

*Towing and  
Road Service Guide  
For  
Lexus LFA*



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January 4, 2011  
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**AAA Towing and Roadside Assistance Guide for Lexus LFA**  
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**GENERAL VEHICLE INFORMATION**

**SPECIAL PRECAUTIONS:**

- Lexus LFA vehicles use unique construction techniques and materials. Most of the body and chassis is constructed of aluminum or carbon fiber reinforced plastic. The result is a vehicle that is light weight but requires special handling.
- Lexus LFA vehicles use a specifically designed 4.8L V-10 engine mounted under the hood coupled to a 6 speed automated sequential gearbox mounted in the rear of the car to provide weight balance.
- Car carrier equipment is the only authorized methods of towing this vehicle. Due to the low profile of the vehicle and the unique construction components utilized to build this vehicle, additional ramping, care and time must be used when transporting.
- When loading or pulling the Lexus LFA, **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.
- **USE ONLY WHEEL STRAP TIE DOWNS** to secure this vehicle when transporting. The use of chains or hooks will damage under vehicle components.
- There is no override provision to get the transmission in a Lexus LFA into Neutral should there be a failure in the shifting mechanism.
- In an emergency situation where the vehicle will not roll or must be moved for towing access, wheel-jacking equipment, such as GoJaks are recommended. Due to the limited ground clearance of this vehicle, some models of GoJaks may not fit. It is recommended that GoJak model 4500 be used. Use care and caution when installing GoJaks on this vehicle.
- When parking this vehicle ensure that the transmission is in First or Reverse and the parking brake is properly set. This vehicle uses a paddle shifted sequential manual transmission and an electronically applied parking brake. The proper operation of these components is discussed in detail in this service guide.

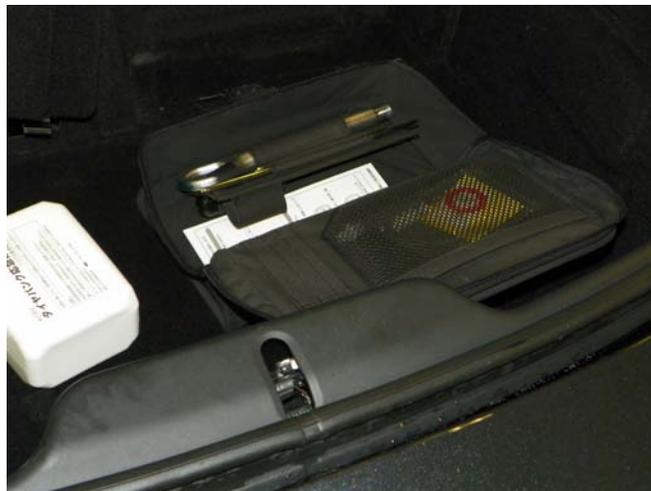
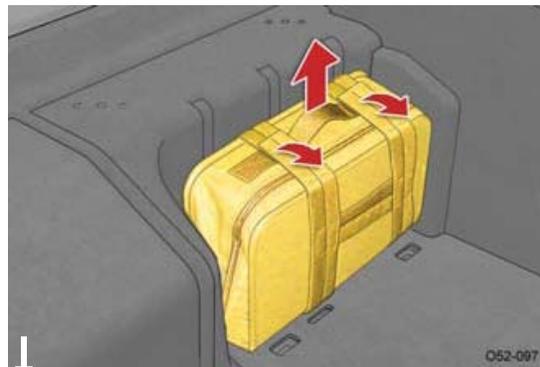
## CAR CARRIER LOADING AND TRANSPORTING:

The use of car carrier equipment is the only approved method of transporting the Lexus LFA.

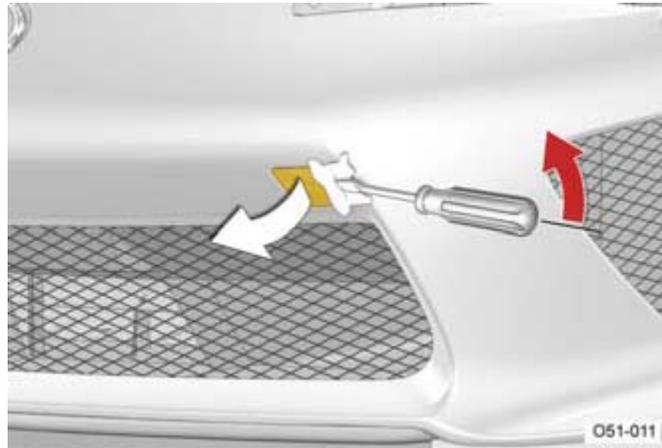
**The curb weight for the LFA is 3,483 lbs.**

The Lexus LFA has a standard ground clearance of 4.3 inches and an approach angle of 7.0 degrees. The average flatbed tow truck has a loading angle of 13 – 17 degrees with the bed down on a flat level surface. Additional ramping is required to load a Lexus LFA without causing damage. Clearance at the trailing end of the vehicle should always be monitored as it is loaded.

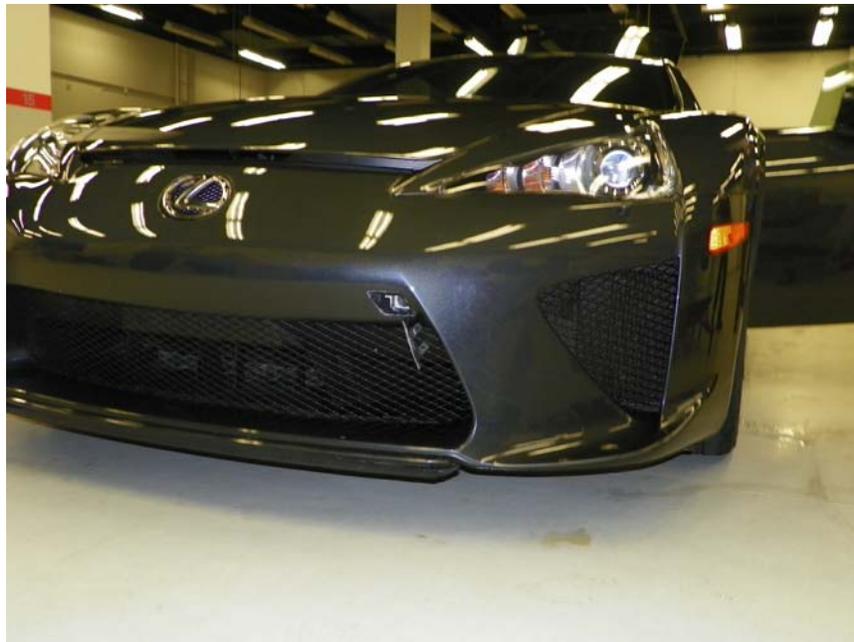
The towing eye bolt must be used for loading of this vehicle as there are not any attachment points under the vehicle. The eye bolt is located in the tool kit which is stowed under a removable cover on the right side forward portion of the rear cargo area.



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.



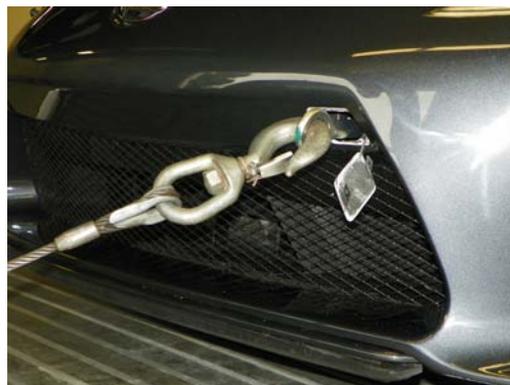
The eyelet has right-hand threads so it screws into the vehicle clockwise. It fits the receiver in both the front and rear bumpers. The front receiver is on the driver's side while the rear receiver is on the passenger's side of the vehicle. Make sure that the eyelet is tightened securely before loading the vehicle.



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.



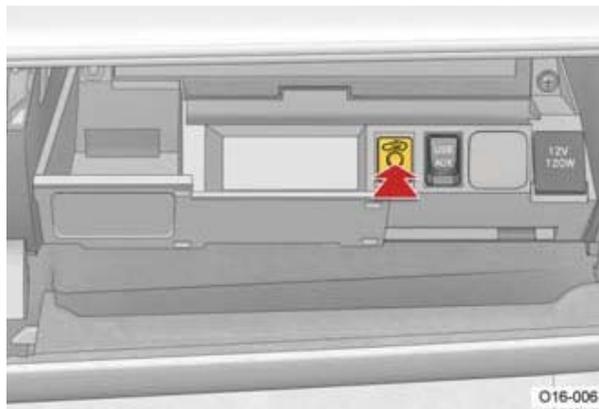
Attach your winch line hook to the eyelet ensuring there is no contact between the hook and the painted surface. Leave the winch line attached to the installed towing eyelet throughout the loading, transporting and unloading processes.



Before loading, ensure that the transmission is in “Neutral” and the ignition switch is in position to unlock the steering (Neutral position can be selected by pulling back paddle shifter handles. More information on the operation of the transmission is found later 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 2 feet from the winch drum.

When the vehicle is in its loaded position on the flatbed with the bed still in the deployed position, secure the vehicle to prevent it from rolling by chocking the wheels and attaching one wheel strap to the wheel closest to you then set the parking brake. The parking brake needs to be set with the vehicle in an inclined position for maximum park brake applied force (refer to Electronic Parking Brake Override information in this guide). In the event the parking brake does not function, secure the vehicle by placing the transmission in First or Reverse gear while secure the vehicle and tilting the bed. Once the bed is in its transport position and the vehicle is secured to the bed with four wheel strap tie-downs, place the transmission into Neutral to prevent gear loading during transport.

If the alarm activates while loading the vehicle, it is most likely caused by the tilt monitor in the anti-theft system. To deactivate the tilt sensor, remove the key from the ignition, open the glove box and press the tilt sensor switch. The tilt sensor is reactivated the next time the ignition is switched to the “ON” position.



These vehicles must be secured to the flatbed surface using nylon straps around the wheels as there is no provision for hooks or chains on this vehicle.



Clearance around the wheel is limited and careful routing of straps is needed to avoid contacting brake lines and wheel speed sensor wires, especially on the back side of the front wheels.



Due to the inset of the wheels and the width of the body, careful routing of the straps is important to avoid contact with the painted surface. You will notice in the two pictures above, the strap end that is traveling toward the middle of the car is routed on the outside of the bedrail. This was done to prohibit strap contact with the body of the vehicle. The end of the strap is secured into the bed tie-down slot from the underside.

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.

## **AUTOMATIC SEQUENTIAL GEARBOX OPERATION:**

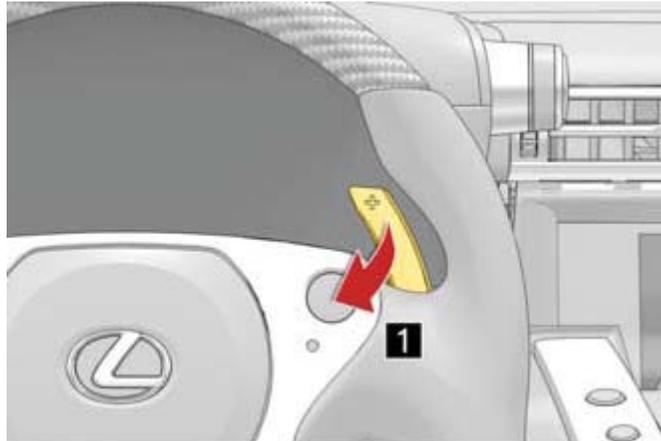
The Lexus LFA is equipped with a special transmission that operates as both an automatic transmission and a manual transmission. The mode which the transmission operates is selectable by the driver. For purposes of providing roadside assistance, only basic transmission operation is covered. For more information, refer to the vehicle owner's manual. All of the controls for the transmission are mounted on or near the instrument cluster. The layout of the controls is as follows: 1. Upshift paddle switch, 2. Downshift switch, 3. Reverse select switch, 4. Driving mode selector switch, 5. Shift speed selector.



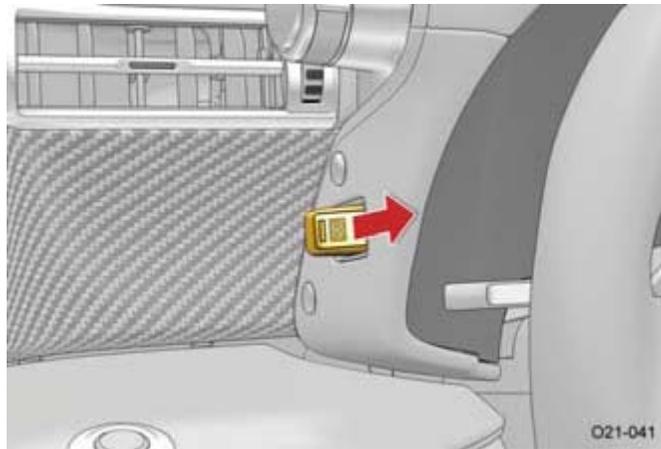
To shift the transmission into Neutral (“N”), turn the ignition to the ON position and pull both shift paddles toward you.



To shift the transmission into Drive (D1 or 1<sup>st</sup> gear) pull the Upshift paddle toward you.



To select Reverse, first ensure the vehicle is not rolling, then shift the transmission into Neutral (“N”). From Neutral (“N”) you can select Reverse (“R”) by pulling rearward on the Reverse switch located on the left of the instrument cluster.



When shutting off the vehicle, ensure that the transmission is set to either D1, 1<sup>st</sup> gear or Reverse (“R”) and set the parking brake before turning the engine off.

## ELECTRONIC PARKING BRAKE OVERRIDE

Lexus LFA vehicles are equipped with an electrically applied parking brake. The system uses a switch located on the lower right side of the instrument panel to send a signal to an electric motor which applies or releases the parking brake. The LFA has the ability to adjust the amount of tension on the park brake cable through the use of a tension sensor on the cable and an angle sensor in the vehicle. If the LFA is sitting on a level surface then moderate tension is applied to the parking brake when the switch is activated. If the switch is activated with the LFA on an incline, more tension is applied to the parking brake system to help hold the vehicle in position.

Power is needed in the vehicle to apply and release the parking brake. 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.



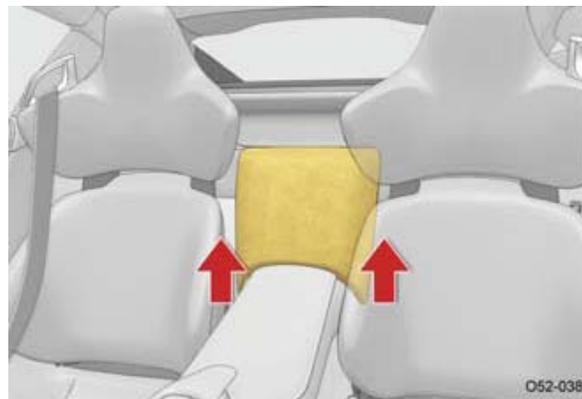
The first step is to ensure there is battery power in the vehicle, so perform your normal diagnostic procedure to ensure the battery is functioning. If there is any question as to the state of charge of the battery, hook your jump starting system to the vehicle following all the procedures outlined in 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.

- Turn the key to the “ON” position
- Shift the transmission into Neutral (“N”) by pulling rearward on both shifter paddles at the same time
- Turn the key to the OFF position

- Chock the tires as the vehicle may roll once the parking brake is manually released.
- Open the trunk and remove the parking brake release tool and screwdriver handle from the tool kit.



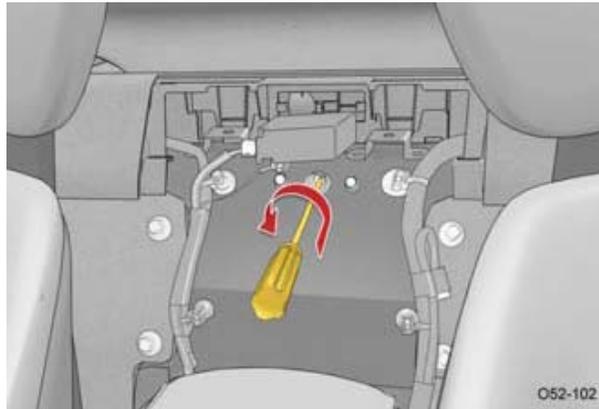
- The access hole to release the parking brake mechanism is in rear of the center console area between the seat backs



- Hold both sides of the bottom edge of the cover and lift to remove
- The access hole is between the two control modules under the cover
- Insert the tool until it bottoms out



- Press the tool in firmly and turn the screwdriver handle counter clockwise until it stops (approximately 30 full revolutions of the tool)



- The parking brake should now be released
- Re-applying the parking brake will reset the mechanism

## **WHEEL DOLLIES**

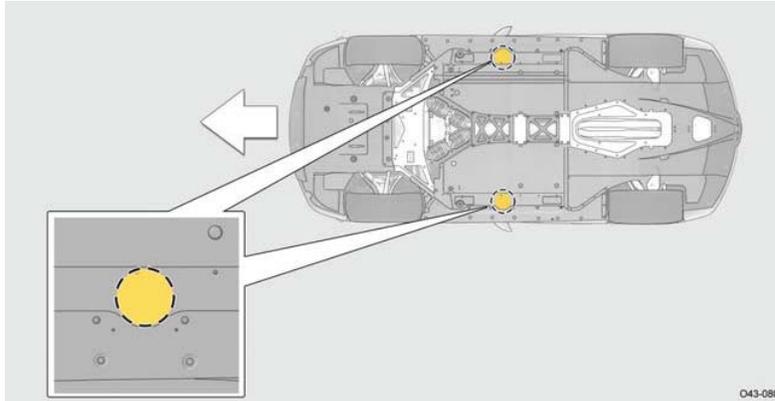
In the event that the transmission is locked in gear or a failure with the brake mechanism that cannot be overridden, wheel dollies such as “GoJaks” need to be used. Lexus recommends GoJak model 4500 because of their lower profile for moving the LFA (GoJak model comparison can be found at [www.zendextool.com/gojak](http://www.zendextool.com/gojak)). Tire skates can be used to assist with loading the vehicle however care must be taken when installing skates or GoJaks due to the limited clearance around the wheels and between the vehicle and the ground.



## EMERGENCY ROAD SERVICE PROCEDURES

### JACKING:

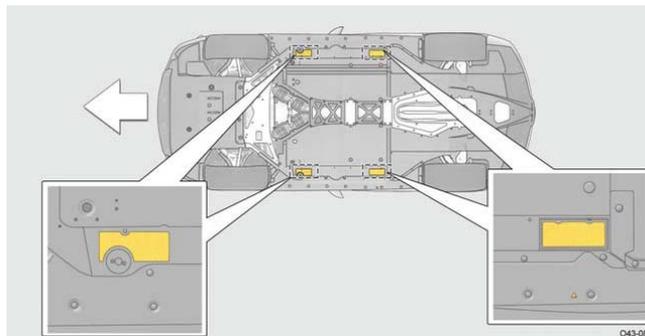
The Lexus LFA vehicle is not equipped with a jack from the factory and jacking in the field should be avoided unless absolutely necessary. Due to the materials used to construct the vehicle and its overall low clearance, extreme care must be taken if jacking needs to occur. The only permissible jacking locations on this vehicle are shown in the figure below.



The jack needs to be of the low profile design in order to fit under the LFA. With the jack fully lowered, the saddle cannot be higher than 3.1 inches in order to fit under the vehicle. Use of a rubber pad on the jack saddle is recommended to prevent damage at the contact point of the vehicle.

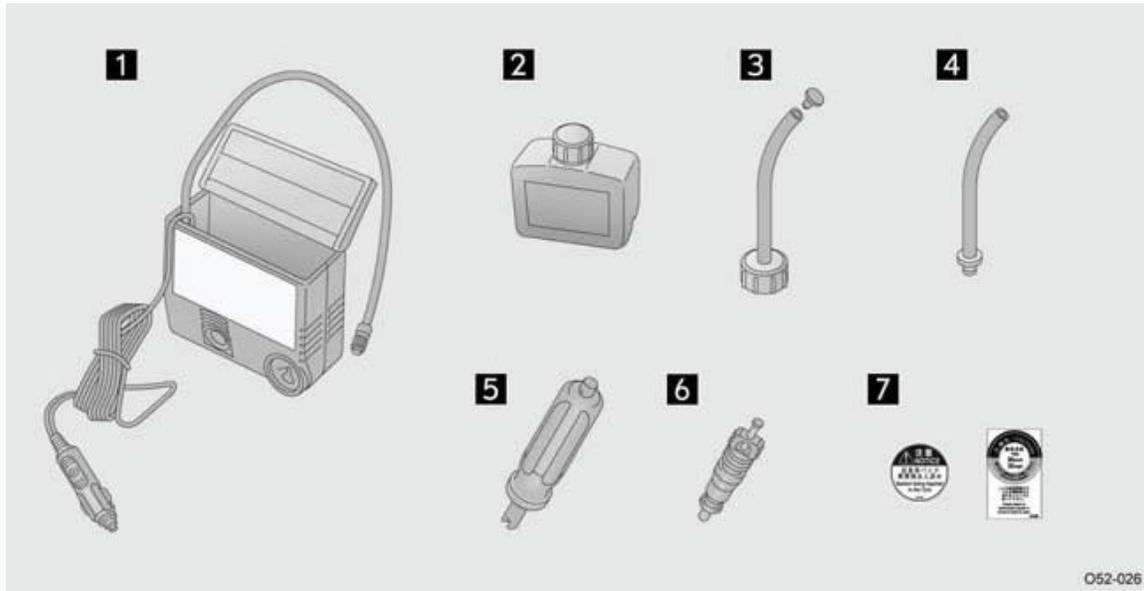
Place the jack in its proper location. Observe all standard jacking precautions and ensure that the vehicle is on firm, level ground and that the wheels are chocked. As the jack comes in contact with the vehicle body, ensure that it is contacting the correct location on the vehicle. Continue lifting to raise the vehicle high enough to execute the service that needs to be performed. The tilt sensor may need to be turned off when jacking the vehicle. Refer to page 7 for instructions on turning off the tilt sensor.

### JACK STAND LOCATIONS:



## TIRE SERVICE:

The Lexus LFA does not come equipped with spare tire; instead the vehicle is equipped with a tire inflation kit. The kit, which is part of the tool kit stored in the rear cargo area, contains a 12-volt air compressor, puncture sealant, an injector hose, an extension hose for extracting the sealant from the container, a valve core tool, a spare valve core and warning stickers.



Check the nature of the damage to the tire. The sealant is only to be used if the flat tire is a result of a nail or screw type puncture to the tire. If damage is greater than a small puncture in the main part of the tread area of the tire or if the tire shows signs of being driven on when deflated, tow the vehicle to a Lexus dealer or authorized repair facility to have the tire properly repaired.

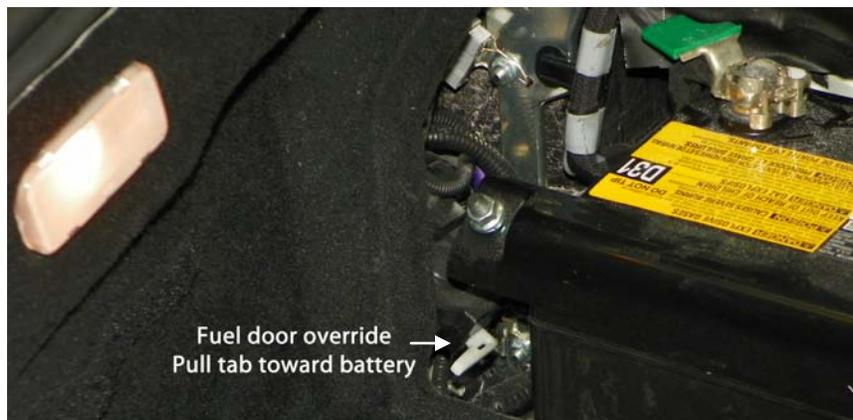
If the inflation kit is to be used, fully deflate the tire and remove the valve core using the valve core tool. Shake the sealant container vigorously for about 1 minute to ensure proper mixing of the sealant. Attach the injector tube to the container, remove the tube plug and attach the tube to the valve stem. Squeeze the sealant into the tire. Affix the small round warning sticker to the center of the wheel to alert service personnel that sealant has been applied to the tire. Reinstall the valve core and inflate the wheel using the compressor. After inflating the tire to its proper pressure, drive the vehicle for about 3 miles to ensure sealant has properly coated the inside of the tire. Stop and recheck tire pressure before allowing vehicle to proceed to repair facility for proper tire evaluation and repair. The larger warning sticker is meant to be placed on the inside of the windshield support pillar on the driver's side to warn the driver to proceed with caution at a speed not greater than 50 MPH to a Lexus dealer or authorized repair facility to get the tire properly repaired.

## OUT OF FUEL SERVICE:

There are no special precautions needed to refuel a Lexus LFA, 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 left side of the dash, is used to unlatch the fuel door.



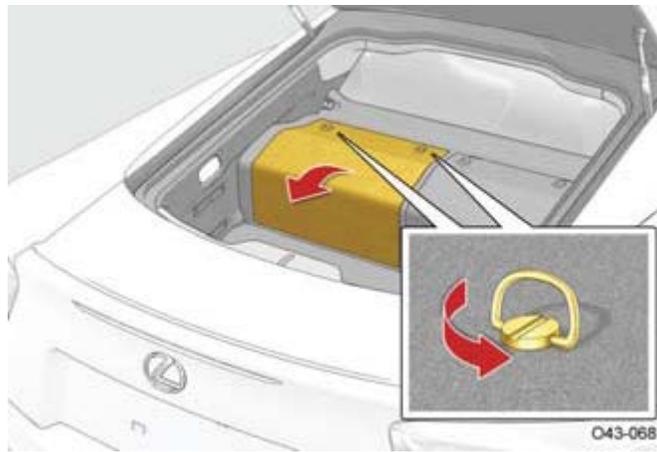
If the fuel filler door is inoperative due to a discharged battery or other trouble, there is an override in the cargo area on the left side behind the trim piece that covers the battery. Access to the cargo area can be obtained by depressing the cargo area release button above the fuel door release button on the dash. If the cargo area cover does not open when the button is depressed, refer to the override procedure listed on page 20.



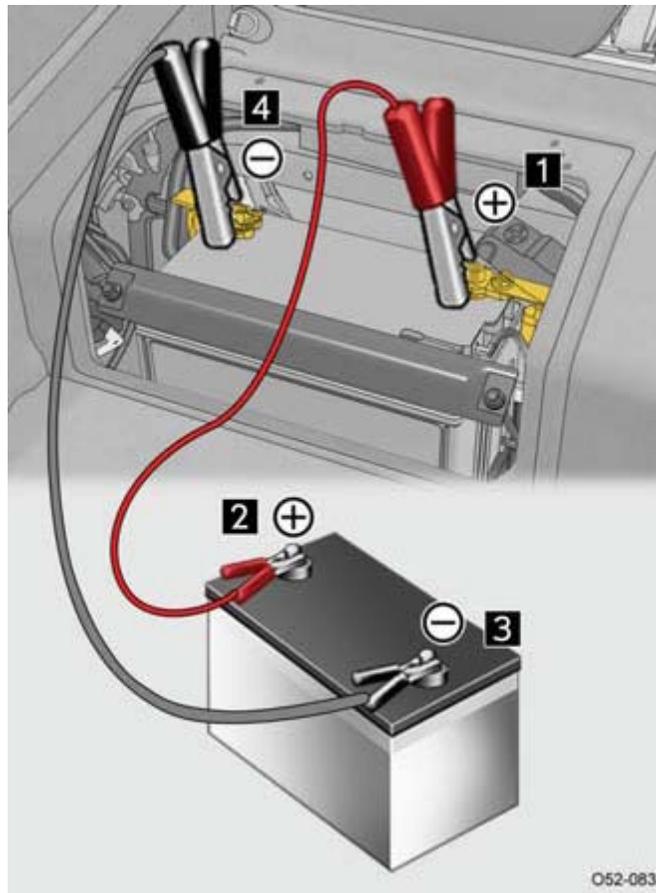
## JUMP-STARTING:

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

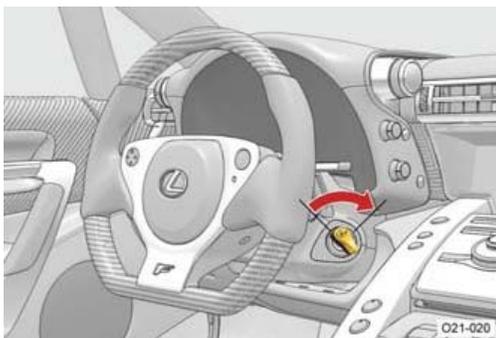
- Follow all normal jump-starting precautions as outlined in other AAA/CAA publications
- Ensure that all electrical accessories and the ignition switch are turned OFF and the ignition key is removed from the ignition before connecting jumper cables or a jumper box to the discharged vehicle
- Open the rear cargo area. If the battery is so discharged that the electric release will not function, refer to the rear cargo release override information on page 20
- Remove the battery compartment cover



- When jump-starting this vehicle, you need to connect the jumper cables directly to the battery due to the construction of the vehicle. Make the 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. **DO NOT CONNECT THE NEGATIVE TO THE BODY OF THE VEHICLE AS DAMAGE TO THE BODY MAY RESULT.**
  4. If using a jumper box with an ON/OFF switch, make the connection with the jumper box turned OFF.
- Get into the vehicle and close all doors before attempting to turn the ignition on

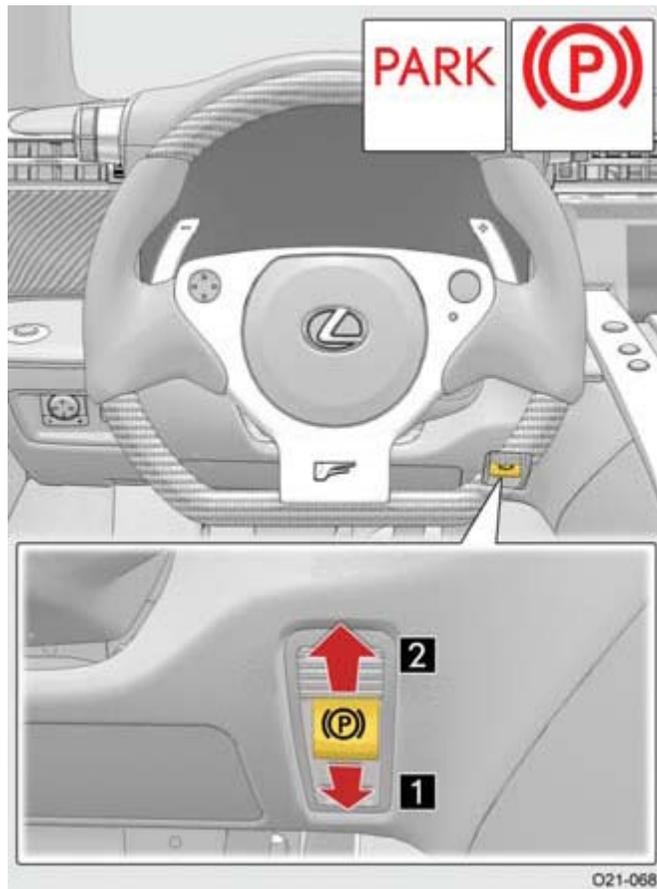


- Turn the ignition ON and shift the transmission into Neutral (“N”) by pulling rearward on both shifter paddles at the same time. Depress the brake pedal then press the “ENGINE START” button on the steering wheel. The engine should start





- If the engine starts, ensure that the parking brake is set before releasing the brake pedal and exiting the vehicle. Disconnect the jump-start connections in reverse order and reinstall any covers removed to access the battery



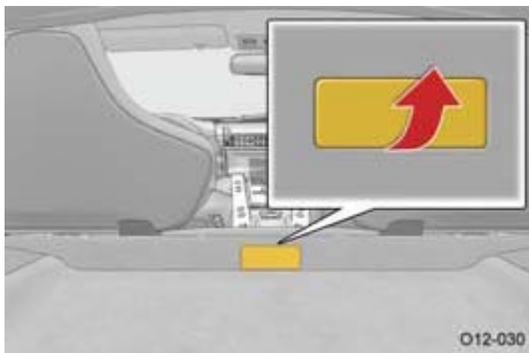
- If the engine fails to start, turn the key OFF and remove it from the ignition before checking the jump-start connections

## REAR CARGO AREA LID AND HOOD OPERATION:

The rear cargo compartment cover can be opened by pressing the cargo cover release button on the left side of the dash.



An override for this switch is provided in case this button does not function such as would be the case if the vehicle has a discharged battery. The override cable is located under a removable trim piece on the rear package tray.

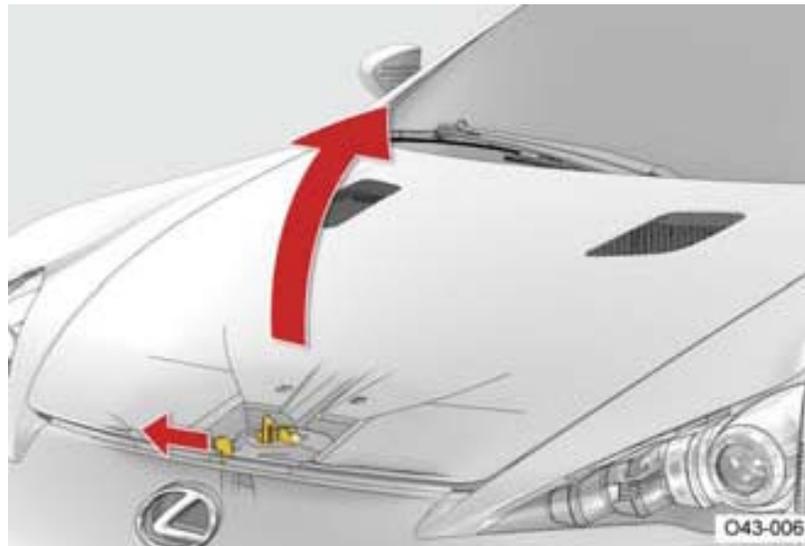


Pulling on the cable unlatches the rear cargo area cover.

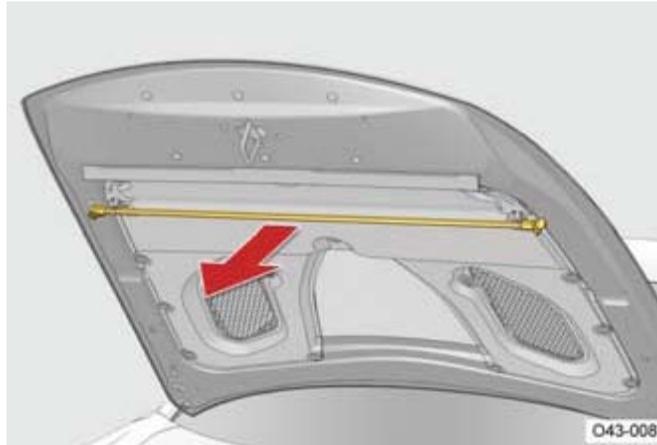
The hood release on the Lexus LFA is located on the lower left side of the dash.



The secondary hood release is located in the middle of the hood just rearward of the Lexus emblem. Use caution not to scratch the painted surface when operating the secondary latch mechanism.



The prop rod used to hold the hood up is stowed on the underside of the hood



The rod fits into a receiver in the forward portion of the passenger side fender as well as the underside of the hood. Use caution when installing the prop rod not to damage any of the surfaces.

