

OWNER AND VEHICLE INFORMATION	
OWNER NAME:	_____
USER/COMPANY NAME:	_____
MAILING ADDRESS:	_____
CITY, STATE:	_____ ZIP: _____
VEHICLE IDENTIFICATION NUMBER:	_____
DATE OF DELIVERY (WARRANTY START DATE):	____ / ____ / ____ MO. DAY YR.

SELLING DEALER IMPRINT HERE

Foreword

Thank you for purchasing a Sterling 360™ vehicle.

This manual provides information needed to operate and understand the vehicle and its components. Not all of the information contained in this manual applies to every vehicle.

For your reference, keep this manual in the vehicle at all times.

Lubrication

When performed on a regular basis, lubricating the parts of your vehicle is the least costly way of obtaining safe and reliable vehicle operation. Added benefits and savings occur when you check that the engine, undercarriage, and noise emission control parts are in good working order during lubrication.

This manual explains when you should lubricate parts and what to look for when checking for wear or damage.

Environmental Concerns and Recommendations

Whenever you see instructions in this manual to discard materials, you should attempt to reclaim and recycle them. To preserve our environment, follow appropriate environmental rules and regulations when disposing of materials.

NOTICE: Parts Replacement Considerations

Do not replace suspension, axle, or steering parts (such as springs, wheels, hubs, and steering gears) with used parts. Used parts may have been subjected to collisions or improper use and have undetected structural damage.



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Symbols and alert messages

- Descriptions and specifications in this manual were in effect at the time of printing. Sterling Truck Corporation reserves the right to discontinue models and to change specifications or design at any time without notice and without incurring obligation. Descriptions and specifications contained in this publication provide no warranty, expressed or implied, and are subject to revisions and editions without notice.
- The following symbols are used throughout this handbook:
 -  : optional equipment
 -  : cross-reference to another page that contains relevant information about the subject.
- This manual contains important hazard messages under the following four headings that identify the nature and importance of the information:

DANGER 

Imminent hazards that will result in severe personal injury or death.

WARNING 

Hazards or unsafe practices that could result in severe personal injury or death.

CAUTION 

Hazards or unsafe practices that could result in minor personal injury and/or damage to products or property.

NOTE:

Relevant information that is helpful or informative but not associated with any risk or hazard.

- California Proposition 65 Warning

DANGER 

THIS PRODUCT CONTAINS OR EMITS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

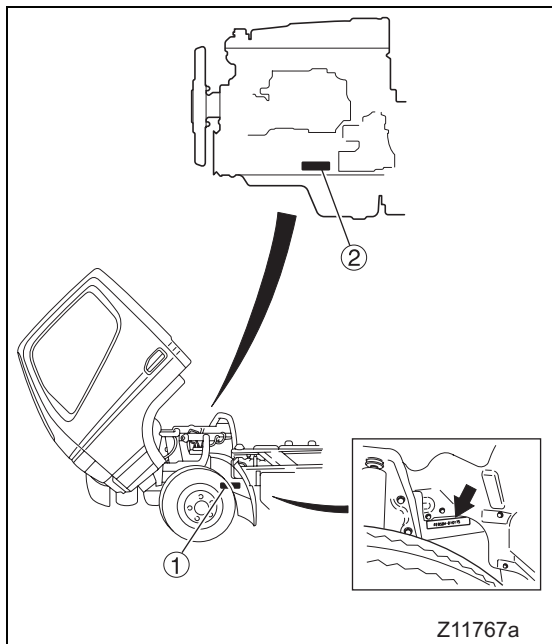
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1. About your vehicle

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Chassis and engine numbers

When ordering replacement parts or requesting repairs, provide the chassis number ① and engine number ②.

1 Chassis number

The chassis number is located on the left frame rail, behind the front wheel.

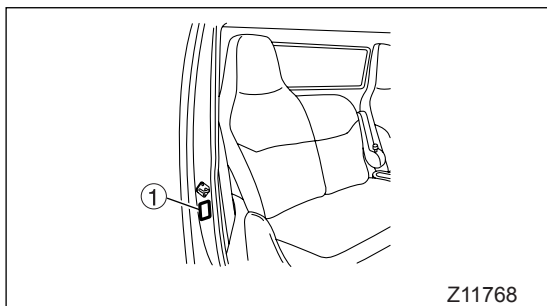
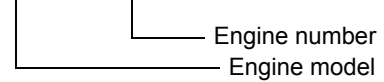
Example: FE84DD - □□□□□□



2 Engine number

The engine number is located on the left-hand side of the crankcase.

Example: 4M50 - □□□□□□



Power line label

The power line label ① is located on the passenger's B-pillar door post. It gives the vehicle model, chassis number, and information about the components of the powertrain: engine, transmission, and axle.

Maintenance

Regular maintenance will improve the performance of your vehicle and extend its service life. It is recommended that you make a habit of performing the following inspections.


In this manual, you will find simple maintenance checks and procedures that can be carried out by the owner. If you have difficulty, or your vehicle needs work that is not described in this manual, please contact an authorized Sterling service facility.

1 Engine run-in period

To avoid overburdening a new engine, limit engine speed to 1800 revolutions per minute (rpm) for the first 600 miles (1000 km).

After this initial run-in period, gradually increase engine speed, starting with the lower gears.





2 Pretrip inspection

Inspect your vehicle at the start of each working day. This will ensure continued safe and comfortable operation. ⇒  P. 11-7

3 Initial maintenance


After you have traveled the first 2500 miles (4000 km), your vehicle needs a free initial maintenance procedure. When this mileage has been reached, bring your vehicle to an authorized Sterling dealer and show them this manual.

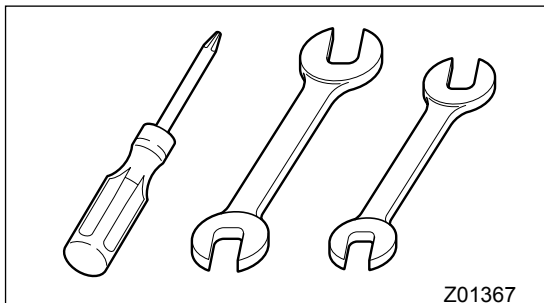
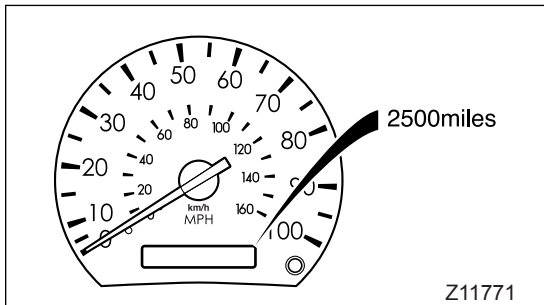
At 2500 miles (4000 km), have the dealer do the following:

- Replace the engine oil, manual transmission oil, and rear axle oil. ⇒  P. 11-17
- Check and adjust valve lash. ⇒  P. 13-4
- Tighten the wheel nuts. ⇒  P. 11-53
- Tighten the suspension U-bolts. ⇒  P. 13-4

4 Maintenance program

Recurring maintenance lengthens the vehicle's service life and can help prevent accidents. Recurring maintenance can be based on either distance traveled (odometer reading), or length of service (hour-meter reading).

Maintenance intervals for each recurring item are shown in the maintenance schedule. Please follow the maintenance schedule. ⇒  P. 14-2



Fuel

Use only diesel fuel conforming to the following recommendations, without any additives, for diesel engines installed in the Sterling 360.

1 Diesel fuel properties

The following recommendations concerning diesel fuel used with Mitsubishi Fuso diesel engines are given for optimum fuel economy and performance.

Use condition	Recommendation
Normal operation at temperatures above 10°F (-12°C)	ASTM D-975 Grade Low Sulfur Grade 2-D*
Operation at temperatures below 10°F (-12°C), or long-hour no-load operation.	ASTM D-975 Grade Low Sulfur Grade 1-D*

NOTE:

* ASTM is an acronym for the American Society for Testing and Materials. ASTM recommends fuel containing 0.05% or less sulfur content.

Sulfur content that exceeds 0.05% causes the performance of the emission control device to deteriorate.

To meet precise fuel requirements, obtain cooperation from a reputable supplier of diesel fuel. The fuel supplier and the vehicle operator are both responsible for keeping the fuel clean.

2 Danger of fire and explosion resulting from fuel mixtures

Fuel containing 5% gasoline has a flash point as low as 32°F (0°C), which can lead to a fire or explosion while the engine is running.

DANGER 

NEVER MIX DIESEL FUEL WITH GASOLINE, GASOHOL OR ALCOHOL.

USE OF FUEL MIXED WITH ONE OR MORE OF THESE COULD LEAD TO A FIRE OR EXPLOSION INVOLVING SERIOUS INJURY, DEATH OR PROPERTY DAMAGE. IF YOU ACCIDENTALLY USE GASOLINE OR ALCOHOL WHEN REFUELING THE VEHICLE, REMOVE ALL OF IT FROM THE FUEL SYSTEM.

3 Adverse effects of fuel mixtures

Using diesel fuel mixed with gasoline, alcohol, or both, has the following adverse effects on the engine:

- Excessive wear, damage, and failure of fuel system parts, as a result of lower fuel viscosity.
- Difficulty in starting the engine, as a result of reduced cetane number.

CAUTION

- The lower the cetane number, the more likely internal engine damage will occur.
- Do not add antifreeze agents or other substances to the fuel. They could damage the engine's fuel injection system.
- Be sure to clean the fuel tank cap and breather regularly. If they become so dirty that the breather gets blocked, the fuel tank may suffer damage and the fuel injection system may fail.

4 Refueling


WARNING

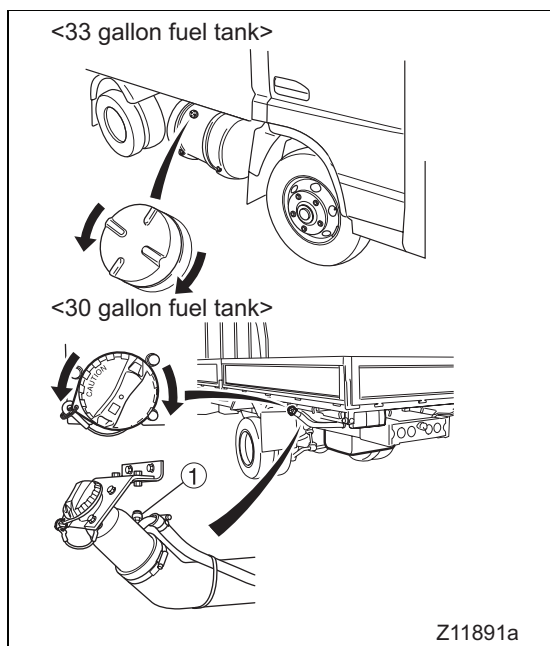
- Do not refuel with the engine running. Shut down the engine before fueling.
- Diesel fuel is combustible. Wipe up any spilled fuel. Do not smoke while refueling.
- If you inadvertently put gasoline in the fuel tank, pump it all out. Do not run the engine with gasoline in the tank.

Any of these practices can cause a fire or explosion, which could result in burn injuries or loss of life.

NOTE:

If the vehicle runs out of fuel and air enters the fuel lines, bleed the fuel system before starting the engine.

⇒  P. 12-23



- **33-gallon fuel tank**

This fuel tank is on the left-hand side of the vehicle. To open the filler cap, slowly turn it counterclockwise. To close the cap, turn it clockwise. Be sure the cap is fully closed.

Fuel tank capacity
33.0 gallons (125 liters)

- **30-gallon fuel tank** 

This optional fuel tank is at the rear of the vehicle. To open the filler cap, slowly turn it counterclockwise. To close the cap, turn it clockwise until you hear a click.

Fuel tank capacity
29.8 gallons (113 liters)

WARNING 

- When filling the fuel tank using a gun-type fuel pump, do not continue pumping after the pump automatically stops. (The tank is full at this point.)
- When filling the fuel tank using any other method, stop as soon as the fuel level becomes visible through the fill opening. If the fuel level reaches the bottom of the opening, fuel may leak through the check valve ① when the vehicle starts and stops. If fuel leaks, carefully wipe it all up.
- If the pointer of the fuel level gauge is above the "F" mark, do not add any more fuel.

Overfilling the fuel tank can cause a fire, which could result in burn injuries and loss of life.

Reporting safety defects

If you believe that your vehicle has a defect that could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Sterling Truck Corporation.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Sterling Truck Corporation.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to <http://www.safercar.gov>; or write to: Administrator, NHTSA, 400 Seventh St., SW, Washington, DC 20590.

You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

Canadian customers who wish to report a safety-related defect to Transport Canada, Defect Investigations and Recalls, may telephone the toll-free hotline 1-800-333-0510, or contact Transport Canada by mail at: Transport Canada, ASFAD, Place de Ville Tower C, 330 Sparks Street, Ottawa, Ontario, Canada K1A 0N5.

For additional road safety information, please visit the Road Safety website at: <http://www.tc.gc.ca/roadsafety/menu.htm>.

Obtaining service

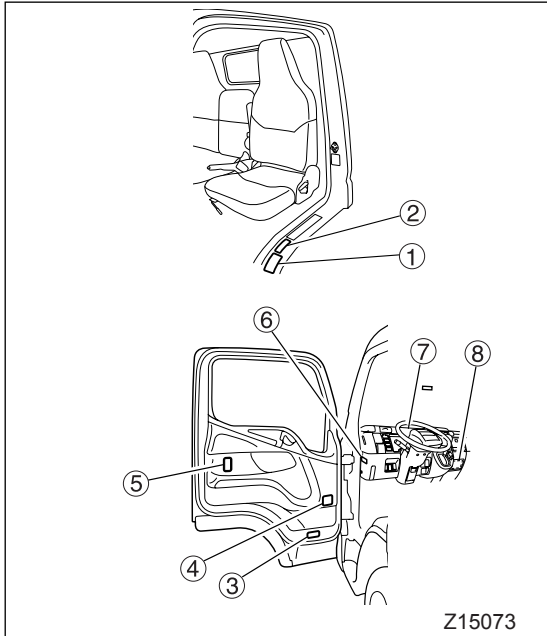
Customer Assistance Center

Having trouble finding service? Call the Customer Assistance Center at **1-800-785-4357** or **1-800-STL-HELP**. Call night or day, weekdays or weekends, for dealer referral, vehicle information, or breakdown coordination. Our people are knowledgeable, professional, and committed to following through to help you keep your truck moving.

2. Warning labels

Locations in cab 2-2
Locations outside cab 2-4

Locations in cab




- The caution and warning labels give important information. Be sure to read them before using the vehicle.
- If any label has become so damaged or dirty that it is difficult to read, please inform an authorized Sterling dealer. The warning and caution labels apply only to the vehicle itself. For vendor equipment mounted on the vehicle, please refer to the equipment manufacturer's manual.
- The locations of the caution and warning labels are shown in the illustration below. Samples of each label are supplied on this and the following pages.

① Limited-slip differential 

CAUTION FOR VEHICLE WITH LIMITED SLIP DIFFERENTIAL

1. NEVER ROTATE THE WHEEL WITH ONLY ONE REAR WHEEL JACKED UP.
2. USE ONLY SPECIFIED L.S.D. OIL.

Z10690

② 30-gallon (113-liter) fuel tank 

WARNING CAUTION: ABOUT REFUELING WORK

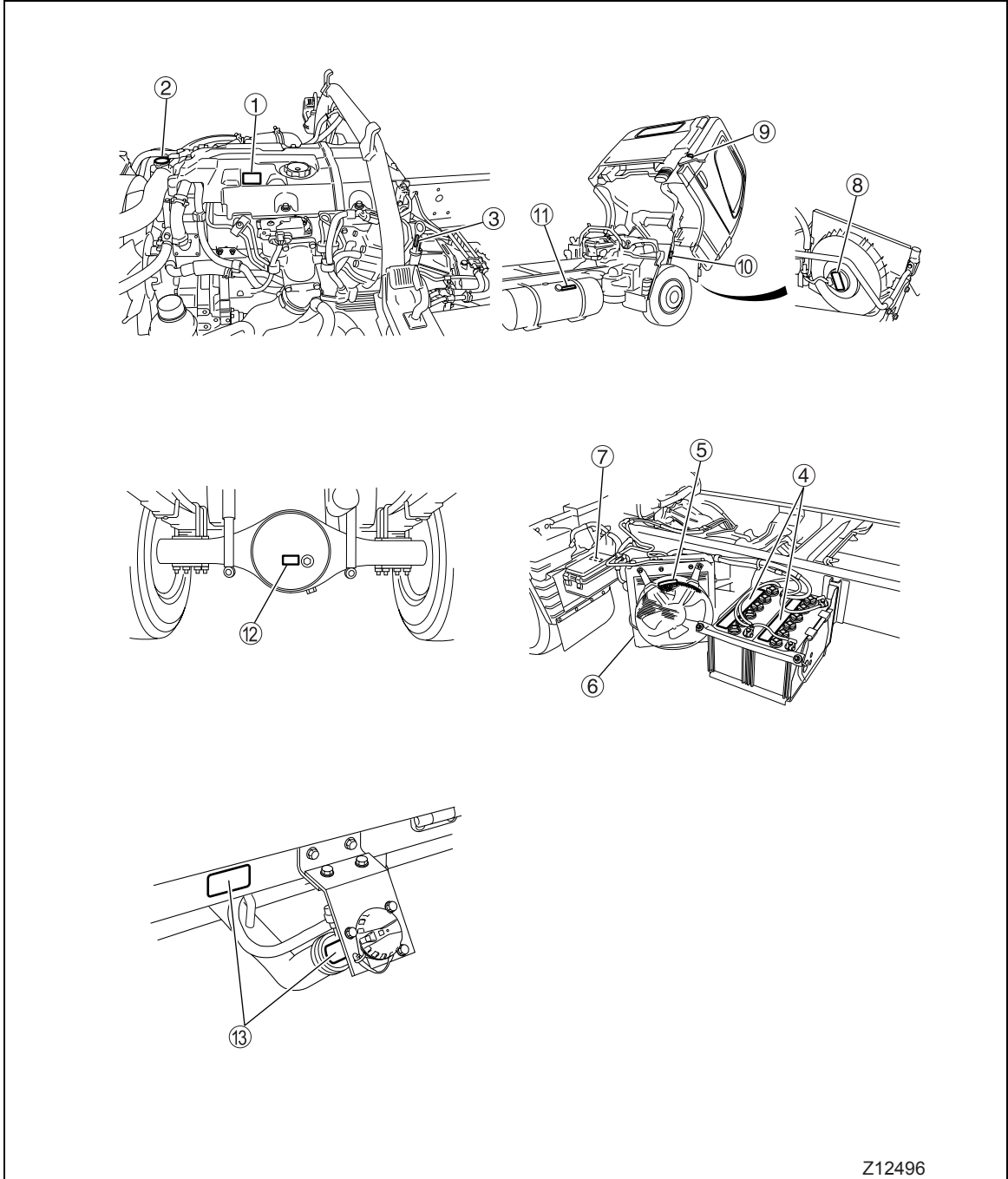
- Don't fill the fuel until being possible to see the oil level from the filler opening.
- The fuel leakage is caused and it causes a fire.

SEE OWNER'S MANUAL FOR DETAILS.

MK518283

Z12494

Locations outside cab



① Engine oil



Z10084

② Radiator pressure cap



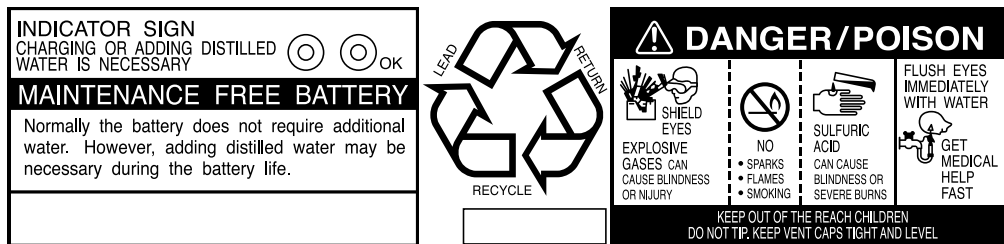
Z08670

③ Automatic transmission fluid (ATF)



Z12549

④ Battery



Z11680

⑤ ATF cooling fan <Automatic transmission>



Z11844

⑥ ATF cooler <Automatic transmission>



Z11773

⑦ High-amp fuse box

CAUTION! TO AVOID FIRE HAZARD. ONLY USE FUSES OF SPECIFIED CURRENT.

Z11803

⑧ Air conditioner 

CAUTION 危険
تذبييه
 HANDS OFF
 DON'T TOUCH AUTOMATIC FAN.
 自動ファンにつき、手を触れないで下さい。
 A BAS LES MAINS
 DU VENTILATEUR AUTOMATIQUE.
 NICHT BEROHRN
 AUTOMATISCH VENTILATOR.
لا تلمس المراجه الاوتوماتيكية

Z13208

⑨ Cab tilt reference

WARNING

When tilting and lowering the cab, strictly follow the instructions given below.

Releasing the cab lock
 Pull and firmly hold Lever A and, while holding Lever A, raise Lever B.

Faulty operation of the levers may damage the cab lock mechanism, making it impossible to lock the cab.

Tilting and lowering the cab
 Be sure to raise or lower the cab by holding Grip D. To tilt the cab, pull Lever C. When the cab is raised, be sure to engage Stopper E with the cab stay.

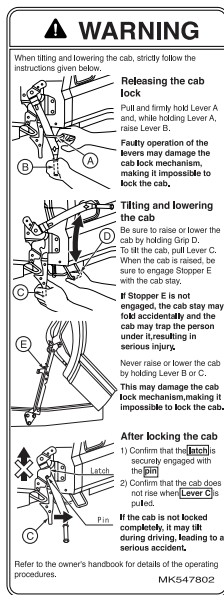
If Stopper E is not engaged, the cab stay may fold accidentally and the cab may trap the person under it, resulting in serious injury.

Never raise or lower the cab by holding Lever B or C. This may damage the cab lock mechanism, making it impossible to lock the cab.

After locking the cab
 1) Confirm that the **latch** is securely engaged with the **pin**.
 2) Confirm that the cab does not rise when **Lever C** is pulled.



If the cab is not locked completely, it may tilt during driving, leading to a serious accident.

Refer to the owner's handbook for details of the operating procedures. MK5-47802



Z14891

⑩ Cab tilt safety

WARNING  

TO ENSURE SAFETY, BE SURE TO FIT THE SAFETY SPRING BETWEEN THE CAB STAY AND THE LEVER.

Z11804

⑪ 33-gallon (125-liter) fuel tank


DIESEL FUEL ONLY

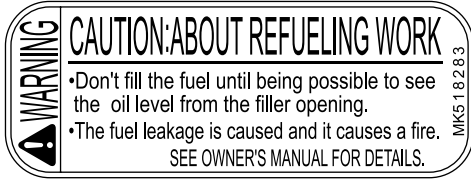
Z11678

⑫ Limited-slip differential 

MAKE USE OF LIMITED SLIP DIFFERENTIAL OIL

Z10707

- ⑬ 30-gallon (113-liter) fuel tank 



Z12494

3. Vehicle access

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