

*Towing and
Road Service Guide
For
Lexus LS 600h L*



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Index

General Towing Information

| | |
|--|----|
| Special Precautions | 3 |
| Hybrid Component Location and Shut Off | 4 |
| Car Carrier Loading and Transporting | 6 |
| Shifter Lock Override | 8 |
| Electronic Parking Brake Override | 9 |
| Wheel-Lift Towing Procedure | 11 |

Emergency Road Service Information

| | |
|--|----|
| Jacking | 12 |
| Tire Service | 14 |
| Out of Fuel | 15 |
| Jump-Start Procedures | 17 |
| Keyless Entry and Keyless Ignition Operation | 19 |

AAA Towing and Roadside Assistance Guide for Lexus LS 600h L
June 15th, 2007

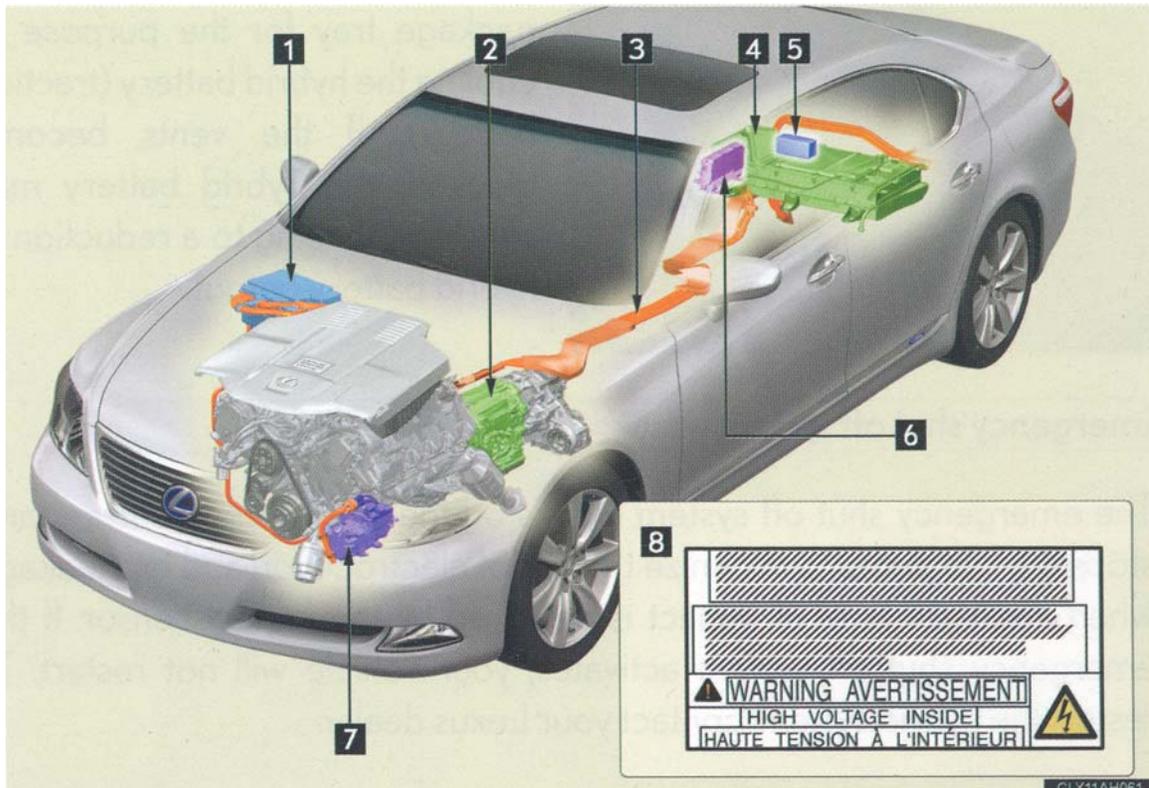
GENERAL TOWING INFORMATION

SPECIAL PRECAUTIONS:

- Lexus LS 600h L vehicles are currently sold in an All Wheel Drive version only.
- Wheel-lift and tow dolly 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 **required** due to the configuration of the All Wheel Drive drivetrain. **THERE IS NO APPROVED PROCEDURE FOR THE USE OF SLING-TYPE EQUIPMENT ON THIS VEHICLE.**
- When loading or pulling the Lexus LS 600h L, **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.

HYBRID COMPONENT LAYOUT AND SHUT-OFF:

The Lexus LS 600h L is a hybrid powered vehicle using an electric motor in addition to a gasoline engine to provide power to the vehicle. The diagram below shows the layout of the hybrid components in the vehicle. The wires shown in orange represent the cables which carry high voltage, up to 650 volts, between the electric motor, the storage battery and other hybrid components.



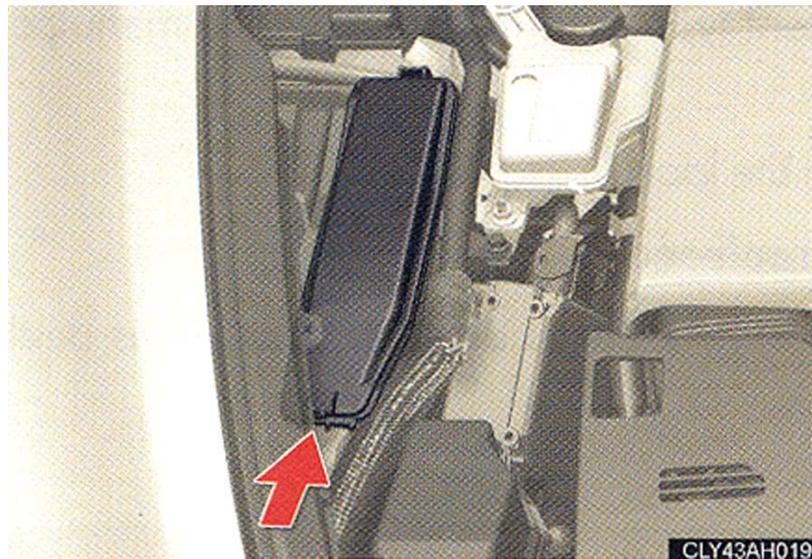
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|---------------------------------------|--|
| 1. Power Control Unit | 5. Service Plug |
| 2. Electric Motor (Traction Motor) | 6. DC/DC Converter |
| 3. High Voltage Cables (Orange color) | 7. Electrically powered A/C Compressor |
| 4. Hybrid Battery (Traction Battery) | 8. Caution Label |

There may be reason to disable the high voltage system in these vehicles to transport them after they have been involved in a crash. To do so, use one of the following methods:

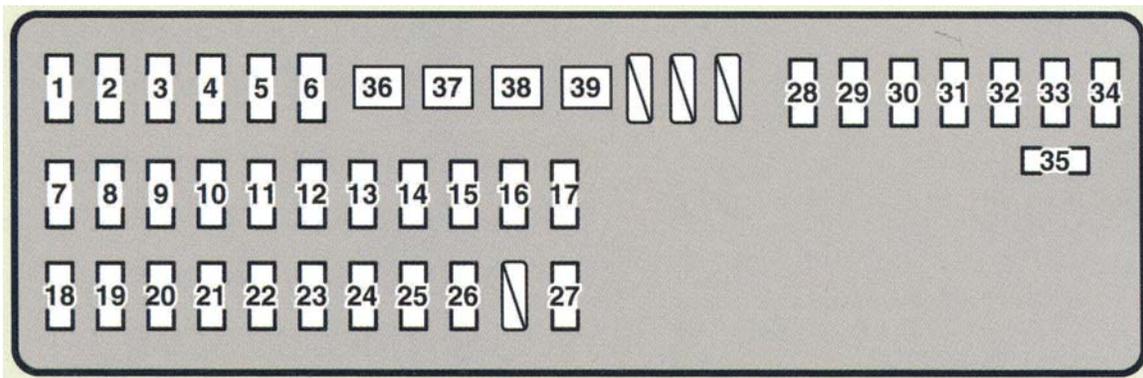
- Ensure that the “POWER” switch on the dash is “OFF” and the “READY” indicator on the instrument panel is not illuminated. If it is, depress the “POWER” switch to turn the car off. Open the trunk by either pressing the trunk release button on the lower left side of the dash or on the key fob and disconnect the negative cable from the 12 volt battery which is located on the left side of the trunk behind a removable trim panel. If the trunk will not open using either

electronic release methods, a metal key can be found in the key fob which can be used to open the trunk. The key cylinder is located above the license plate on the trunk lid.

- If access to the trunk is not available, the other method is to remove the IGCT 1 fuse from the underhood fuse panel. The fuse panel is located on the right (passenger's) side of the engine compartment under a removable trim panel.



Lift the fuse panel cover up and remove fuse number 4 which should be a 25 Amp fuse labeled IGCT 1.



CAR CARRIER LOADING AND TRANSPORTING:

The use of car carrier equipment is the preferred method of transporting the new Lexus LS 600h L vehicles.

CAUTION: The curb weight for the LS 600h L is 5,049lbs.

The Lexus LS 600H L has a standard ground clearance of 5 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 Lexus LS 600h L should be loaded using the “T” hook slots found in the torque box area of the frame. These slots may be covered with a black rubber plug from the factory.



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).

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, use the “T” hook slots in the unibody structure 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 vehicle 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)



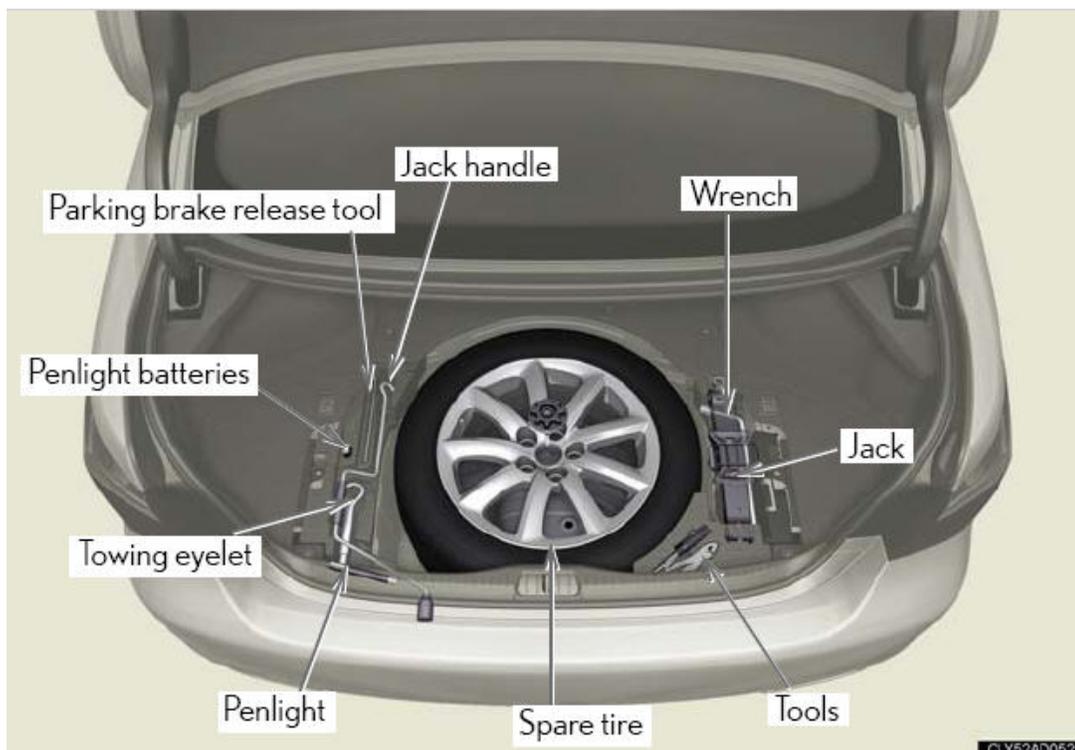
(with access plug removed)

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 2008 Lexus LS 600H L vehicles are currently available in a All Wheel Drive configuration only. All wheels MUST be lifted during towing to prevent damage to the drive system on this vehicle.



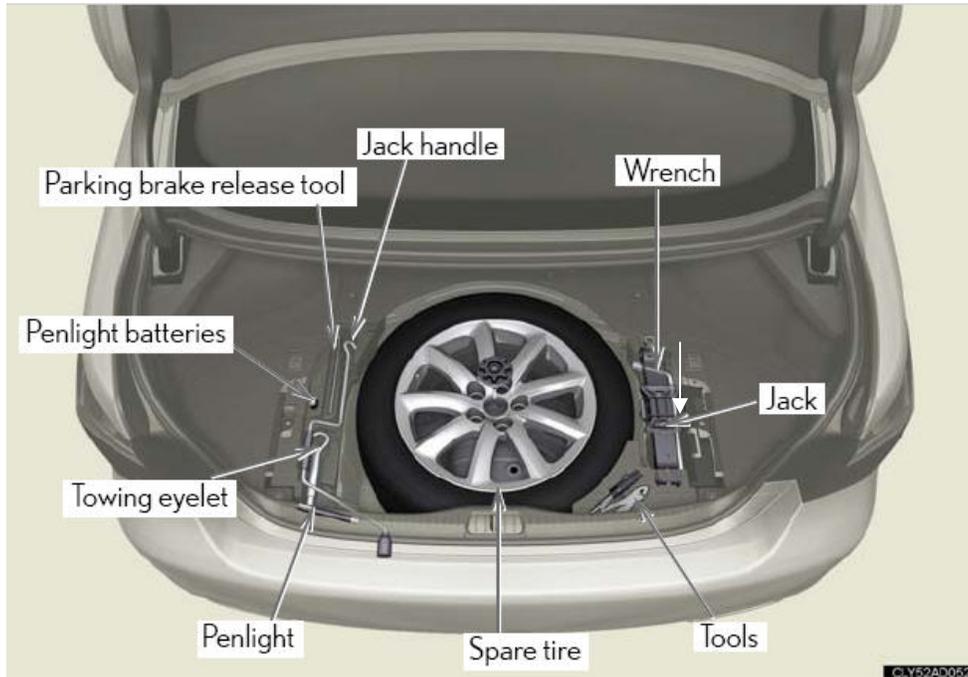
To tow the LS 600H L with a wheel-lift and dolly, observe the following:

- 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 600H L 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.

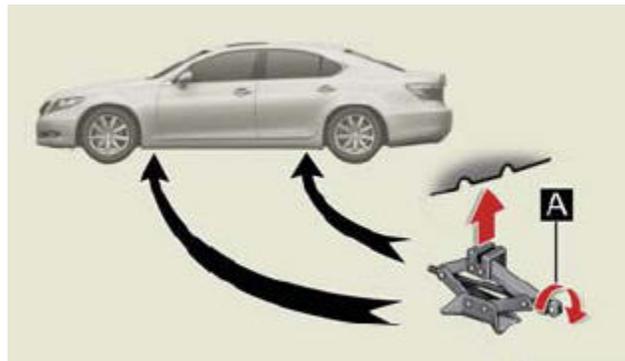
EMERGENCY ROAD SERVICE PROCEDURES

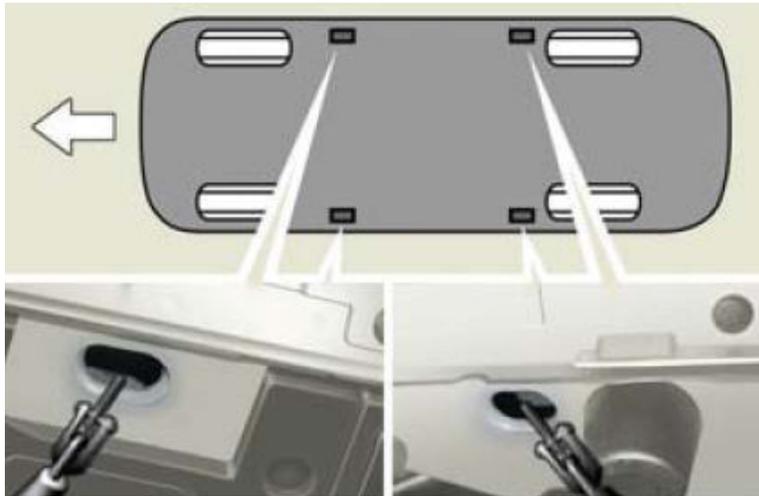
JACKING:

The jack supplied with the 2008 Lexus LS 600H L vehicles is located under the trunk floor mat as shown in the figure below.



The approved lifting locations for the factory style jack are on the pinch weld or rocker sills, located inboard of the wheels. If you are using a garage style floor jack you should lift on a solid location on the frame section. The area in the frame where the “T” hooks are located for towing and tie down are usually a good location for this style of jack. Avoid lifting on the pinch welds and any aluminum suspension components with a garage style floor jack. Failure to lift the vehicle in the correct location can result in expensive damage.

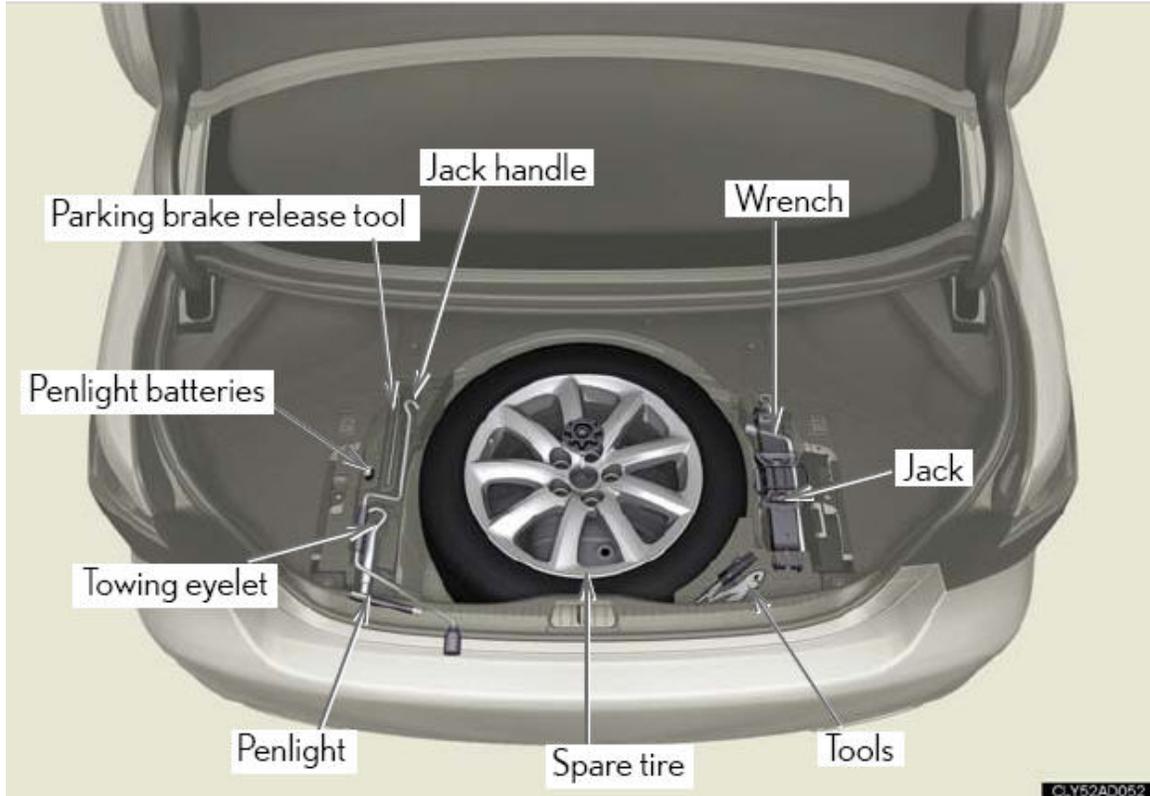




Place the jack in its proper location. Observe all standard jacking precautions which include blocking the wheel diagonal from the wheel you are lifting to help ensure the vehicle will not fall off the jack and ensure that the vehicle is on firm, level ground. As the jack comes in contact with the vehicle 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:

2008 Lexus LS 600H L 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 special precautions to be aware of when refueling a 2008 Lexus LS 600h L as the fuel tank has a special structure which requires a reduction in the fuel tank pressure before refueling. Before attempting to open the fuel filler door, ensure that the ignition is switched to “OFF” and that all of the doors and windows are closed. 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. Once the fuel filler door button is depressed it may take up to 10 seconds before the fuel filler door will open. This time is required to allow the fuel tank to depressurize. The multi information display should show when the fuel filler door is open. The fuel filler is located on the left-hand (driver’s) side of the vehicle on the rear quarter panel.



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.



If the fuel filling process takes more than 30 minutes, there is an internal valve in the fuel filler neck which shuts and does not allow filling to resume until the fuel filler door release button is depressed again. This feature is in place to prevent fuel vapors from escaping due to a non-installed fuel cap, thus preventing unnecessary emissions.

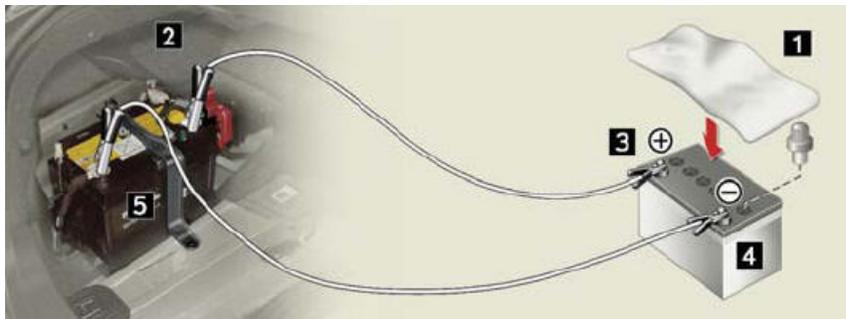
JUMP-STARTING:

The following jump-starting procedures should be followed when rendering assistance to a 2008 Lexus LS 600H L.

- 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.
- Open the trunk of the vehicle. If the battery is discharged to the point that the remote unlock will not function from either the key fob or the button on the dash, use the metal key housed in the key fob to unlock the trunk.



- The 12-volt battery is located on the left side of the trunk behind a removable trim panel.
- 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 “POWER” switch to the “ON” mode then start the hybrid system.

- Make sure the “READY” indicator comes on. If the indicator does not come on, tow the vehicle to a Lexus dealer for repair.
- Once the hybrid system has started, remove the jumper cables in the exact reverse order in which they were connected.

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 hybrid system off. Ensure that the tires are at their proper pressure settings, this includes the spare tire. Start the hybrid system. 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 will 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.

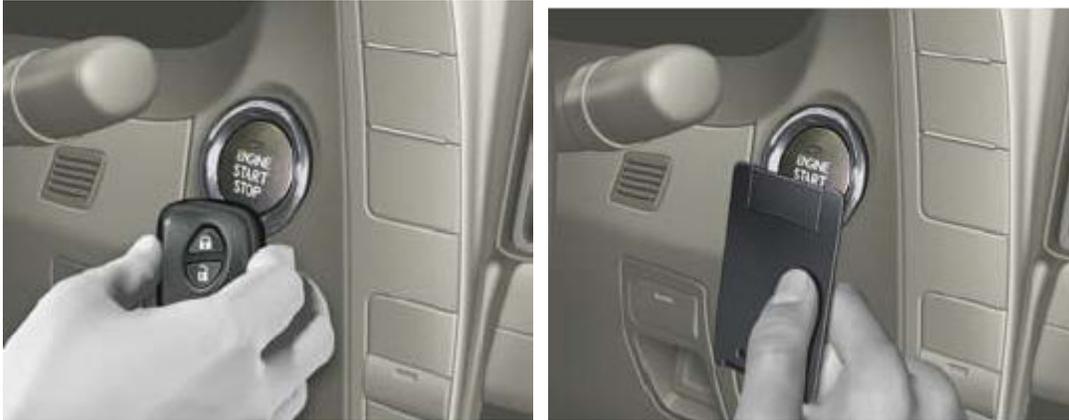
KEYLESS ENTRY AND KEYLESS IGNITION OPERATION:

The 2008 Lexus LS 600h L 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 (in most cases, within 2 feet) 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 on-board computer senses that proper key is in the vehicle, the green LED in the “POWER” 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 “POWER” button. An audible beep will be heard and the “READY” indicator in the middle of the dash will illuminate.

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 “POWER” button, depress the brake pedal then depress the “POWER” 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.

