Towing and Road Service Guide For Lexus LS 460



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October 12, 2006

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AAA Towing and Roadside Assistance Guide for Lexus LS 460 October 12th, 2006

GENERAL TOWING INFORMATION

SPECIAL PRECAUTIONS:

- Lexus LS 460 vehicles are currently sold in two configurations, a standard and a long wheel base, LS 460L, both are only available in Rear Wheel Drive.
- Wheel-lift or car carrier equipment are authorized methods of towing this vehicle.
 A car carrier is the preferred method of transporting these vehicles; however,
 when wheel-lift equipment is used, a dolly is <u>recommended</u> under the front axle
 as trailing end clearances will be limited without. THERE IS NO APPROVED
 PROCEDURE FOR THE USE OF SLING-TYPE EQUIPMENT ON THIS
 VEHICLE.
- When loading or pulling the Lexus LS 460, DO NOT USE HOOKS OF ANY TYPE ON THE LOWER CONTROL ARMS OR ANY OTHER STEERING OR SUSPENSION COMPONENT. Follow only the approved loading procedures specified in the following pages.
- In an emergency situation where the vehicle will not roll or must be moved for towing access, wheel-jacking equipment, such as Go-Jacks are recommended.
- When parking this vehicle ensure that the transmission is in "PARK" and the parking brake is properly set. This vehicle does not use a conventional ignition key or key cylinder so the vehicle can be shut off and the key removed from the car without putting the transmission into the "PARK" position.

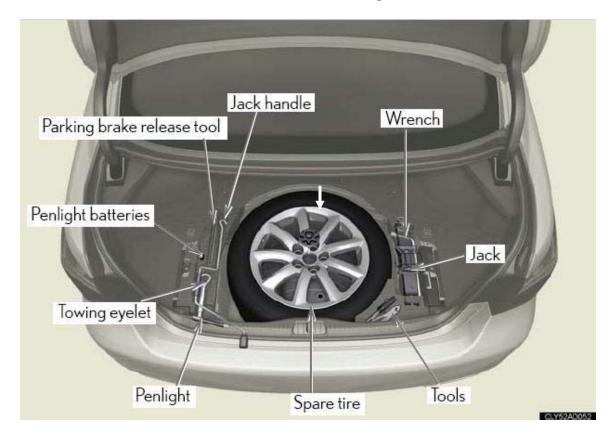
CAR CARRIER LOADING AND TRANSPORTING:

The use of car carrier equipment is the preferred method of transporting the new Lexus LS 460 vehicles.

CAUTION: The curb weight for the LS 460 is 4,244lbs. The LS 460L it is 4,332lbs.

The Lexus LS 460 has a standard ground clearance of 5.7 inches with the optional air suspension system functioning properly. Loading this vehicle onto a conventional car carrier may require additional ramping in some circumstances. However, clearance at the trailing end of the vehicle should always be monitored as it is loaded.

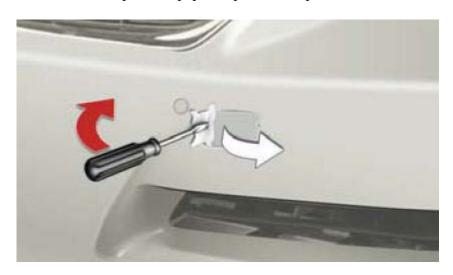
The towing eye bolt should be used for front loading of this LS series vehicle. The eye bolt is located in the tool kit in the center of the rear cargo area under the floor.



If the towing eyebolt is missing or otherwise inaccessible, the tie-down slots on the undercarriage can be used to load the vehicle. Eyebolts are available for purchase through any Lexus dealership parts department. Other towing and tie-down equipment shown in this guide is available through AW Direct, a AAA preferred supplier.



To install the eyelet correctly on this vehicle, start by carefully removing the eyelet receiver cap from the bumper. If a sharp, metal object like a screwdriver is used as shown below, use a cloth or piece of paper to protect the painted surfaces from scratches.

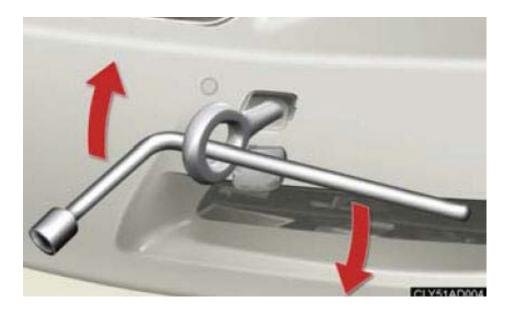


Although the receiver cap cover has a string type piece that holds it to the vehicle when it is removed, it is always a good idea to remove the assembly completely from the bumper. Stow the receiver cap in the vehicle either in the trunk, where the eyelet was stowed, or in a cup holder in the center console, so that it does not blow off the vehicle or get lost during transport.



NOTE: The eyebolt on this model has RIGHT-HAND THREADS. Screw the eye bolt clockwise into the receiver in the bumper and attach the winch line to the eyebolt with the open side of the hook facing upward when possible.

Ensure the eyelet is secure in the receiver by tightening it using the wheel lug wrench.

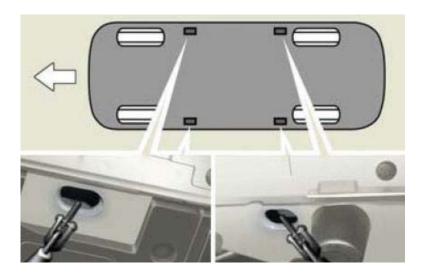


Before loading, ensure that the transmission is in "Neutral" and the ignition switch is in position to unlock the steering (operation of the keyless ignition switch is covered later on in this guide). When loading, remember that the eye bolts are designed for a straight ahead pull within a 20 degree window, so stop the vehicle as the winch wire rope begins to pull downward. To prevent too much downward pull you will need to keep the leading edge of the vehicle about 3 feet from the winch drum.

AAA recommends that these vehicles be secured using nylon straps around the wheels as these vehicles are available with an electronically operated air suspension system and any downward pull on the vehicle while the ignition is on will cause the suspension system to try and level out the vehicle, possibly causing damage to it.



If nylon straps are not available, there are "T" hook slots in the unibody structure of the vehicle that can be used to secure it during transport. The tow truck operator must ensure that the ignition is not switched on at any time the vehicle is secured to the tow truck using the "T" hook slots as this will activate the air suspension system on optionally equipped models.



After securing, return the bed to the transporting position, then slacken the winch wire rope slightly to prevent downward pull on the towing eye bolt as bumps are encountered during transport. Make sure that the ignition switch is turned to the OFF position to avoid unnecessary battery drain and to prevent air suspension from adjusting on vehicles with this optional system.

SHIFTER LOCK OVERRIDE

If there is a problem with the shifter or if the ignition key is not available, the transmission can be shifted out of the park position. This is accomplished by lifting out the small cover above the shifter "Park (P)" indicator and depressing the button below the cover to allow the shifter to be moved out of the Park position.



(Shifter with access plug in place)



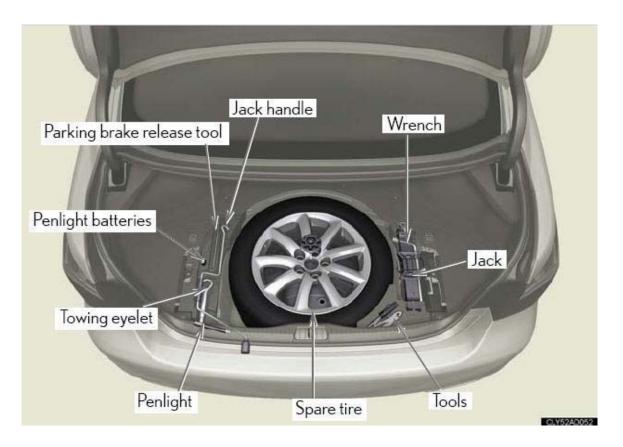
(with access plug removed)

ELECTRONIC PARKING BRAKE OVERRIDE

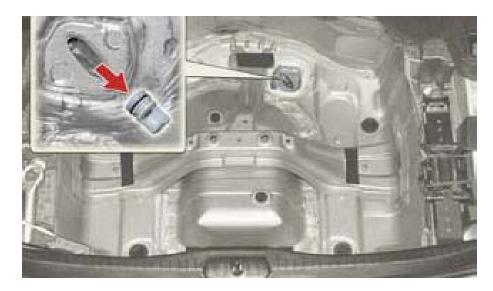
2007 and newer Lexus LS series vehicles are equipped with an electrically applied parking brake. Power is needed in the vehicle to apply and release the parking brake which can be set to function automatically when the vehicle is shifted in and out of PARK (P). In the event that the battery is discharged or the switch, mounted in the dash to the lower right of the steering wheel, will not release the parking brake, an override procedure is incorporated into the system.

The first step is to ensure there is battery power in the vehicle so perform your normal diagnostic procedure to ensure the battery is functioning. If there is any question as to the state of charge of the battery, hook your jump starting system to the vehicle following all the procedures outlined in the jump starting section of this service guide and your normal jump starting precautions. If ensuring battery power does not release the parking brake, it will need to be released manually using the following steps.

- Shift the shift lever to PARK (P)
- Turn the engine switch OFF by pressing the "ENGINE START STOP" button on the dash
- Check that the parking brake indicator, on the dash, is off.
- Chock the tires as the vehicle may roll once the parking brake is manually released.
- Open the trunk, remove the parking brake release tool and screwdriver handle from the tool kit.



- The access hole to release the parking brake mechanism is in the spare tire well so the removal of the spare tire is necessary.
- With the spare tire removed, remove the plug covering the access hole for the parking brake release mechanism.



• Insert the tool into the access hole until it engages with the release mechanism.



- Press the tool in firmly and turn the screwdriver handle counter clockwise until it stops.
- The parking brake should now be released.

WHEEL-LIFT TOWING PROCEDURE:

If a wheel-lift is used, the procedures shown below must be used with no exceptions.

CAUTION: The 2007 Lexus LS 460 vehicles are currently available in a Rear Wheel Drive configuration only. The rear wheels <u>MUST</u> be lifted during towing to prevent damage to the drive system on this vehicle.



The 2007 Lexus GS series vehicles have limited clearance on the front valance under the front bumper so it is recommended that a towing dolly should be installed under the trailing wheels when towing these vehicles with a wheel lift.

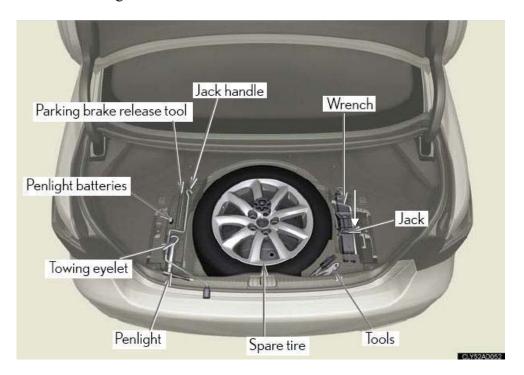
To tow the LS 460 with a wheel-lift and dolly, observe the following:

- Secure the one set of wheels firmly to the wheel-lift and the other set of wheels firmly to the dolly.
- After loading the LS 460 onto the dolly and wheel-lift, place the transmission selector in Park and set the parking brake.
- Use a steering wheel securing device to prevent possible excessive load on the steering column lock.
- Attach safety chains and tow lights to the vehicle being careful not to damage the painted surface with the tow lights.
- Ensure that the ignition switch is turned OFF to prevent unnecessary battery drain and to prevent the suspension system from operation on vehicles equipped with the optional air suspension system.

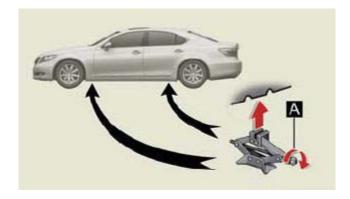
EMERGENCY ROAD SERVICE PROCEDURES

JACKING:

The jack supplied with the 2007 Lexus LS 460 vehicles is located under the trunk floor mat as shown in the figure below.



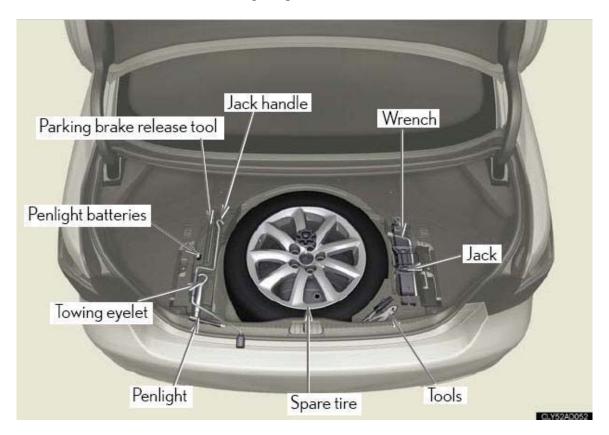
The approved lifting locations are on the pinch weld or rocker sills, located inboard of the wheels.



Place the jack in its proper location. Observe all standard jacking precautions and ensure that the vehicle is on firm, level ground. As the jack comes in contact with the vehicle body, ensure that it is contacting the correct location on the vehicle. Continue lifting to raise the vehicle high enough to change the tire.

TIRE SERVICE:

2007 Lexus LS 460 vehicles come with a full size spare tire as standard equipment. The spare tire is stored in a well in the trunk floor under trunk carpeting. See "Out of Fuel Service" for instructions on accessing the power trunk release switch.



When installing the spare wheel, follow all recommended procedures including cleaning of the hub and axle mating surfaces, tightening the lug nuts securely in a criss-cross pattern and checking the spare for proper inflation. The recommended torque on the lug nuts is 103 ft/lbs.

OUT OF FUEL SERVICE:

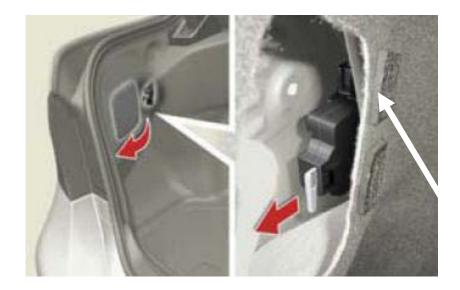
There are no special precautions needed to refuel a new Lexus LS vehicle, although it is important to take care not to damage the vehicle's finish during refueling. The fuel filler is located on the left-hand (driver's) side of the vehicle on the rear quarter panel and is covered by a locking door. A button with an image of a fuel pump, located on the lower left side of the dash below the left A/C vent, is used to unlatch the fuel door.



If the fuel filler door is inoperative due to a discharged battery or other trouble, there is an override pull cable in the luggage compartment on the left side behind a trim piece. Trunk access can be obtained by depressing the trunk release button on either the key fob or the button next to the fuel door release button on the dash. If the trunk does not open when the button is depressed, check the position of the power trunk release override switch in the glove box. This switch can disable the power trunk release feature on this vehicle. If the trunk still does not open, there is a key cylinder in the trunk lid above the rear license plate mounting location.



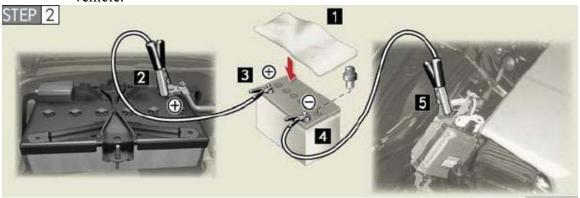
The manual override pull for the fuel door is accessible from inside the trunk. There is a removable cover over the left rear wheel well area of the trunk liner. Remove this cover and look for the release lever for the fuel door.



JUMP-STARTING:

The following jump-starting procedures should be followed when rendering assistance to a 2007 Lexus LS 460.

- Never use jump-starting equipment that can exceed normal 12-volt charging system voltage.
- Ensure that all electrical accessories and the ignition switch are turned OFF before connecting jumper cables or a jumper box to the discharged vehicle.
- Remove the engine compartment cover and the battery compartment cover.
- If using jumper cables, make connections in the following order:
 - 1. Connect the positive (+) jumper cable to the positive battery terminal of the discharged vehicle and to the positive (+) battery terminal of the donor vehicle or jumper box.
 - 2. Connect the negative (-) jumper cable to the negative battery terminal of the donor vehicle. (Skip this step if using a jumper box.)
 - 3. Connect the negative (-) cable to negative battery terminal of the discharged vehicle.



- Get into the vehicle and close all doors before attempting to turn the ignition on.
- Depress the "ENGINE START STOP" switch once, to get to the "IG-ON" mode.
- Depress and hold down the brake pedal.
- Press the "ENGINE START STOP" button one more time to start the vehicle.

NOTE: When the battery becomes discharged or disconnected on these vehicles the tire pressure monitoring system may need to be reset. To reset the system, park the vehicle in a safe location and turn the engine off. Ensure that the tires are at their proper pressure settings, this includes the spare tire. Start the engine. Press and hold the tire pressure warning reset switch, located on the lower side of the dash to the right of the steering wheel, for at least 3 seconds. The tire pressure warning light will flash 3 times and a message with be displayed in the dash to indicate that the system initialization has begun. Wait a few minutes until the information display shows the pressure for the vehicles tires, once it does, the system has been reset.

KEYLESS ENTRY AND KEYLESS IGNITION OPERATION:

The 2007 Lexus LS series vehicles do not require the operator to insert a key into a key cylinder to unlock a door or start the vehicle. These vehicles "sense" the proximity of the key and will unlock the door(s) with the key close to the vehicle and when contact is made with the outside door release handle. Once the keys are inside the vehicle the operator can now use the push button start/stop feature of this vehicle. When the onboard computer senses that proper key is in the vehicle, the green LED in the "ENGINE START STOP" button will illuminate. To turn the ignition to the accessory position, depress the button once and items like the radio or on-board navigation system will become active. A second press of the button will turn the vehicle to the "ON" position where items like the instrument gauges will operate. To start the vehicle, the operator needs to depress the brake pedal then press "ENGINE START STOP" button until the engine starts. To shut the engine off, depress the "ENGINE START STOP" button again.

If there is a problem with the transponder or the battery in the key fob, a display should appear in the middle of the instrument panel like the one shown below.



If this is occurring on a vehicle you encounter, ensure the vehicle is in "PARK", hold the key fob against the chrome ring around the "ENGINE START STOP" button, depress the brake pedal then depress the "ENGINE START STOP" button to start the vehicle. If the vehicle starts, ensure the operator knows to hold the key fob against the chrome ring to start the vehicle and then direct the operator to take the vehicle to the closest Lexus dealer to have the problem repaired.





If there is a problem with the keyless entry system, there is a key cylinder in the driver's side door to insert the removable metal key from the end of the key fob into to unlock the vehicle.



