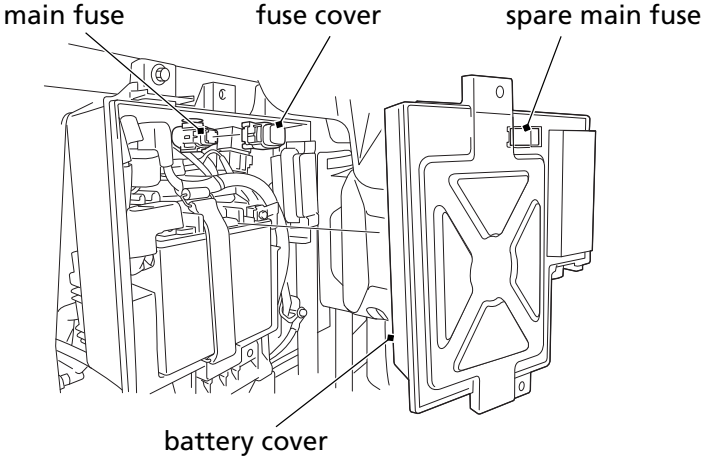
Recommended Fuses

main fuse	40 A
circuit fuses	30 A, 15 A x 4, 10 A x 2

Main Fuse Access

1. To prevent an accidental short circuit, turn the ignition switch OFF (O) before checking or replacing the fuses.
2. To access the main fuse, remove the battery cover (page 187).
3. Remove the fuse cover.
4. Pull the main fuse out. If it is blown, install the spare main fuse. The spare main fuse is located in reverse side of the battery cover.
5. Install the fuse cover.

RIGHT REAR



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If a Fuse Blows

Circuit Fuse Access

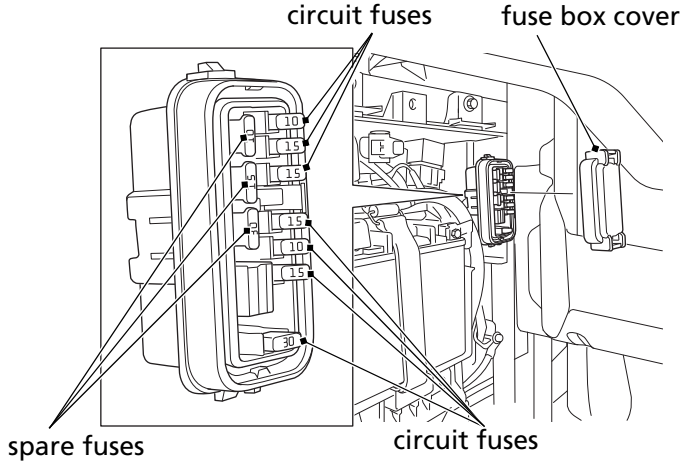
6. To access the circuit fuse, remove the fuse box cover.
7. To check or replace a circuit fuse, pull the old fuse out. If the fuse is blown, replace it with a spare fuse of the same rating. Spare fuses are located in the fuse box.

If you do not have a replacement fuse with the proper rating for the circuit, install one with a lower rating.

NOTICE

Replacing a fuse with one that has a higher rating greatly increases the chance of damage to the electrical system.

8. Install the fuse box cover.
9. Install the battery cover.



If a Fuse Blows

If you do not have a spare fuse and you cannot drive the Honda SXS without fixing the problem, take a fuse of the same rating or a lower rating from one of the other circuits that you can do without temporarily.

If you replace a blown fuse with a spare fuse that has a lower rating, replace the fuse with the correct rating as soon as you can. Also remember to replace any spare fuses that were installed.

If the replacement fuse of the same rating burns out in a short time, there is probably a serious electrical problem on your Honda SXS. Leave the blown fuse in that circuit and have your Honda SXS checked by your dealer.

If You Crash

Personal safety is your first priority after a crash. If you or anyone else has been injured, take time to assess the severity of the injuries and whether it is safe to continue driving. If you cannot drive safely, send someone for help. Do not drive if you will risk further injury.

If you decide that you are capable of driving your SXS safely, first evaluate the condition of your SXS. If the engine is still running, turn it off and look it over carefully; inspect it for fluid leaks, check the tightness of critical nuts and bolts securing such parts as the steering wheel, control levers, brakes, and wheels.

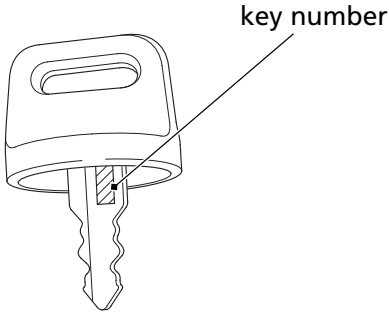
If there is minor damage, or you are unsure about possible damage but decide to try driving the Honda SXS back to your base, drive slowly and cautiously.

Sometimes, crash damage is hidden or not immediately apparent. When you get home, thoroughly check your Honda SXS and correct any problems you find. Also, be sure to have your dealer check the frame, suspension, seat belts, and occupant protective structure after any serious crash.

If You Lose Your Key

Be sure to record your key number. Store the spare key and recorded key number in a safe location. You'll need this number to have a duplicate key made.

If you lose your key and aren't carrying a duplicate, either get your spare or have one made. If you don't know your key number, call the dealer where you purchased your Honda SXS. They may have it listed in their records. If they don't, transport your Honda SXS to them or the nearest dealer. The dealer will probably have to remove the ignition switch assembly to find the key number so they can make a key for you.



If the Battery Is Low

If the battery is low, the starter motor doesn't operate or works poorly, and you can't start the engine.
Jump starting your Honda SXS should be avoided.
Instead, the battery should be removed and recharged (page 189).
If you can't charge the battery or it appears unable to hold a charge, contact your dealer.

⚠WARNING

The battery gives off explosive hydrogen gas during normal operation.

A spark or flame can cause the battery to explode with enough force to kill or seriously hurt you.

Wear protective clothing and a face shield, or have a skilled mechanic do the battery maintenance.

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds. **Wash your hands after handling.**

However, when there is no option other than jump starting, follow the instructions given below.

NOTICE

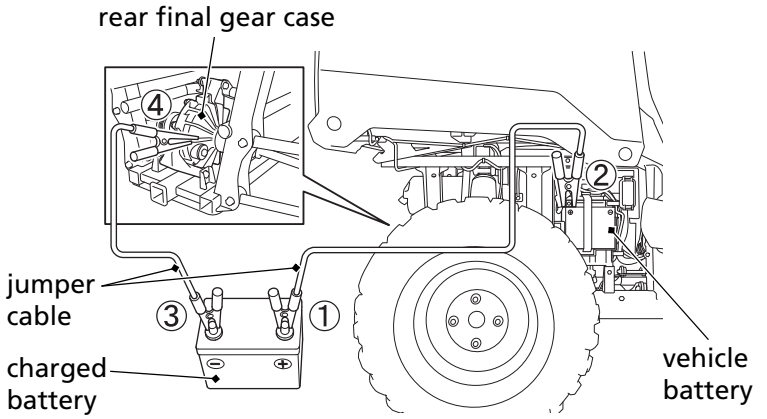
If a battery sits in extreme cold, the electrolyte inside can freeze. Attempting to jump start with a frozen battery can cause it to rupture.

Use a battery that is the same as the one in the vehicle or an equivalent.

1. To prevent an accidental short circuit, turn the ignition switch OFF (○).
2. Remove the battery cover (page 187).
3. Using a fully charged 12-volt battery, connect the positive (+) side of the jumper cable to the charged battery, and connect the positive (+) side on the other end of the jumper cable to the positive (+) terminal of vehicle battery.
4. Connect the negative (-) side of the jumper cable to the charged battery, and connect the negative (-) side on the other end of the jumper cable to the rear final gear case (SXS520M2) or the upper muffler cover (SXS500M2).
5. After starting the engine, remove the negative (-) sides of the jumper cable from the vehicle and the charged battery. Then, remove the positive (+) sides of the jumper cable from the vehicle battery and the charged battery.
6. Install the battery cover.
   - Do not let the positive (+) side of the jumper cable touch on the negative (-) terminal.
   - If the jumper cable is connected to the battery with the polarity reversed, the battery can explode or the electrical system will be seriously damaged.

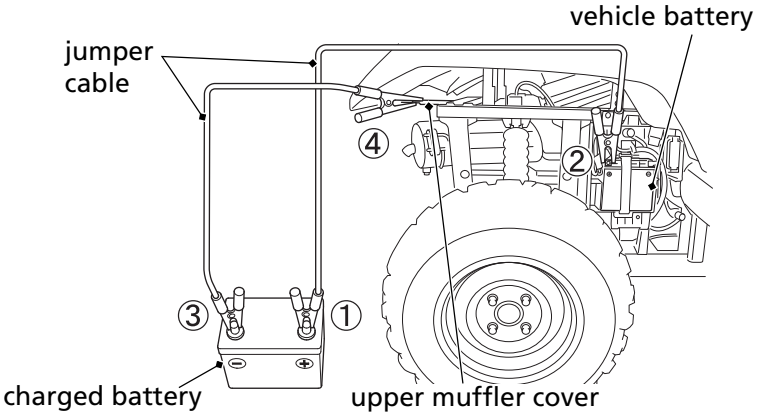
RIGHT REAR

SXS520M2



If the Battery Is Low

SXS500M2



If a Component Fails

The brake lines, control cables, and other components can be damaged as you drive in dense brush or over rocky terrain. Making a trailside repair depends on how serious the damage is and what tools and supplies you have with you.

- If any component in the brake system is damaged, you may have reduced or limited stopping power. If you decide to continue driving back to your base, do so cautiously and at a very low speed.
- If you damage the accelerator cable or other critical component, your Honda SXS may be unsafe to drive. Carefully assess the damage and make any repairs that you can. But if there is any doubt, it's best to be conservative and safe.

If the Vehicle Speed Does Not Exceed 15 mph (24 km/h)

If the driver's side seat belt is not latched properly, the maximum vehicle speed will be limited to no more than 15 mph (24 km/h) by the seat belt speed limiting system (page 46).
Also, the seat belt indicator and speedometer digits blink.

Make sure that the driver's side seat belt is latched properly.
If the problem persists, see your dealer.

Technical Information

This section contains dimensions, capacities, and other technical data, plus information on government requirements and how to break-in your Honda SXS.

Vehicle Identification

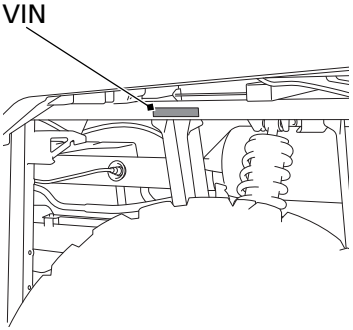
Serial Numbers

The VIN, engine serial number, and key number may be required when ordering replacement parts. You may record these numbers in the Quick Reference section at the rear of this manual.

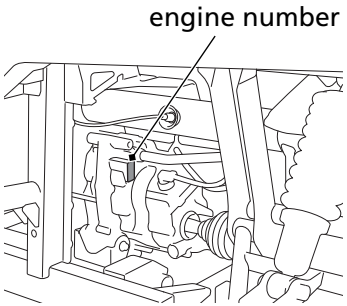
The VIN is stamped on the left side of the frame, located under the cargo bed (or the cargo carrier).

The engine number is stamped on the upper side of the rear crankcase.

LEFT SIDE
SXS520M2 shown



LEFT SIDE
SXS520M2 shown

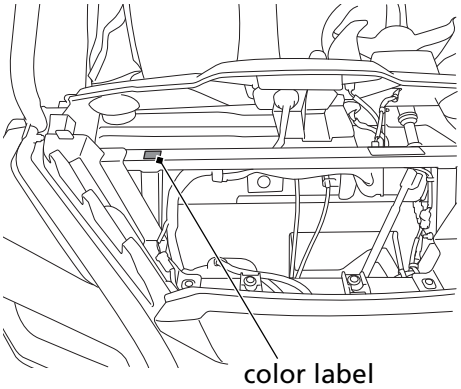


Color Label & Code

The color label is attached to the right front side of the frame.

The color code is helpful when ordering replacement parts. You may record the color code in the Quick Reference section at the rear of this manual.
Remove the front hood (page 110).

UNDER FRONT HOOD



Specifications

Dimensions	
overall length	SXS520M2 105.0 in (2,668 mm) SXS500M2 102.6 in (2,605 mm)
overall width	50.0 in (1,270 mm)
overall height	SXS520M2 71.2 in (1,809 mm) SXS500M2 71.2 in (1,808 mm)
wheelbase	73.0 in (1,855 mm)
ground clearance	SXS520M2 8.5 in (217 mm) SXS500M2 8.5 in (216 mm)
curb weight	SXS520M2 A: 1,058 lb (480 kg) AC: 1,060 lb (481 kg) CM: 1,063 lb (482 kg) SXS500M2 A: 1,027 lb (466 kg) AC: 1,030 lb (467 kg)

Fuel & Lubricants	
fuel recommendation	unleaded gasoline, pump octane number of 86 or higher
fuel tank capacity	4.07 US gal (15.4 ℓ)
engine oil capacity	after disassembly: 3.5 US qt (3.3 ℓ) after draining: 3.1 US qt (2.9 ℓ) after draining & oil filter change: 3.2 US qt (3.0 ℓ)
engine oil recommendation	API Service Classification SJ or higher except oils labeled as energy conserving or resource conserving on the circular API service label, SAE 10W-30, JASO T 903 standard MA, Pro Honda GN4 4-stroke oil (USA & Canada) or Honda 4-stroke oil, or an equivalent

Specifications

Fuel & Lubricants (cont'd)	
cooling system recommendation	Pro Honda HP Coolant (USA & Canada) or an equivalent high quality ethylene glycol antifreeze containing corrosion protection inhibitors specifically recommended for use in aluminum engines
cooling system capacity	2.5 US qt (2.4 ℓ)

Capacities	
passenger capacity	driver and one passenger
maximum weight capacity	882 lb (400 kg) driver, passenger, all cargo and accessories

Engine Specifications	
displacement	SXS520M2 31.6 cu-in (518 cm^3) SXS500M2 29.0 cu-in (475 cm^3)
bore & stroke	SXS520M2 3.78 × 2.81 in (96.0 × 71.5 mm) SXS500M2 3.62 × 2.81 in (92.0 × 71.5 mm)
compression ratio	9.5 : 1
spark plug (standard)	BKR5E-11 (NGK) or K16PR-U11 (DENSO)
spark plug gap	0.039 – 0.043 in (1.00 – 1.10 mm)
valve clearance (cold)	intake: 0.006 ± 0.001 in (0.15 ± 0.02 mm) exhaust: 0.009 ± 0.001 in (0.23 ± 0.02 mm)
idle speed	1,400 ± 100 rpm (non-adjustable)

Specifications

Power Transmission		
primary reduction		2.103
secondary reduction		1.818
final reduction	front	4.077
	rear	4.077
transmission ratio	1st	3.615
	2nd	2.388
	3rd	1.608
	4th	1.178
	5th	0.875
	reverse	3.716
final drive		shaft

Chassis & Suspension		
caster	7 °	
trail	1.4 in (35 mm)	
tire size	front:	SXS520M2 24X8.00-12 NHS Vee Rubber V-392 SXS500M2 24X8.00-12 NHS MAXXIS M977H
	rear:	SXS520M2 24X10.00-12 NHS Vee Rubber V-392 SXS500M2 24X10.00-12 NHS MAXXIS M978H
tire pressure	front:	10 psi (70 kPa)
	rear:	10 psi (70 kPa)

Specifications

Electrical	
battery	A, AC YTX14-BS 12V-12 Ah (10HR) CM GYZ16H 12V-16 Ah (10HR)
generator	0.481 kW/5,000 rpm

Lights	
headlight	12 V 37.5 W x 2
brake/tail light	LED
neutral indicator	LED
reverse indicator	LED
high coolant temperature indicator	LED
PGM-FI malfunction indicator lamp (MIL)	LED
parking brake indicator	LED
seat belt indicator	LED
If there is a LED which is not turned on, see your dealer for this service.	

Fuses	
main	40 A
circuit	30 A, 15 A x 4, 10 A x 2

Torque Specification	
right seat bottom cover	5.9 lbf·ft (8 N·m, 0.8 kgf·m)
engine oil drain plug	18 lbf·ft (25 N·m, 2.5 kgf·m)
engine oil filter cover bolts	9 lbf·ft (12 N·m, 1.2 kgf·m)
front final gear oil drain plug	9 lbf·ft (12 N·m, 1.2 kgf·m)
front final gear oil filler cap	9 lbf·ft (12 N·m, 1.2 kgf·m)
rear final gear oil drain plug	9 lbf·ft (12 N·m, 1.2 kgf·m)
rear final gear oil filler cap	9 lbf·ft (12 N·m, 1.2 kgf·m)
wheel nuts	98 lbf·ft (133 N·m, 13.6 kgf·m)

Break-in Guidelines

Help assure your Honda SXS's future reliability and performance by paying extra attention to how you drive during the first operating day or 15 miles (25 km).

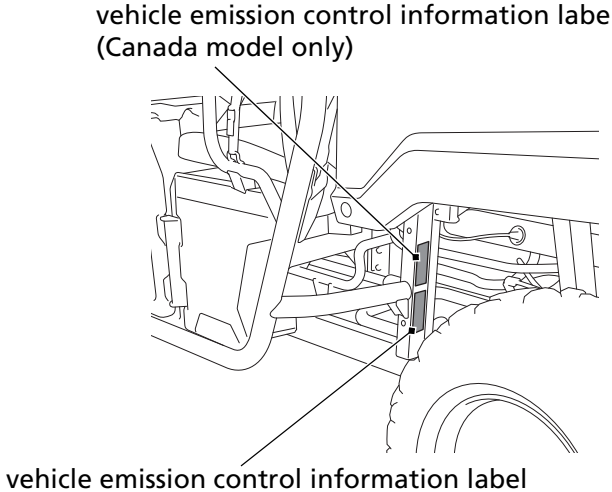
During this period, avoid full-throttle starts and rapid acceleration.

Emission Control Systems

Exhaust Emission Requirements
The U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Environment and Climate Change Canada (ECCC) require that your Honda comply with applicable emissions standards during its useful life, when operated and maintained according to the instructions provided.

The Vehicle Emission Control Information Label is attached on the left side of the frame, located under the cargo bed (or the cargo crrier).

LEFT SIDE
SXS520M2 shown



Emission Control Systems

Source of Exhaust Emissions
The combustion process produces carbon monoxide (CO), oxides of nitrogen (NOx) and hydrocarbons (HC). Control of hydrocarbons and oxides of nitrogen is very important because, under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but it is toxic.

Honda Motor Co., Ltd. utilizes various systems to reduce carbon monoxide, oxides of nitrogen and hydrocarbons.

Exhaust Emission Control System
The exhaust emission control system includes an oxygen sensor, a three-way catalytic converter and a PGM-FI system.
No adjustment to this system should be made although periodic inspection of the components is recommended.
The exhaust emission control system is separate from the crankcase emission control system.

Evaporative Emission Control System
(USA - 50 States [meets California])
An evaporative emissions control system uses a canister filled with charcoal to adsorb fuel vapor from the fuel tank while the engine is off. The vapor is drawn into the engine and burned while the engine is running or driving.

Models sold in and used in California:
An add-on or modified part must be compliant with applicable ARB evaporative emission control standards. A violation of this requirement is punishable by civil and/or criminal punishment.

Crankcase Emission Control System
The engine is equipped with a Closed Crankcase System to prevent discharging crankcase emissions into the atmosphere. Blow-by gas is returned to the combustion chamber through the air cleaner and throttle body.

Problems That May Affect Exhaust Emissions
If you are aware of any of the following symptoms, have the vehicle inspected and repaired by your dealer.

Symptoms:
1. Hard starting or stalling after starting
2. Rough idle
3. Misfiring or backfiring during acceleration
4. After-burning (backfiring)
5. Poor performance (driveability) and poor fuel economy

Federal regulations prohibit removing or disabling a device or element of design that may affect your engine's emission performance unless your Honda will be used exclusively in competition. If you modify your engine for use in sanctioned competition events, you must deface or destroy the emission control information label.

If you loan, sell, or give your competition modified Honda to someone else, according to applicable law, you must inform the new owner/driver in writing that the vehicle is to be used for competition only.

Emission Control Systems

Noise Emission Control System
TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED: State laws prohibit, or Canadian provincial laws may 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 purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE FOLLOWING ACTS:

- Removal of, or puncturing the muffler, baffles, header pipes or any other component which conducts exhaust gases.
- Removal of, or puncturing of any part of the intake system.
- Lack of proper maintenance.
- Removing or disabling any emissions compliance component, or replacing any compliance component with a non-compliant component.

Fuel Permeation Emission Control System
This vehicle complies with the Fuel Permeation Emission Control regulations of the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Environment and Climate Change Canada (ECCC).
The fuel tank, fuel hoses, and fuel vapor charge hoses used on this vehicle incorporate fuel permeation control technologies.
Tampering with the fuel tank, fuel hoses, or fuel vapor charge hoses to reduce or defeat the effectiveness of the fuel permeation technologies is prohibited by federal regulations.

Oxygenated Fuels

Some conventional gasolines are being blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels. To meet clean air standards, some areas of the United States and Canada use oxygenated fuels to help reduce emissions.
If you use an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirement.
Before using an oxygenated fuel, try to confirm the fuel's contents. Some states/provinces require this information to be posted on the pump.

The following are percentages of oxygenates for non-road vehicles:

ETHANOL (ethyl or grain alcohol) up to 10% by volume.
You may use gasoline containing up to 10% ethanol by volume. Gasoline containing ethanol may be marketed under the name "Gasohol".
Do not use gasoline containing more than 10% ethanol by volume. The use of gasoline containing a higher percentage (e.g. E15, E20, E85) of ethanol has not been approved for use in this vehicle and may cause starting and/or performance problems and can also damage metal, rubber, and plastic parts of the fuel system and are not be covered by the Distributor's Limited Warranty.

Oxygenated Fuels

Do not use gasoline containing METHANOL (methyl alcohol). Gasoline containing methanol may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of your fuel system.

If you notice any undesirable operating symptoms, try another service station or switch to another brand of gasoline.

Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentages of oxygenates mentioned above are not covered under warranty.

Oxygenated fuels can damage paint and plastic. Be careful not to spill fuel when filling the fuel tank. Wipe up any spills immediately.

NOTICE

Oxygenated fuels can damage paint and plastic. Damage caused by spilled fuel is not covered by warranty.

Catalytic Converter

This SXS is equipped with a three way catalytic converter. The catalytic converter contains precious metals that serve as catalysts, promoting chemical reactions to convert the exhaust gases without affecting the metals.

The catalytic converter acts on HC, CO, and NOx. A replacement unit must be an original Honda part or its equivalent.

The catalytic converter must operate at a high temperature for the chemical reactions to take place. It can set fire to any combustible materials that come near it. Park your SXS away from high grasses, dry leaves, or other flammables.

A defective catalytic converter contributes to air pollution, and can impair your engine's performance. Follow these guidelines to protect your SXS's catalytic converter.

- Always use unleaded gasoline. Even a small amount of leaded gasoline can contaminate the catalyst metals, making the catalytic converter ineffective.
- Keep the engine in good running condition. A poorly running engine can cause the catalytic converter to overheat causing damage to the converter or the SXS.
- If your engine is misfiring, backfiring, stalling, or otherwise not running properly, stop driving and turn off the engine. Have your SXS serviced as soon as possible.

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Consumer Information

This section contains information on your warranty and how to get an official Honda service manual.

Authorized Manuals

The Service Manual used by your authorized dealer is available from your Honda dealer or Helm, Inc. (USA only, Canada: See your dealer to order authorized manuals.)

Also available but not necessary to service your model is the Honda Common Service Manual which explains theory of operation and basic service information for various systems on Honda motorcycles, scooters, ATVs, SXSs and PWCs.

(USA only)
The Winter Storage Guide in conjunction with the Owner's Manual and Service Manual can help you prepare your Honda motorcycle, scooter, ATV, and SXS for winter storage.

These Honda manuals are written for the professional technician, but most mechanically capable owners should find them easy to use if they have the proper tools and observe proper safety standards. Special Honda tools are necessary for some procedures.

Description
2015-2023 Pioneer 500/520 Service Manual
Common Service Manual (61CSM00)
(USA only) Winter Storage Guide (S9507)
2023 Pioneer 500/520 Owner's Manual

Order online: www.helminc.com

Order Toll Free: 1-888-CYCLE93 (1-888-292-5393)
(NOTE: For Credit Card Orders Only)
Monday - Friday 8:00 AM - 6:00 PM EST

Warranty Coverage

Your new Honda is covered by these warranties:

- Honda SXS Limited Warranty
- Emission Control System Warranty

There are responsibilities, restrictions, and exclusions which apply to these warranties. Please read the Warranties Booklet given to you by your Honda dealer at the time of purchase. Be sure to keep your Honda owner's card with your Warranties Booklet.

Canada: Please refer to the Warranty Booklet posted on our website at www.honda.ca.

It is important to realize that your warranty applies to defects in material or workmanship of your Honda. Your warranty coverage does not apply to normal wear or deterioration associated with using the Honda SXS.

Your warranty coverage will not be voided if you choose to perform your own maintenance. However, you should have the proper tools and service information and be mechanically qualified. Failures that occur due directly to improper maintenance are not covered.

Almost all of your warranty coverage can be extended through the HondaCare® Protection Plan (USA only). For more information, see your dealer.

Warranty Service

Please remember that recommended maintenance interval servicing is not included in your warranty coverage. Additionally, your warranty does not apply to the normal wear of items (such as brakes, tires, etc.).

If you believe you have a problem with your Honda SXS, call the service department of your dealer. Make an appointment for an inspection and diagnosis. Remember, as the owner of the Honda SXS, you will be asked to authorize that inspection. Your dealer will give you the results of the inspection. If the problem is covered under warranty, your dealer will perform the warranty repairs for you.

If you have questions about warranty coverage or the nature of the repair, it is best to talk to the Service Manager of your dealer.

Sometimes, in spite of the best intentions of all concerned, a misunderstanding may occur. If you aren't satisfied with your dealer's handling of the situation, we suggest you discuss your problem with the appropriate member of the dealership's management team. If the problem has already been reviewed with the Service Manager, Parts Manager, Sales Manager, etc., contact the Owner of the dealership or their designated representative.

Contacting Honda

Your owner's manual was written to cover most of the questions you might ask about your Honda. Any questions not answered in the owner's manual can be answered by your dealer. If your dealer doesn't have the answer right away, they will get it for you.

If you have a difference of opinion with your dealer, please remember that each dealership is independently owned and operated. That's why it's important to work to resolve any differences at the dealership level.

If you wish to contact Honda directly to comment on your experiences with your Honda or with your dealer, please send your comments using one of the following methods:

USA:

POST MAIL

Powersports Customer Relations,
American Honda Motor Co., Inc.
P.O. Box 2200, Torrance, CA 90509-2200
mailstop: 100-4W-5F

PHONE

Telephone: (866) 784-1870

ONLINE CUSTOMER SERVICE

Website: *https://powersports.honda.com/contact-us*

Contacting Honda

Canada: Honda Canada Inc., Customer Relations Dept, 180 Honda Boulevard, Markham, Ontario L6C 0H9, telephone: (888) 946-6329, facsimile: (877) 939-0909.
E-mail: honda_cr@ch.honda.com

Please include the following information in your letter:

- name, address, and telephone number
- product model, year, and VIN
- date of purchase
- dealer name and address

We will likely ask your dealer to respond, or possibly acknowledge your comments directly.

Your Honda Dealer

Once you purchase your new Honda, get familiar with the organization of your Honda dealer so you can utilize the full range of services available.

The service department is there to perform regular maintenance and unexpected repairs. It has the latest available service information from Honda. The service department will also handle warranty inspections and repairs.

The parts department offers Honda Genuine Parts, Pro Honda products, Honda Accessories (USA only), and Honda accessories and products (Canada only). The same quality that went into your Honda can be found in Honda Genuine replacement parts. You'll also find comparable quality in the accessories and products available from the parts department.

The sales department offers the HondaCare® Protection Plan to extend almost all of your warranty coverage (USA only).

Your Honda dealer can inform you about competition and other driving events in your area. You'll also find that your dealer is a source of information about safety training available in your local area.

We're sure you'll be as pleased with the service your Honda dealer continues to provide after the sale as you are with the quality and dependability of your Honda.

Reporting Safety Defects (Canada only)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Honda Canada Inc. and you may also inform Transport Canada.

If Transport Canada receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may lead to a recall and remedy campaign. However, Transport Canada cannot become involved in individual problems between you, your dealer, or Honda Canada Inc.

To contact Transport Canada's Defect Investigations and Recalls Division,
Mailing Address:
Transport Canada - ASFAD
330 Sparks Street
Ottawa, ON
K1A 0N5

Telephone: 819-994-3328 (Ottawa-Gatineau area or internationally)
Toll free: 1-800-333-0510 (in Canada)

Online:
(English Link:) *www.tc.canada.ca/recalls*
(French Link:) *www.tc.canada.ca/rappels*

For more information on reporting safety defects or about motor vehicle safety, go to *https://www.tc.gc.ca/roadsafety*.

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Quick Reference

The following is a brief, but important collection of information you need to know about your Honda. You'll also find space to record important notes.

How To Avoid Costly Repairs

The engine of your Honda can be the most expensive component to repair. Proper maintenance, especially the use of the recommended fluids and filters, prevents premature wear and damage.

Frequent causes of costly repairs are:

- Engine oil — insufficient quantity, improper oil.
- Air cleaner — dirty, leaking because of improper installation (poor seal).

Record important information on the following page:

Quick Reference

Engine No.	
VIN	
Color Label	
Owner's Name	
Address	
City/State	
Phone	
Dealer's Name	
Address	
City/State	
Phone	
Service Mgr.	

Quick Reference

Scheduled Maintenance	Initial: **100 miles (150 km)** Regular: every **600 miles (1,000 km)**
Pre-drive Inspection	Each time before you drive (page 64): tires, fuel level, oil level, underbody, air cleaner housing drain tube, coolant, brake fluid, driveshafts, suspension, exhaust system, wheels, lights, controls, seat belts.
Fuel/Capacity	Unleaded gasoline, pump octane number 86 or higher **4.07 US gal (15.4 ℓ)**
Engine Oil/ Capacity	API Service Classification SJ or higher except oils labeled as energy conserving or resource conserving on the circular API service label, SAE 10W-30, JASO T 903 standard MA, Pro Honda GN4 4-stroke oil (USA & Canada) or Honda 4-stroke oil, or an equivalent after disassembly: **3.5 US qt (3.3 ℓ)** after draining: **3.1 US qt (2.9 ℓ)** after draining & oil filter change: **3.2 US qt (3.0 ℓ)**
Maximum Weight Capacity	**882 lb (400 kg)** driver, passenger, all cargo and accessories

Quick Reference

Tires	Front: SXS520M2 24X8.00-12 NHS Vee Rubber V-392 SXS500M2 24X8.00-12 NHS MAXXIS M977H Rear: SXS520M2 24X10.00-12 NHS Vee Rubber V-392 SXS500M2 24X10.00-12 NHS MAXXIS M978H
Tire Pressure (cold)	Front: 10 psi (70 kPa) Rear: 10 psi (70 kPa)
Spark Plugs	standard: BKR5E-11 (NGK) or K16PR-U11 (DENSO)
Coolant	Ethylene glycol antifreeze (silicate-free) for aluminum engines in 50/50 solution with Pro Honda HP Coolant or an equivalent distilled water
Fuses	main: 40 A circuit: 30 A, 15 A x 4, 10 A x 2

Quick Reference

These symbols are used in Driver Controls section:

SYMBOL	COMPONENT	SEE PAGE
II	START — ignition switch	33
I	ON — ignition switch	33
O	OFF — ignition switch	33
•	OFF — headlight switch	34
☼	ON — headlight switch	34
+	Up — right shift paddle	36
–	Down — left shift paddle	36
R	reverse lever	39

California Proposition 65 Warning

⚠ **WARNING**: Operating, servicing and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.

31HL5680
00X31-HL5-6800

Printed in the U.S.A.