# SECTION 4

# **IN CASE OF AN EMERGENCY**

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# IF YOUR ENGINE STALLS WHILE DRIVING

#### If your engine stalls while driving . . . .

- 1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
- 2. Turn on your emergency flashers.
- 3. Try starting the engine again.

If the engine will not start, see "If your vehicle will not start".

# **♠** CAUTION

If the engine is not running, the power assist for the brakes and steering will not work, so steering and braking will be much harder than usual.

# IF YOUR VEHICLE WILL NOT START

## (a) Simple checks

Before making these checks, make sure you have followed the correct starting procedure instructions in "How to start the engine" on page 178 and that you have sufficient fuel. Since your vehicle is equipped with the engine immobiliser system, also check whether the other keys will start the engine. If they work, your key may be broken. Have the key checked at your Lexus dealer. If none of your keys work, the system is possibly broken. Call your Lexus dealer. See "Keys" on page 8.

# If the engine is not turning over or is turning over too slowly –

- 1. Check that the battery terminals are tight and clean.
- 2. If the battery terminals are O.K., switch on the interior light.
- 3. If the light is out, dim or goes out when the starter is cranked, the battery is discharged. You may try jump starting. See "(c) Jump starting" for further instruction.

If the light is O.K., but the engine still will not start, it needs adjustment or repair. Call a Lexus dealer, Roadside Assistance or Customer Service Assistance. (See "Foreword".)

#### **NOTICE**

Do not pull— or push—start the vehicle. It may damage the vehicle or cause a collision when the engine starts. Also the three—way catalytic converter may overheat and become a fire hazard.

If the engine turns over at its normal speed but will not start –

- 1. The engine may be flooded because of repeated cranking. See "(b) Starting a flooded engine" for further instructions.
- 2. If the engine still will not start, it needs adjustment or repair. Call a Lexus dealer, Roadside Assistance or Customer Service Assistance. (See "Foreword".)

## (b) Starting a flooded engine

If the engine will not start, your engine may be flooded because of repeated cranking.

If this happens, turn the key to "START" with the accelerator pedal held down. Continue this operation for 30 seconds and then stop cranking. Then try starting the engine with your foot off the accelerator pedal.

If the engine does not start after 30 seconds of cranking, release the key, wait a few minutes and try again.

If the engine still will not start, it needs adjustment or repair. Call a Lexus dealer, Roadside Assistance or Customer Service Assistance. (See "Foreword".)

#### **NOTICE**

Do not crank for more than 30 seconds at a time. This may overheat the starter and wiring systems.

## (c) Jump starting

To avoid serious personal injury and damage to your vehicle which might result from battery explosion, acid burns, electrical burns, or damaged electronic components, these instructions must be followed precisely.

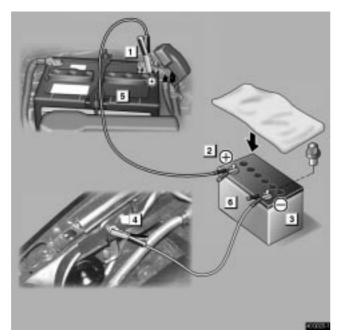
If you are unsure about how to follow this procedure, we strongly recommend that you seek help from your Lexus dealer, Roadside Assistance or Customer Service Assistance. (See "Foreword".).

## **CAUTION**

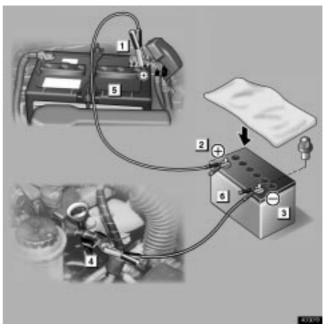
- Batteries contain sulfuric acid which is poisonous and corrosive. Wear protective safety glasses when jump starting, and avoid spilling acid on your skin, clothing, or vehicle.
- If you should accidentally get acid on yourself or in your eyes, remove any contaminated clothing and flush the affected area with water immediately. Then get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.
- The gas normally produced by a battery will explode if a flame or spark is brought near. Use only standardized jumper cables and do not smoke or light a match while jump starting.

#### **NOTICE**

The battery used for boosting must be 12 V. Do not jump start unless you are sure that the booster battery is correct.



► GS430 5 Discharged battery 6 Booster battery



► GS300 5 Discharged battery 6 Booster battery

JUMP STARTING PROCEDURE

1. If the booster battery is installed in another vehicle, make sure the vehicles are not touching. Turn off all unnecessary lights and accessories.

2. If required, remove all the vent plugs from the booster battery. Lay a cloth over the open vents on the booster battery. (This helps reduce the explosion hazard, personal injuries and burns.)

If the booster battery is an extended maintenance interval battery, it is not necessary to remove the vent plugs.

- 3. If the engine in the vehicle with the booster battery is not running, start it and let it run for about 5 minutes. During jump starting, run the engine at about 2000 rpm with the accelerator pedal lightly depressed.
- 4. Locate positive (+) and negative (-) terminals of each battery. Connect the jumper cables in the exact order ( 1 2
- **3 4** ) shown in the illustration.
- 1 Connect a positive (red) jumper cable clamp to the positive (+) terminal of the discharged battery.
- 2 Connect the clamp at the other end of the positive (red) cable to the positive (+) terminal of the booster battery.
- 3 Connect a negative (black) cable clamp to the negative (–) terminal of the booster battery.
- Connect the clamp at the other end of the negative (black) cable to a solid, stationary, unpainted metallic point (such as shown in the illustration) away from the battery. Do not connect it to or near any part that moves when the engine is cranked.

# **CAUTION**

When making the connections, to avoid serious injury, do not lean over the battery or accidentally let the jumper cables or clamps touch anything except the correct battery terminals or the ground.

- 5. Start your engine in the normal way. After starting, run it at about 2000 rpm for several minutes with the accelerator pedal lightly depressed.
- 6. Carefully disconnect the cables in the exact reverse order: the negative cable and then the positive cable.
- 7. Carefully dispose of the battery cover cloths which may now contain sulfuric acid.
- 8. If removed, replace all the battery vent plugs.

If the cause of your battery discharging is not apparent (for example, lights left on), you should have it checked.

## IF YOUR VEHICLE OVERHEATS

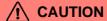
If your engine coolant temperature gauge indicates overheating, if you experience a loss of power, or if you hear a loud knocking or pinging noise, the engine has probably overheated.

#### When the engine overheats

Pull safely off the road, stop the vehicle and turn on your emergency flashers. Put the transmission in "P" and apply the parking brake.

#### A: If steam is coming from your engine:

Turn off the engine. Leave the hood closed until there is no sign of steam or coolant. Your engine could have been seriously damaged already. Call your Lexus dealer for assistance.



To help avoid personal injury, keep the hood closed until there is no steam. Escaping steam or coolant is sign of very high pressure.

#### B: If no steam is coming from your engine:

Leave the engine running and turn off the air conditioning. Check the following.

- Is the cooling fan operating?
- Is the coolant in the acceptable range?
- Is the engine drive belt O.K.?

# **CAUTION**

- When the engine is running, keep hands and clothing away from the moving fan and engine drive belt.
- Do not attempt to remove the radiator cap when the engine and radiator are hot. Serious injury could result from scalding hot fluid and steam blown out under pressure.

If the cooling fan is not operating or the coolant is not in the acceptable range, turn off the engine and call your Lexus dealer.

If both conditions are O.K., after the engine coolant temperature has cooled to normal, continue driving your vehicle.

If the engine coolant temperature does not cool down, or your vehicle overheats again, have it checked as soon as possible by your Lexus dealer.

## IF YOU HAVE A FLAT TIRE

- 1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place well away from the traffic. Avoid stopping on the center divider of a highway. Park on a level spot with firm ground.
- 2. Stop the engine and turn on your emergency flashers.
- 3. Firmly set the parking brake and put the transmission in "P".
- 4. Have everyone get out of the vehicle on the side away from traffic.
- 5. Read the following instructions thoroughly.

# <u>√</u> C

#### **CAUTION**

When jacking, be sure to observe the following to reduce the possibility of personal injury:

- Follow jacking instructions.
- Do not put any part of your body under a vehicle supported by a jack. Personal injury may occur.
- Do not start or run the engine while your vehicle is supported by the jack.

- Stop the vehicle on a level firm ground, firmly set the parking brake and put the transmission in "P". Block the wheel diagonally opposite to the one being changed if necessary.
- Make sure to set the jack properly in the jack point.
   Raising the vehicle with jack improperly positioned will damage the vehicle or may allow the vehicle to fall off the jack and cause personal injury.
- Never get under the vehicle when the vehicle is supported by the jack alone.
- Use the jack only for lifting your vehicle during wheel changing.
- Do not raise the vehicle with someone in the vehicle.
- When raising the vehicle, do not put an object on or under the jack.
- Raise the vehicle only high enough to remove and change the tire.

#### NOTICE

Do not continue driving with a deflated tire. Driving even a short distance can damage a tire and wheel beyond repair.



▶ 1 Tool bag 2 Jack 3 Wrench 4 Jack handle 5 Spare tire

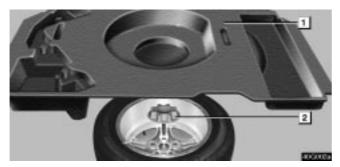
#### 1. Get the jack, wrench and spare tire.

To prepare yourself for an emergency, you should familiarize yourself with the use of the jack and each tool, and their storage locations.



▶ 1 Joint

- 2 When removing the jack, turn the joint by hand in the "contract" direction until the jack is free.
- 3 When storing, turn the joint by hand in the "expand" direction until the jack is firmly secured to prevent it from flying forward during a collision or sudden braking.



To remove the spare tire:

- 1 Remove the luggage tray.
- 2 Loosen the bolt and remove it.

When storing the spare tire, place it with the inner side of the wheel facing up. Then bolt the tire in place and install the luggage tool box to prevent the tire from flying forward during a collision or sudden braking.



2. Block the wheel diagonally opposite the flat tire to keep the vehicle from rolling when it is jacked up.

When blocking the wheel, place a wheel block in front of the front wheels or behind the rear wheels.

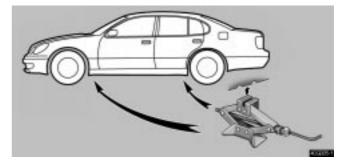


#### 3. Loosen all the wheel nuts.

Always loosen the wheel nuts before raising the vehicle.

Turn the wheel nuts counterclockwise to loosen them. To get maximum leverage, fit the wrench to the nut so that the handle is on the right side, as shown above. Grab the wrench near the end of the handle and pull up on the handle. Be careful that the wrench does not slip off the nut.

Do not remove the nuts yet – just unscrew them about one–half turn.



4. Position the jack at the jack points as shown.

Make sure the jack is positioned on a level and solid surface.



5. After making sure no one is in the vehicle, raise it high enough so that the spare tire can be installed.

Allow for the fact that you need more ground clearance when putting on the spare tire than when removing the flat tire.

To raise the vehicle, insert the jack handle into the jack (it is a loose fit) and turn it clockwise. As the jack touches the vehicle and begins to lift, double—check that it is properly positioned.

# **!** CAUTION

Never get under the vehicle when the vehicle is supported by the jack alone.



6. Remove the wheel nuts and remove the flat tire.

Lift the flat tire straight off and put it aside.



Before putting on the wheel, remove any corrosion on the mounting surfaces with a wire brush or such. Installation of wheels without good metal—to—metal contact at the mounting surface can cause wheel nuts to loosen and eventually cause a wheel to come off while driving.



#### 7. Reinstall all the wheel nuts finger tight.

Align the holes in the wheel with the bolts. Then lift up the wheel and get at least the top bolt started through its hole. Wiggle the tire and press it back over the other bolts.

Reinstall the wheel nuts and tighten them as much as you can by hand. Press the tire back and see if you can tighten them more.



# 8. Lower the vehicle completely and tighten the wheel nuts.

Turn the jack handle counterclockwise to lower the vehicle.

Use only the wheel nut wrench to tighten the nuts. Do not use other tools or any additional leverage other than your hands, such as a hammer, pipe or your foot. Make sure the wrench is securely engaged over the nut.

Tighten each nut a little at a time in the order shown. Repeat the process until all the nuts are tight.

# **!** CAUTION

- When lowering the vehicle, make sure all portions of your body and all other persons around will not be injured as the vehicle is lowered to the ground.
- As soon as possible after changing wheels, have the wheel nuts tightened by torque wrench at 103 N-m (10.5 kgf-m, 76 ft-lbf.).

9. After changing the wheel, check the air pressure of the replaced tire. Stow all the tools, jack and flat tire securely.

If the pressure of the replaced tire is low, drive slowly to the nearest service station and fill to the correct pressure.

Do not forget to reinstall the tire valve cap as dirt and moisture could get into the valve core and possible cause air leakage. If the cap is missing, put a new one on as soon as possible.

This is the same procedure for changing or rotating your tires.

## **CAUTION**

- When reinstalling a standard tire, take due care in handling the ornament to avoid unexpected personal injury.
- Before driving, make sure all the tools, jack and flat tire are securely in place in their storage location to reduce the possibility of personal injury during a collision or sudden braking.

# IF YOUR VEHICLE NEEDS TO BE TOWED

If towing is necessary, we recommend you to have it done by your Lexus dealer or a commercial tow truck service. In consultation with them, have your vehicle towed using either (a) or (b).

- (a) Towing with a wheel lift type truck
- (b) Using a flat bed truck
- (c) Never tow with a sling type truck

Only when you cannot receive a towing service from a Lexus dealer or commercial tow truck service, tow your vehicle carefully in accordance with the instructions given in "(d) Emergency towing" on page 224.

Proper equipment will help ensure that your vehicle is not damaged while being towed. Commercial operators are generally aware of the state/provincial and local laws pertaining to towing.

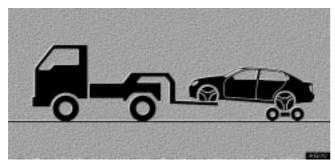
Your vehicle can be damaged if it is towed incorrectly. Although most operators know the correct procedure, it is possible to make a mistake. To avoid damage to your vehicle, make sure the following precautions are observed. If necessary, show this page to the tow truck driver.

#### **TOWING PRECAUTIONS:**

Use a safety chain system for all towing, and abide by the state/provincial and local laws. The wheels and axle on the ground must be in good condition. If they are damaged, use a towing dolly.

## (a) Towing with a wheel lift type truck

#### From front

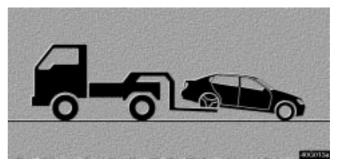


Use a towing dolly under the rear wheels.

#### NOTICE

Never tow a vehicle with an automatic transmission from the front with rear wheels on the ground, as this may cause serious damage to the transmission.

#### • From rear

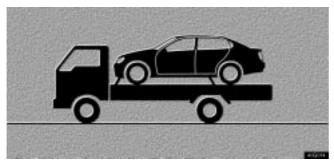


Place the ignition key in the "ACC" position.

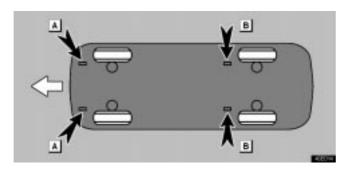
#### NOTICE

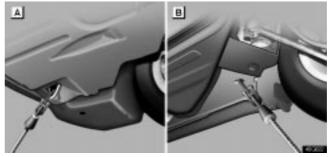
- Do not tow with the key removed or in the "LOCK" position, as the steering lock mechanism is not strong enough to hold the front wheels straight.
- When lifting wheels, take care to ensure adequate ground clearance for towing at the opposite end of the raised vehicle. Otherwise, the bumper and/or underbody of the towed vehicle will be damaged during towing.

# (b) Using a flat bed truck



• Tie down points





If your Lexus is transported by a flat bed, it should be tied down at locations A and B as shown above.

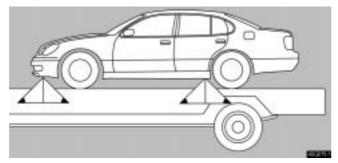


► Rear emergency towing eyelets

## NOTICE

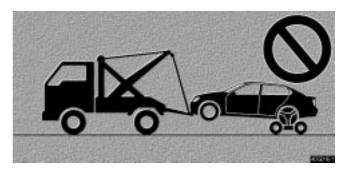
Do not use the rear emergency towing eyelets.

## • Tie down angle



If you use chains or wires to tie down your vehicle, the angles shaded black must be at  $45\,^{\circ}.$ 

# (c) Towing with a sling type truck



## NOTICE

Do not tow with a sling type truck, either from the front or rear. This may cause body damage.

### (d) Emergency towing



If towing is necessary, we recommend you to have it done by your Lexus dealer or a commercial tow truck service.

If towing service is not available in an emergency, your vehicle may be temporarily towed by a cable or chain secured to the emergency towing eyelet. Use extreme caution when towing the vehicle.

A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard–surfaced roads for a short distance and at low speeds. Also, the wheels, axles, drive train, steering and brakes must all be in good condition.

# **CAUTION**

Use extreme caution when towing the vehicle. Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing eyelet and towing cable or chain. The eyelet and towing cable or chain may break and cause serious injury or damage.

#### NOTICE

Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing eyelet provided.

Before towing, release the parking brake and put the transmission in "N". The ignition key must be in "ACC" (engine off) or "ON" (engine running).

# **CAUTION**

If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.

# IF YOU CANNOT SHIFT AUTOMATIC TRANSMISSION SELECTOR LEVER



If you cannot shift the selector lever, use the shift lock override button as follows:

1 Turn the ignition key to "LOCK" or "ACC". Make sure the parking brake is applied. Pry up the cover with a flat—bladed screwdriver or equivalent.



2 Insert your finger, the screwdriver or equivalent into the hole to push down the shift lock override button. You can shift the selector lever while pushing the button.

## For your safety, keep the brake pedal depressed.

Be sure to have the system checked by your Lexus dealer as soon as possible.

# IF YOU LOSE YOUR KEYS OR LOCK YOURSELF OUT

You can purchase a new key at your Lexus dealer if you can give them the key number and master key.

Even if you lose only one key, contact your Lexus dealer to make a new key. If you lose all your master keys, you cannot make new keys; the whole engine immobiliser system must be replaced.

See the suggestion given in "Keys" on page 8.

You can use the wireless remote control system with the new key. Contact your Lexus dealer for detailed information.

If your keys are locked in the vehicle and you cannot get a duplicate, many Lexus dealers can still open the door for you, using their special tools. If you must break a window to get in, we suggest breaking the smallest side window because it is the least expensive to replace. Be extremely cautious to avoid cuts from the glass.