

7-6. Remote Engine Start System (Dealer Option)



WARNING

- There are some general precautions when starting the engine. Carefully read the precautions described in "General Precautions When Starting/Stopping Engine" P326.
- Do not remote start a vehicle in an enclosed environment (e.g. closed garage). Prolonged operation of a motor vehicle in an enclosed environment can cause a harmful build-up of carbon monoxide. Carbon monoxide is harmful to your health. Exposure to high levels of carbon monoxide can cause headaches, dizziness or in extreme cases unconsciousness and/or death.

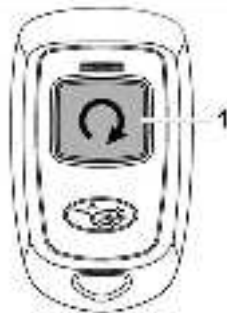
The remote engine start system allows you to start the engine from outside the vehicle. In addition, the remote engine start system can activate the heater or air conditioner, providing you with a comfortable cabin upon entry. For more details, refer to the Owner's Manual supplement for the re-

mote engine start system.

NOTE

- The length of time for which it is acceptable to allow the engine to remain idling may be bound by local laws and regulations. Check the local rules when using the remote engine start system.
- When taking your vehicle in for service, it is recommended that you inform the service personnel that your vehicle is equipped with a remote engine start system.

■ Remote Engine Starter Transceiver (Fob)



1) Fob button

▼ Starting the engine

NOTE

All vehicle doors (including rear gate) and the engine hood must be closed prior to activating the remote engine start system. Any open entry point will prevent starting or cause the engine to stop.

The remote engine start system is activated by pressing the fob button on your remote engine starter transceiver (fob) twice within 3 seconds. If the fob is within operating range of the system and the start request is received, the following will occur.

- The fob flashes and beeps once.
- The horn sounds once.
- The side marker lights, tail lights, and parking lights flash once.

If the fob is not within range (the user is too far away from the vehicle), the fob will indicate two long flashes without beeping.

The system will check certain safety preconditions before starting, and if all conditions are met, the engine will start within 5 seconds. After the engine starts, the following will occur.

- The fob flashes and beeps twice.
- The horn sounds once.

- The side marker lights, tail lights, and parking lights flash once.

While the engine is idling via the remote engine start system, the following will occur.

- The side marker lights, tail lights, and parking lights remain illuminated.
- The fob button flashes once every 3 seconds.
- The power windows are disabled.

If the engine turns over but does not start (or starts and stalls) the remote engine start system will power off and then attempt to start the engine 3 additional times. The system will not attempt to restart the engine if it determines a vehicle malfunction is preventing starting. If the engine does not start after 3 additional attempts, the remote engine start request will be aborted.

▼ Stopping the engine

Press and hold the fob button for at least 2 seconds to stop the engine. The fob will flash and beep three times, indicating the engine has stopped. If the stop request is not received (for example, if the user is too far away from the vehicle), the fob will continue to flash once every 3 seconds. The system will automatically stop the engine after 15 minutes.

▼ Remote start safety features

For safety and security reasons, the remote engine start system will prevent starting (or stop the engine if running) and sound the horn twice if any of the following conditions is detected. In addition, the fob will flash and beep 3 times.

- The total run-time has exceeded 20 minutes.
- The brake pedal is depressed.
- A key is in the ignition switch.
- The engine hood is open.
- The engine idle speed exceeds 3,500 rpm.
- The security alarm is triggered.
- The select lever is not in the "P" position.

If the system detects any door (including the rear gate) open during operation, it will prevent starting or stop the engine, and sound the horn and flash side marker lights, tail lights, and parking lights 6 times.

In addition to the items above, if the vehicle's engine management system determines there is a safety risk due to a vehicle-related problem, the vehicle will power down and the horn will sound 3 times.

NOTE

- If the alarm system is armed at the time of remote engine starter activation (the security indicator light on the combination meter is flashing), the alarm system will remain armed throughout the remote start run cycle.
- If the alarm system is disarmed at the time of remote engine starter activation (the security indicator light on the combination meter is not flashing), the alarm system will remain disarmed throughout the remote start run cycle.

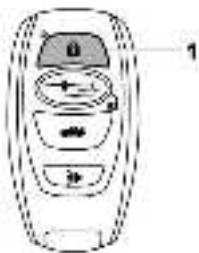
▼ Remote start operation - fob confirmation

Your remote engine starter fob is a bidirectional transceiver that can confirm system operation with several different visual and audible indications. The fob's LED-backlit button and internal piezo buzzer will indicate the status of the system using the following the flash and beep sequences, provided the fob is within operational range of the system.

Precondition	Fob Indication		Meaning
	Flash	Beep	
Fob start button is being pressed	Continuous while button is held down	—	The fob is transmitting an RF signal
User attempts to start engine by pressing fob button twice within 3 sec.	1 flash	1 beep	Engine start request received
	2 flashes	2 beeps	Engine started successfully
	1 flash every 3 sec	—	Engine idling
	3 flashes	3 beeps	Vehicle is in range but engine not started
	2 long flashes	—	Vehicle not in range (engine not started)
Engine idling by remote engine start operation	1 flash every 3 sec	—	Engine idling
	3 flashes	3 beeps	Engine stopped by system time-out or for safety reasons (see sections above)
User attempts to stop engine by pressing and holding fob button for at least 2 sec.	3 flashes	3 beeps	Engine stopped by user request
	1 flash every 3 sec	—	Stop request not received. Engine still idling.



■ Alternate Operation Method for Models with “Keyless Access with Push-Button Start System”



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Access key fob

- 1) Lock button

An access key fob can be used as the remote engine start transmitter. Operate the lock button to start or stop the engine as follows.

▼ Before starting the engine

Before using the remote engine start system to start the engine, confirm the following conditions.

- The select lever is in the “P” position.
- All doors including the rear gate are closed.

- The engine hood is closed.
- The push-button ignition switch is in the “OFF” position.

▼ Starting the engine

To start the engine with remote engine start system, briefly press the lock button twice within 2 seconds, then press and hold the lock button for 3 seconds.

1. Press the lock button briefly. The hazard warning flashers then flash once and the keyless buzzer chirps once.
2. Within 2 seconds, press the lock button briefly again. The hazard warning flashers then flash once again, and the keyless buzzer chirps once again.
3. After step 2, immediately press and hold the lock button. The hazard warning flashers then flash three times, and the horn will honk once.
4. Approximately 3 seconds after step 3, release the lock button. The engine will then start successfully.

▼ Stopping the engine

Press and hold the lock button to stop the engine with remote engine start system.

▼ Remote start safety features

For detailed information, refer to “Remote start safety features” P333.

■ Entering the Vehicle While It Is Running via Remote Start (Models without “Keyless Access with Push-Button Start System”)

1. Unlock the vehicle doors using the remote keyless entry system.

NOTE

If the vehicle's doors are unlocked manually using the key, the vehicle's alarm system will trigger (if the alarm system is armed prior to activating the remote engine start system) and the engine will turn off. Perform either of the following procedures to disarm the alarm system. Refer to “Alarm System” P140.

- Insert the key into the ignition switch and turn it to the “ON” position.
 - Press any button on the remote keyless entry transmitter.
2. Enter the vehicle. The engine will shut down when any door or rear gate is opened.
 3. Insert the key into the ignition switch and turn it to the “START” position to restart the engine.

■ Entering the Vehicle While It Is Running via Remote Start (Models with “Keyless Access with Push-Button Start System”)

1. Unlock the vehicle doors using the keyless access function and remote keyless entry system.

NOTE

If the vehicle's doors are unlocked manually using the key, the vehicle's alarm system will trigger (if the alarm system is armed prior to activating the remote engine start system) and the engine will turn off. Perform either of the following procedures to disarm the alarm system. Refer to “Alarm System” **P140**.

- Turn the push-button ignition switch to the “ACC” or “ON” position.
 - Press any button on the access key fob.
2. Enter the vehicle. The engine will remain running provided the access key fob is present and detected by the vehicle.
3. Press the push-button ignition switch once while depressing the brake pedal before driving your vehicle. The remote engine starter transceiver (fob) will flash

and beep 3 times to indicate that the remote start system has been shut down.

■ Entering the Vehicle Following Remote Engine Start Shutdown

An alarm trigger may occur if the vehicle is opened by the remote keyless entry transmitter within a few seconds immediately following remote engine start shutdown.


■ Pre-heating or Pre-cooling the Interior of the Vehicle

Before exiting the vehicle, set the temperature controls to the desired setting and operation. After the system starts the engine, the heater or air conditioning will activate and heat or cool the interior to your setting.

■ Remote Transmitter Program (Remote Engine Starter Transceiver)

New transmitters can be programmed to the remote engine start system in the event that a transmitter is lost, stolen, damaged or additional transmitters are desired (the system will accept up to eight transmitters). New remote engine start transmitters can be programmed accord-

ing to the following procedure.

1. Open the driver's door (the driver's door must remain open throughout the entire process).
2. Depress and hold the brake pedal.
3. Turn the ignition switch to “ON” then “LOCK”/“OFF”, back to “ON” then “LOCK”/“OFF”, back to “ON” then “LOCK”/“OFF”, then back to “ON” again and leave the ignition “ON” throughout the programming process.
4. The system will flash the side marker lights, tail lights and parking lights and honk the horn three times, indicating that the system has entered the transmitter learn mode.
5. Press and release the “” button on the transmitter that you want to program.
6. The system will flash the side marker lights, tail lights and parking lights and honk the horn one time, indicating that the system has learned the transmitter. Upon successful programming, the remote start confirmation transmitter button will flash one time.
7. Repeat step 5 for any additional transmitters (the system will accept up to eight transmitters).
8. The system will exit the transmitter learn mode if the key is turned to the “LOCK”/“OFF” position, the door is closed

or after 2 minutes.

■ System Maintenance

NOTE

For remote engine starter transceiver:
In the event that the vehicle's battery is replaced, discharged or disconnected, it will be necessary to start the vehicle a minimum of one time using the key prior to activating the remote engine start system. This is required to allow the vehicle electronic systems to re-synchronize.

▼ Changing the battery



CAUTION

- Do not let dust, oil or water get on or in the remote engine start transmitter when replacing the battery.
- Be careful not to damage the printed circuit board in the remote engine start transmitter when replacing the battery.
- Be careful not to allow children to touch the battery and any removed parts; children could swallow them.

- There is a danger of explosion if an incorrect replacement battery is used. Replace only with the same or equivalent type of battery.
- Battery should not be exposed to excessive heat such as sunshine, fire or the like.

For models with "keyless access with push-button start system":

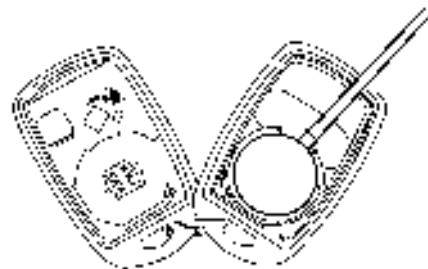
Perform the procedure described in "Replacing Battery of Access Key Fob" P517.

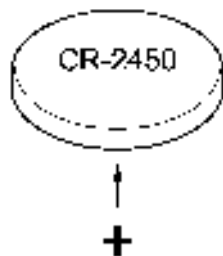
For remote engine starter transceiver:

The 3-volt lithium battery (model CR-2450) supplied in your remote engine start transmitter should last approximately one year, depending on usage. When the battery begins to weaken, you will notice a decrease in range (distance from the vehicle that your remote control operates). Follow the instructions below to change the remote engine start transmitter battery.



1. Remove the small Phillips screw located on the back side lower left corner of the transmitter.
2. Carefully pry the remote engine start transmitter halves apart using a small flat-head screwdriver.





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3. Remove the circuit board from the bottom half of the case and remove the battery and replace with new one. Be sure to observe the (+) sign on the old battery before removing it to ensure that the new battery is inserted properly (battery "+" should be pointed away from the transmitter circuit board on battery).

4. Carefully snap the case halves back together, reinstall the phillips screw and test the remote engine start system.

■ Certification for Remote Engine Starter

▼ U.S.-spec. models



CAUTION

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

▼ Canada-spec. models

NOTE

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

REMARQUE

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage; (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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FCC statement:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the

following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and a human body.

Changes or modifications not expressly approved by the party responsible for

compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

ISED statement (French version):

Cet appareil est conforme à la partie 15 des règles de la FCC et aux normes RSS sans licence d'Industrie Canada.

L'exploitation est soumise aux deux conditions suivantes :

1. Cet appareil ne doit pas provoquer d'interférences nuisibles et
2. Cet appareil doit accepter toute interférence reçue, y compris toute interférence susceptible de provoquer un fonctionnement indésirable.

Pour se conformer aux limites d'exposition aux RF pour la population générale/exposition non contrôlée, l'antenne (e) utilisée pour cet émetteur doit être installée de manière à fournir une distance de séparation d'au moins 20 cm de toutes les personnes et ne doit pas être colocalisée ou utilisée

conjointement avec tout autre antenne ou émetteur.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and a human body.

Cet équipement est conforme aux limites d'exposition aux rayonnements de la ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et un corps humain

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause unde-

sired operation of the device

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage; (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi même si le brouillage est susceptible d'en compromettre le fonctionnement.