



Hybrid Emergency Response Information

Presentation Overview

- Hybrid Operation
- Hybrid Identification
- Hybrid Components
- Starting/Shutting Off Procedures
- Vehicle Operation
- High Voltage Safety
- Supplemental Restraint Systems
- Extrication
- Submersion
- Fire
- Spills
- Recovery/Recycling/Disposal
- First Aid
- Roadside Assistance

2006 Toyota Highlander Hybrid

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Hybrid Emergency Response Information

Hybrid Operation

- Power sources
- Energy sources
- High voltage battery recharging
- High voltage electricity
- Running silent

2004 Toyota Prius

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Hybrid Emergency Response Information

TOYOTA Hybrid Models

- 2001 - 2003 **PRIUS**
- 2004 - **PRIUS**
- 2006 - **HIGHLANDER**
- 2007 - **CAMRY**

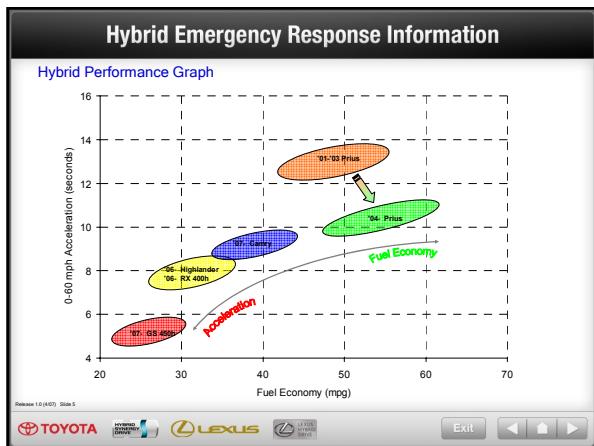
LEXUS Hybrid Models

- 2006 - **RX 400h**
- 2007 - **GS 450h**
- 2008 - **LS 600hL**

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TOYOTA HYBRID LEXUS HYBRID

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Hybrid Emergency Response Information

Hybrid Exterior Identification

Exterior body

Hybrid badging

TOYOTA Hybrids:

- Identified by Hybrid Synergy Drive and Hybrid badging.

LEXUS Hybrids:

- Identified by model badge designation "h", and Hybrid badging.

2001 Toyota Prius

2004 Toyota Prius

2007 Toyota Camry

2007 Lexus GS 450h

HYBRID

HYBRID SYNERGY DRIVE

HYBRID

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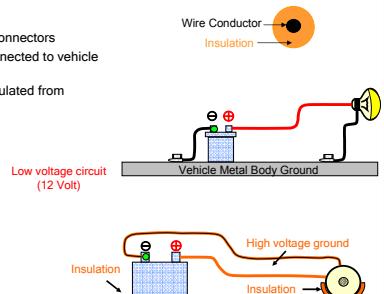
TOYOTA HYBRID LEXUS HYBRID

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Hybrid Emergency Response Information

High Voltage Safety

- Insulated cables and connectors
 - Low voltage wiring connected to vehicle body ground
 - High voltage wiring insulated from vehicle body ground



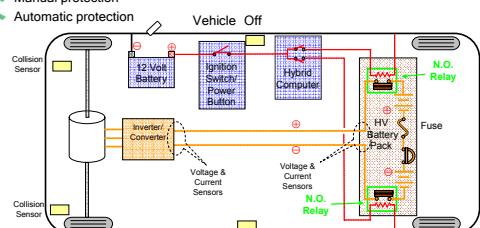
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Hybrid Emergency Response Information

High Voltage Safety

- Hybrid vehicle high voltage circuit
 - Vehicle Off
 - Vehicle On
 - Manual protection
 - Automatic protection



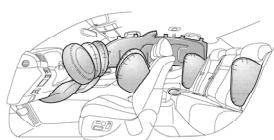
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Hybrid Emergency Response Information

Supplemental Restraint System

- SRS standard and optional equipment
 - Airbag identification
 - 90 second SRS reserve time
 - Rear cushion airbag (optional)
 - Pre-collision safety system (option)



WARNING:

- To prevent serious injury or death from unintentional SRS deployment, avoid crushing, cutting or breaching the SRS components.



Rear passenger seat
cushion airbag

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Hybrid Emergency Response Information

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Hybrid Emergency Response Information

Extrication

Access Patients

- High voltage concerns
- Laminated side windows



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Hybrid Emergency Response Information

Submersion

Extrication

- Access patients

Vehicle Recovery

- Remove the vehicle from the water
- Drain the water from the vehicle if possible
- Follow immobilizing and disal



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Hybrid Emergency Response Information

Fire

Extinguishing agent

Initial fire attack

Fire in the high voltage battery pack

- Offensive fire attack
- Defensive attack



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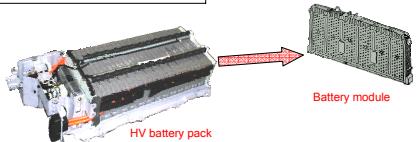


Hybrid Emergency Response Information

Spills

- NiMH battery modules
- Personal protective equipment
- Neutralize NiMH electrolyte
- MSDS availability

WARNING:
The NiMH battery electrolyte is a caustic alkaline (pH 13.5) that is damaging to human tissues. To avoid injury by coming in contact with the electrolyte, wear proper personal protective equipment.



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Hybrid Emergency Response Information

Recovery/Recycling/Disposal

- High voltage NiMH battery pack recycling
- Toyota/Lexus dealer
- Toyota/Lexus customer assistance

United States:

Toyota (800) 331-4331

Lexus (800) 255-3987

Canada:

Toyota (888) 869-6828

Lexus (800) 265-3987



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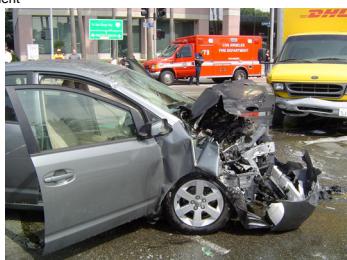
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Hybrid Emergency Response Information

First Aid

- NiMH battery electrolyte
- Personal protective equipment
- Absorption
- Inhalation
- Ingestion



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Hybrid Emergency Response Information

Roadside Assistance

- Towing
 - Flat bed trailer
 - Keep drive wheels off the ground
 - Various drive configurations

	Model	Model Year	Front Wheel Drive	All Wheel Drive	Rear Wheel Drive
	PRIUS	01 - 03	Standard		
	PRIUS	04 -	Standard		
	HIGH FLEET		Available		
	CAMRY	03 -	Standard		
	RX 400h	06 -	Available	Available	
	GS 450h	07 -			Standard
	LS 600hL	08 -		Standard	

- Jump Starting
 - Similar to non-hybrid vehicles.
 - Connect booster battery to the 12 Volt auxiliary battery.
 - 12 Volt auxiliary battery location varies.

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Hybrid Emergency Response Information

Summary

- Hybrid identification
 - Hybrid badging
 - **READY** indicator
 - Orange high voltage
- High voltage safety
 - Insulated ground
 - Manual and automatic disconnects
- Extrication
 - Immobilize
 - Disable
 - Stabilize
- Fire
 - Water
- Spills
 - NiMH alkaline electrolyte
- Website
 - <http://techinfo.toyota.com> or <http://techinfo.lexus.com>
- Comments
 - email to ERG@toyota.com

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