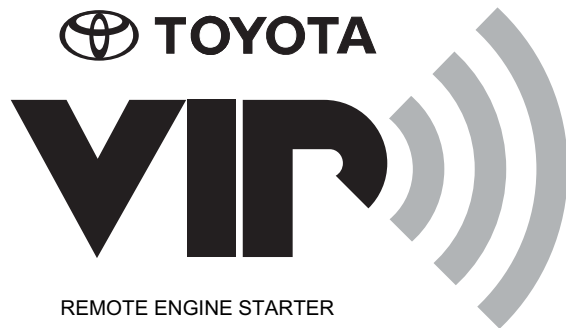


2008-

HIGHLANDER HYBRID

TVIP V4

REMOTE ENGINE START (RES)  
OWNER'S GUIDE



# REMOTE ENGINE STARTER

# OWNER'S GUIDE



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## INTRODUCTION

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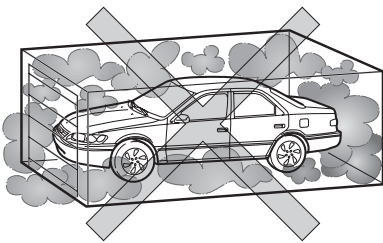
The REMOTE ENGINE STARTER allows you to start your engine from outside the vehicle. It utilizes your vehicle's keyless entry remote, so there is no need to carry around an extra remote. The REMOTE ENGINE STARTER is operated the same way for vehicles equipped with or without the Smart Entry / Push Start system; simply push the remote's LOCK button in a quick, two-step sequence. In addition, the REMOTE ENGINE STARTER can activate the heater or air conditioner according to your preset temperature controls, providing you with a comfortable cabin upon entry. As an added convenience, the REMOTE ENGINE STARTER can also activate the defroster (when preset) to clear up the windshield during cold weather.

To ensure your safety, and the safety of anyone near the vehicle, the REMOTE ENGINE STARTER is designed to shut the engine off when it detects any attempt to enter or move the vehicle after a remote engine start. Please consult your Toyota dealer for more details.

NOTE: To utilize the REMOTE ENGINE STARTER, your vehicle must have an automatic transmission; it cannot be used for manual transmission models. The transmission range for remote start may be shorter than the remote's basic keyless entry operation. Range can also be affected by the surrounding environment. Laws in some communities require that the vehicle be within view of anyone using the REMOTE ENGINE STARTER. In some states, use of the REMOTE ENGINE STARTER may violate state or local laws. Before using the REMOTE ENGINE STARTER, check your state and local laws.

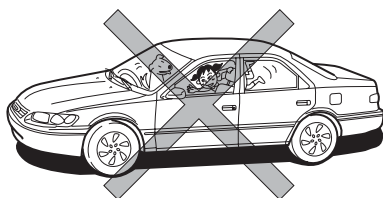
For any questions or concerns about the REMOTE ENGINE STARTER, please call Toyota Customer Experience at (800) 331-4331.

## IMPORTANT INFORMATION



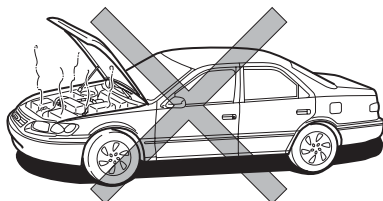
### CAUTION

Do not start the engine in an enclosed area (such as a garage or indoor parking lot) where too much exhaust may accumulate and create a hazardous environment with potential for CO poisoning.



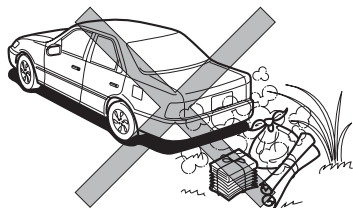
### CAUTION

Do not start the engine if a child or pet are present in or near the vehicle. Interior power components such as windows and seats can accidentally be switched on and lead to injury.



### CAUTION

Do not check the engine while it is still warm after being remotely started. Allow at least five minutes for the engine to cool to avoid being burned.



### CAUTION

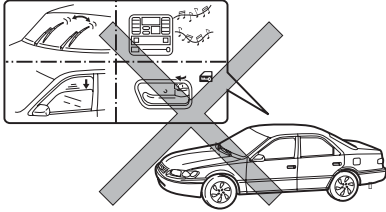
Do not start the engine near dry foliage, paper, or other flammable substances. The exhaust tube and emissions can create a fire hazard at high temperatures.



### CAUTION

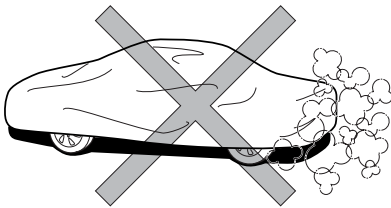
Do not use the REMOTE ENGINE STARTER from a distance where the vehicle cannot be seen. Children or small animals should not be near the vehicle.

## IMPORTANT INFORMATION



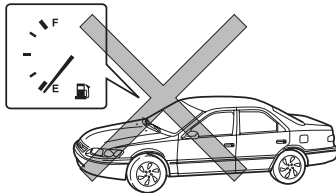
### NOTICE

Always shut off components such as the windshield wipers and radio after parking. If left on, such components may be damaged by remote engine start in extremely cold weather. Check that all vehicle windows are closed and all doors locked after parking.



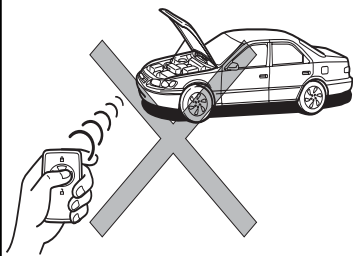
### NOTICE

Do not start the engine with the body cover still on the vehicle. The exhaust tube and emissions are capable of starting a fire at high temperatures.



### NOTICE

Only use the REMOTE ENGINE STARTER when you intend to drive the vehicle; excessive engine starting consumes fuel and battery power.



### NOTICE

To help reduce the risk of injury during engine service, the REMOTE ENGINE STARTER will not function while the hood is open.

## OPERATION

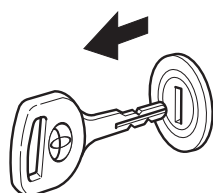
### BEFORE STARTING THE ENGINE

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Before using the REMOTE ENGINE STARTER to start your vehicle, please be sure of the following conditions.



The shift lever is in the “P” position.

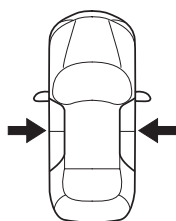


(Without Push Start)

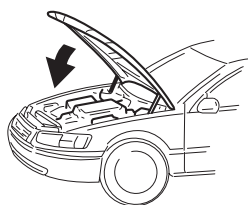
The key is not inserted in the key cylinder.

(With Push Start)

The engine can be remotely started regardless of whether the driver has a smart key remote inside or outside the vehicle.



All doors are closed.



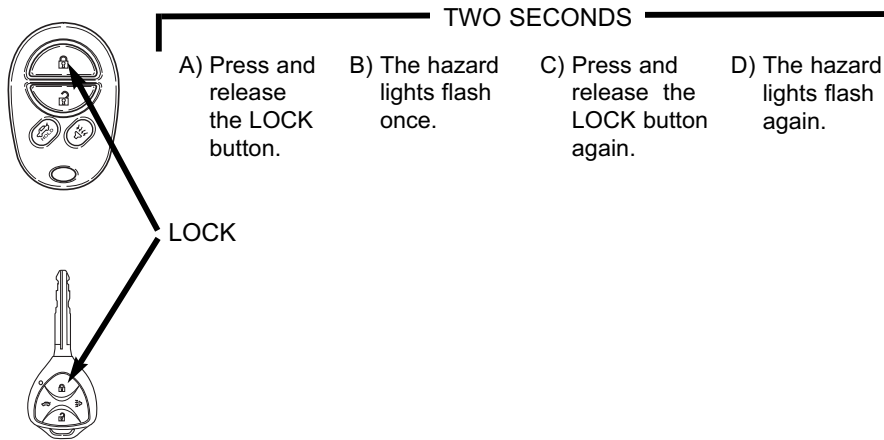
The hood is closed.

## OPERATION

### REMOTE ENGINE START (vehicles without Smart Entry System)

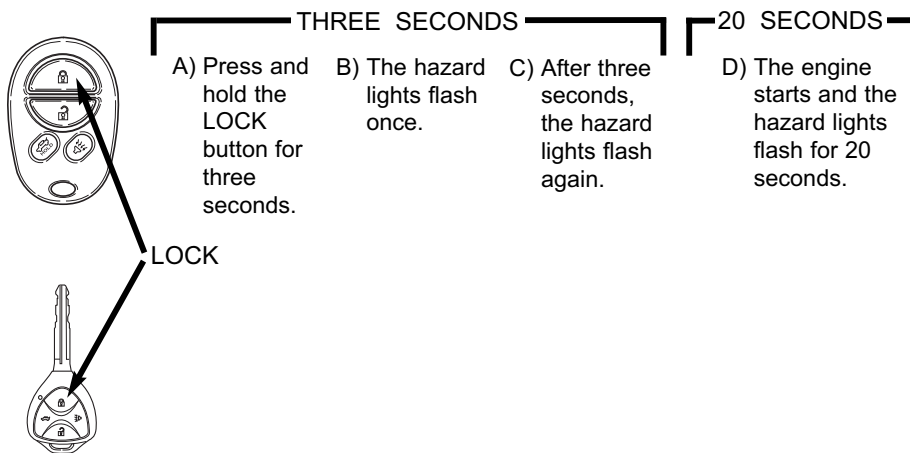
To start a non-Smart Entry vehicle remotely, press and release the LOCK button twice within two seconds, then press and hold the LOCK button for three seconds.

**STEP 1.** Press and release the LOCK button twice within two seconds. The hazard lights will flash each time.



#### FOLLOWED IMMEDIATELY BY:

**STEP 2.** Press and hold the LOCK button for three seconds. The hazard lights flash once when pressed, then again after three seconds. The engine starts, and the hazard lights flash for 20 seconds.



NOTE: Your vehicle may be equipped with either remote pictured here.

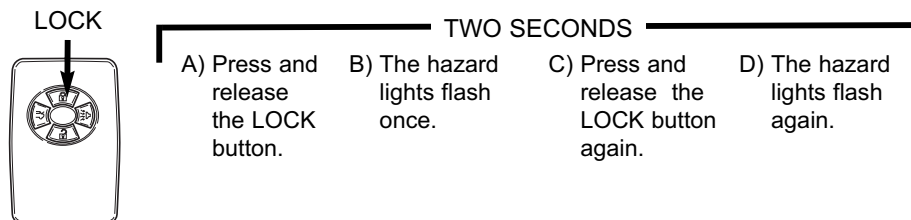
NOTE: For vehicles equipped with Piezo, the buzzer will chirp the same number of times that the light flashes.

## OPERATION

### REMOTE ENGINE START (vehicles with Smart Entry System)

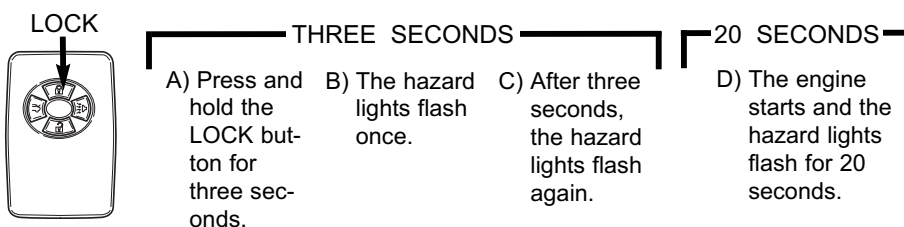
To start a Smart Entry vehicle remotely, press and release the LOCK button twice within two seconds, then press and hold the LOCK button for three seconds.

**STEP 1.** Press and release the LOCK button twice within two seconds. The hazard lights will flash each time.



#### FOLLOWED IMMEDIATELY BY:

**STEP 2.** Press and hold the LOCK button for three seconds. The hazard lights flash once when pressed, then again after three seconds. The engine starts, and the hazard lights flash for 20 seconds.



**NOTE:** Any vehicle started with the REMOTE ENGINE STARTER can idle for a total of 20 minutes. Automatic engine shutdown occurs after 10 minutes, but the vehicle may be remotely started as many times as the user wishes and run for an additional 10 minutes. After 20 minutes of total operation, however, the vehicle must be started manually to reset the REMOTE ENGINE STARTER.

**NOTE:** For vehicles equipped with Piezo, the buzzer will chirp the same number of times that the light flashes.

For any questions or concerns about the REMOTE ENGINE STARTER, please call Toyota Customer Experience at (800) 331-4331.

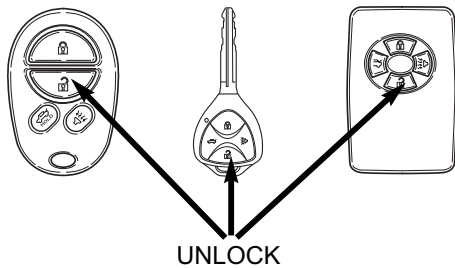


## OPERATION

### REMOTE ENGINE STOP

There are two methods by which to shut off the vehicle engine remotely: Either press the UNLOCK button once **OR** press and hold the LOCK button for two or more seconds.

**METHOD 1:** Press the UNLOCK button. The engine stops and the hazard lights flash twice.



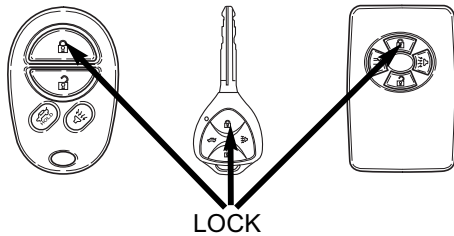
A) Press the UNLOCK button.

B) The engine stops.

C) The hazard lights flash twice.

Using Method 1, your vehicle will remain unlocked for 30 seconds. Then it automatically relocks if no doors are opened. If your vehicle will not be in plain view for that time, or you have other security concerns, you may wish to use Method 2 (below), which does not unlock the vehicle.

**METHOD 2:** Press and hold the LOCK button for two or more seconds. The engine stops and the hazard lights flash once.



A) Press and hold the LOCK button for two seconds or more.

B) The engine stops.

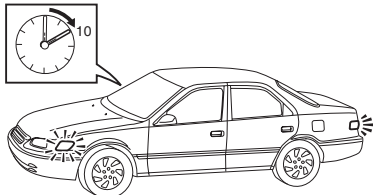
C) The hazard lights flash once.

NOTE: All doors will remain locked after the engine is shut off.

NOTE: For vehicles equipped with Piezo, the buzzer will chirp the same number of times that the light flashes.

### AUTOMATIC ENGINE SHUTDOWN

The engine will stop automatically after 10 minutes.

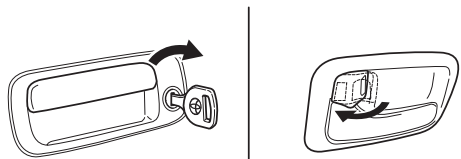


## OPERATION

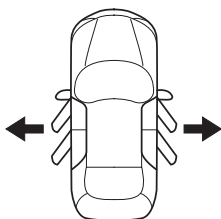
### AUTOMATIC ENGINE SHUTDOWN

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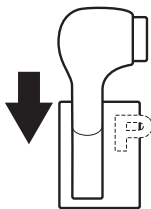
The REMOTE ENGINE STARTER will automatically shut down or will not start the vehicle's engine under the following conditions:



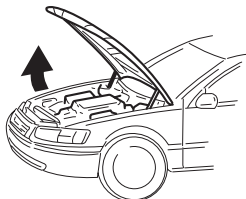
If any door is manually unlocked via Smart Key.



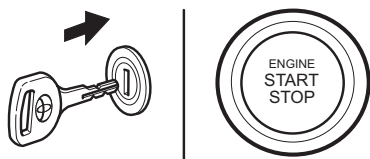
If any door is opened.



If the shift lever is moved to any position other than "P."



If the hood is opened.

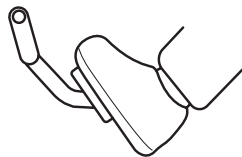


(Without Smart Entry System)

If the key is inserted in the key cylinder.

(With Smart Entry System)

If the push button is pressed.



If the brake pedal is applied.



If the security alarm is triggered.

NOTE: The engine will continue to run if the panic alarm is triggered.

## REMOTE ENGINE STARTER INFORMATION

### HEATER / AIR CONDITIONER / DEFROSTER / DEFOGGER SETTINGS

For your comfort and convenience, the vehicle's air conditioning system controls can be preset to operate the heater, air conditioner, and defroster/defogger at engine startup. The two tables below contain the settings recommended for best results. Users should preset these before exiting the vehicle. (Please see your vehicle's owner's manual for available settings.)

#### Vehicles with Automatic Air Conditioner

|                | <b>Auto Button</b> | <b>A/C Button</b> | <b>Temperature Selector</b> | <b>Windshield Airflow Button</b> | <b>Fan Speed Selector</b> |
|----------------|--------------------|-------------------|-----------------------------|----------------------------------|---------------------------|
| <b>Heat</b>    | ON                 | OFF               | User Settings               | OFF                              | Off                       |
| <b>Cool</b>    | ON                 | ON                | User Settings               | OFF                              | OFF                       |
| <b>Defrost</b> | OFF                | ON                | Max Setting                 | ON                               | HIGH                      |
| <b>Defog</b>   | OFF                | ON                | Max Setting                 | ON                               | HIGH                      |

**NOTE:** The REMOTE ENGINE STARTER may not activate the rear window defroster/defogger.

#### Vehicles with Manual Air Conditioner

|                | <b>A/C Button</b> | <b>Temperature Button</b> | <b>Airflow Selector</b> | <b>Fan Speed Selector</b> |
|----------------|-------------------|---------------------------|-------------------------|---------------------------|
| <b>Heat</b>    | OFF               | WARM                      | PANEL                   | HIGH                      |
| <b>Cool</b>    | ON                | COLD                      | PANEL                   | HIGH                      |
| <b>Defrost</b> | ON                | WARM                      | WINDSHIELD              | HIGH                      |
| <b>Defog</b>   | ON                | WARM                      | WINDSHIELD              | HIGH                      |

**NOTE:** The REMOTE ENGINE STARTER may not activate the rear window defroster/defogger.

### REMOTE ENGINE STARTER RANGE

The REMOTE ENGINE STARTER can be effectively operated up to 80 feet in an open space. The physical makeup of the surrounding environment (hills, trees, buildings, etc.) may affect the REMOTE ENGINE STARTER's maximum range.



## Warning

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- This product is applicable only to vehicles with 12V DC, negative grounding specifications. *Do not use in vehicles with 24V specifications. Otherwise, damage to the unit or a fire may result.*
- Do not allow children to play with remote controls. The doors may be locked or unlocked, and the engine may be started unintentionally.
- If an unusual event occurs, such as liquids spilling onto the product, or the product emitting smoke or strange odors, stop using it immediately and consult the dealer from whom you purchased it. Continued use of the product before corrective actions are taken may result in an accident, injury, or fire.
- Never pull the plastic bag over your head. Otherwise, a serious injury or death from suffocation may occur.
- The REMOTE ENGINE STARTER is for vehicles with automatic transmissions only. Do not use it for the manual transmission vehicles.



## Notice

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- Do not use this product for applications other than in-vehicle use. An electric shock or injury may result.
- Do not operate the REMOTE ENGINE STARTER if the Check Engine Light stays on and engine service is required.
- Never attempt to disassemble or modify the product. An accident, fire, or electric shock may result.
- When replacing fuses, be sure to use fuses with the same specified capacity (amperage). Otherwise, damage to the unit or vehicle, fire, or electric shock may result.

**NOTE:** Laws in some communities require that the vehicle be within view of anyone using the REMOTE ENGINE STARTER. In some states, use of the REMOTE ENGINE STARTER may violate state or local laws. Before using the REMOTE ENGINE STARTER, check your state and local laws.