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Transmitter Part Number and Module Serial Number

You will find in the boxes below information concerning your Transmitter and your Module.

We have entered the Transmitter Part Number. Should you need to order a new Transmitter, you will need to provide us with the Transmitter Part Number that is printed below.

The second section is to contain the Module's Serial Number. Please make sure the installer has taken the time to enter your Module Serial Number within that box.

Thank You.

Transmitter Part Number: ASTR-515CF

The installer is to write in the boxes below the Module's serial number and the location of the Valet Switch.

Module Serial Number:

Valet Switch is located:

Introduction

This Module is a state-of-the-art remote car starter system. The system is packed with advanced features such as priority access to the driver's door and the Safe Start children safety feature. Among other sophistications, it features super-heterodyne transmission technology for increased range of operation.

With many an advanced function, this product will satisfy any one of the user’s expectations from high-end commodity systems, without neglecting any standard feature commonly offered by entry-level starters.

Basic Remote Operation

Your system is equipped with a multi-channel 5-button remote transmitter. It can operate two independent identically-equipped vehicles (see Multi-car Operation for 2nd car functions)
Remote-starting Your Vehicle

Press the START button for **approx. 1 second**. The parking lights will come on, informing you that the unit has received your signal. The engine will start approximately 5 seconds later. The parking lights will remain on during the entire pre-programmed engine run time. If the vehicle doesn't start the first time, the system will shut off, wait a few seconds and try to start the engine again. It will make three start attempts before giving up.

Vehicle Presets

**Heater and Heated Seat:** When leaving the vehicle it is recommended to preset the accessory controls in preparation for the next remote start. Settings for the blower motor (fan), front and rear, as well as heated seats (if equipped) should not be left on **HIGH**. It is recommended to leave the settings on **LOW** or **MEDIUM** instead.

**Windshield Wipers, Radio and Headlights:** Certain vehicles require the radio and / or windshield wiper and / or headlight circuits to become energized while running under remote start. When leaving the vehicle you must ensure that the windshield wiper and headlight switches are **OFF**. Leaving the headlight switch **ON** on certain types of vehicles could cause them to remain on even after remote starter shut down, resulting in a dead battery.

Driving Off

With the vehicle running under remote control, press the UNLOCK button to disarm the system (and unlock the doors if keyless entry is installed). Enter the vehicle and do the following:

1. Turn the ignition key to the **IGNITION ON** (run) position.
2. Press the brake pedal to disengage the remote starter unit.

You are now ready to drive off.

**Caution!** Upon entering your vehicle after it has been remote-started, **do not turn** the key to the **CRANK** position while the engine is running. This would cause the starter motor to re-engage, unless the anti-grind feature is installed.

Advanced Features

**Idle Mode**

This feature allows you to remove the ignition key from the ignition switch and leave the vehicle running without the key while you are away from your vehicle, until the pre-programmed engine run time expires or until it the vehicle is shut down with the remote control. This feature may be handy if you need to make a short stop (for a delivery, to a convenience store, etc.). To learn more about the run time, see Engine Run Time on page 8.
To enable Idle Mode:
1. Press and hold the LOCK, UNLOCK or START button on your remote transmitter while the engine is running.
   - Pressing LOCK or UNLOCK will unlock the doors.
   - Pressing START will leave the doors unaffected.
2. The parking lights will come on.
3. Remove the ignition key, exit the vehicle and lock the doors.
   The engine will go on running. It will shut down when the pre-programmed run time expires.

Caution: Do not leave children or pets unattended in a car running in Idle Mode.

Note: When enabling Idle Mode, pressing LOCK or UNLOCK will unlock the doors (if keyless entry is installed).

Valet Mode
The system can be placed in Valet Mode to disable the remote starting capabilities. If the vehicle needs to be serviced, or if you park it indoors, the Valet Mode will prevent the engine from being accidentally started by remote control.

To put the system into Valet Mode:
1. Turn the ignition key to the IGNITION ON (RUN) position.
2. Within 3 sec. press and hold the valet button for approx. 1 sec. The L.E.D. will turn on and remain lit.

To take the system out of Valet Mode:
1. Turn the ignition key to the IGNITION ON (RUN) position.
2. Within 3 sec. press and hold the valet button for approx. 1 sec. The L.E.D. will go off.

The valet button can only be used if the ignition key is in the IGNITION ON (RUN) position.

Ignition Valet
This feature allows the user to enter Valet Mode by using only the Ignition key.

To ENTER Valet Mode
1. With the key in the Ignition switch, turn the key to the ON (RUN/IGNITION) and then OFF positions 5 times within 10 seconds.
2. The Parking Light output from the Module will activate and flash 3 times indicating the Module is now in Valet Mode. The LED will turn on solid.

To EXIT Valet Mode
1. With the key in the Ignition switch, turn the key to the ON (RUN/IGNITION) and then OFF positions 5 times within 10 seconds.
2. The Parking Light output from the Module will activate and flash twice indicating the Module is now out of Valet Mode. The LED will turn off.

“Home Valet”™ Mode
This safety feature will remotely place the vehicle into a no-remote-start mode: if the vehicle is parked indoors there is no danger it will start accidentally by remote control or external trigger.

To ENTER Home Valet Mode:
1. Press the LOCK or UNLOCK button and,
2. Within 3 sec. press the STOP button until the parking lights turn on and remain lit for 3 sec.

To EXIT Home Valet Mode, turn the ignition key to the Ignition On (Run) position.

Note: Once Home Valet is activated, the vehicle will not start by remote control or external trigger until the ignition key is turned to the IGNITION ON (RUN) position.
Panic Mode

Note: This feature will be available only if the Horn was configured at installation.

In an emergency situation, you can activate Panic Mode using the Lock or Unlock button. This will:

- Shut down the engine,
- Unlock the doors (if Unlock is pressed) or lock the doors (if Lock is pressed),
- Disarm the Starter Kill and
- Activate the horn for 30 seconds.

(See p. 7 for a description of the Starter Kill option.)

To trigger Panic Mode:

- Press and hold the Unlock button for approximately 3 seconds until the horn starts to sound and the parking lights flash: this will unlock the doors before the horn starts.
- Or press and hold the Lock button for approximately 3 seconds until the horn starts to sound and the parking lights flash: this will lock the doors before the horn starts.

Panic Mode will automatically shut off after 30 seconds.

Note: If you want to stop Panic Mode before the 30-second delay, press the Lock or Unlock button.

Quick Lockout™
(Also called Secure Panic.) For fast protection, the system will lock all doors when you press the brake pedal while the horn is activated and the system is in Panic Mode. (Quick Lockout is only available when Panic Mode has been activated.)

Cold Weather Mode

When the Cold Weather Mode is active, the engine starts every 2 hours and runs for 4 minutes (or for 9 or 20 minutes with Diesel engines); this routine will go for a period of 24 hours.

To enter Cold Weather Mode:

- Press and hold the Stop button for 3 seconds until the Parking Lights flash 3 times.

If Safe Start is enabled, you can activate Cold Weather Mode by

- Pressing the Start button, and then
- Pressing and holding the Stop button until the parking lights flash 3 times.

To check whether the system is in Cold Weather Mode:

- Press the brake pedal: the parking lights should stay on until the brake pedal is released.

To exit Cold Weather Mode, do any one of the following:

- Open the hood.
- Start the engine using the remote control.
- Turn the ignition key to the Ignition On (RUN) position.
- Turn on the Valet Mode (but not Home Valet Mode).

In Safe Start Mode:

- Press and hold the Start button, then press and hold down the Stop button for 3 seconds...

... until the parking lights flash once.

In standard mode:

- Press and hold the Stop button for 3 seconds until the parking lights flash once.

Remote Door Locks

If your Module was installed with the Remote Door Locks option, you will have the convenience of remote keyless entry.

To unlock your doors and disarm the Starter Kill:

1. Press and hold the Unlock button for approx. 1 sec.
2. The parking lights will flash twice and the LED will turn off to confirm that the doors have been unlocked and that the Starter Kill feature is disarmed if it was installed.

To lock your doors and arm the Starter Kill:
1. Press and hold the LOCK button for approx. 1 sec.
2. The parking lights will flash once and the LED will flash slowly to confirm that the doors have been locked and that the Starter Kill feature is enabled if it was installed.

Priority Door Access
When programmed, this safety feature lets you unlock solely the driver’s door with a single press of the UNLOCK button on the transmitter; upon a second press of the UNLOCK button, all the other doors will unlock.

Arming the Starter Kill
If installed, the Starter Kill can be programmed to arm in Active Mode (will not arm automatically) or in Passive Mode (will arm automatically). See p. 7 for more details on arming modes.

- To disarm the Starter Kill in Active or Passive Mode, press the UNLOCK button on the transmitter. The parking lights will flash twice. (If Remote Door Locks were installed, this will also unlock the doors.)
- To arm the Starter Kill in Active or Passive Mode, press and hold the LOCK button on the transmitter. The parking lights will flash once. (If Remote Door Locks were installed, this will also lock the doors). In Passive Mode, the Starter Kill will automatically rearm 1 or 3 minutes after the doors were unlocked unless the ignition key has meanwhile been inserted in the ignition switch (if Key Sense is installed – see p. 8).

Installation-programmable Options
This Unit was designed with flexibility and OEM integration in mind. With its programmable options, this unit can single-handedly control nearly any electrical system in your vehicle.

Note: The programming of your system should be left to a professional. Changing any one of the settings may affect the operation of your Unit.

The user-selectable options are as follows:
- Remote Door Locks
- Safe Start
- Starter Kill / Anti-grind feature
- Passive / active arming of the Starter Kill
- Idle Mode
- Ignition-controlled Door Locks
- Smart Ignition Locks
- Secure Lock
- Priority Door Access
- Remote Trunk Release
- Horn Confirmation (Panic Mode)
- Engine Run Time
- Key Sense
- AUX 1, AUX 2 and AUX 3 outputs
- Multi-car Operation

Remote Door Locks Option
If your system was installed with the Remote Door Locks option, you will have the convenience of remote keyless entry. See p. 5 for operation details.

Safe Start
If this feature is enabled, it will require the user press the START button 2 times within 3 seconds to remote-start the vehicle. If the Swap Start Mode is selected, to remote-start your vehicle press LOCK and UNLOCK simultaneously.
This will eliminate accidental remote starts – for example: when there are children playing with the remote control.

Under Safe Start, you can activate Cold Weather Mode by
- Pressing the START button, and then
- Pressing and holding the START button again until the parking lights flash 3 times.
If the Starter Kill is installed, your vehicle will benefit from a protection against starter motor damage that could occur after remote-starting the engine should the user, by force of habit, turn the ignition key to the **crank** position.

### Starter Kill / Anti-grind feature

With this added security feature, the system will prevent your vehicle from starting with the ignition key when the Starter Kill is armed. If your system was installed with the Starter Kill option, one will not be able to start your vehicle with the Key unless the system has been unlocked and disarmed first, or put into Valet Mode.

If the Starter Kill is installed, your vehicle will benefit from a protection against starter motor damage that could occur after remote-starting the engine should the user, by force of habit, turn the ignition key to the **crank** position.

### Active / Passive Arming of the Starter Kill

The Starter Kill can be configured to either Passive mode (so as to arm automatically) or Active Mode (so as not to arm automatically). In **Passive Mode**, the system can be configured to arm automatically either after 1 minute or after 3 minutes. The Starter Kill is configured by default for a **1-minute Passive Arming Delay**: the Starter Kill will automatically arm **1 minute** after the ignition key is turned back to the **OFF** position – or until the last door is closed, depending on the configuration.

If the **Key Sense** option is installed (see p. 8), the system will not arm while the ignition key remains in the ignition switch. If the Door Trigger option is installed, the system will not arm while a door remains open.

See p. 6 for more detailed instructions on how to arm and disarm the Starter Kill.

### Idle Mode Option

If configured at installation, this feature will allow the user to remove the ignition key from the ignition switch and leave the vehicle running without the key. (See **Idle Mode** on p. 3 for details.)

### Ignition-controlled Door Locks Option

This is an added security feature. If your system was installed with the Ignition-controlled Door Locks option, the doors will automatically be locked as soon as the brake pedal is pressed after the ignition key has been turned to the **IGNITION ON** (**run**) position. When the ignition key is turned to the **OFF** position, the doors will automatically be unlocked.

### Smart Ignition Locks Option

If the Ignition-controlled Door Locks option is configured at installation, the Smart Ignition Locks option may be configured as well, with the following effect: whenever the brake pedal is pressed while the ignition key is in the **IGNITION ON** (**run**) position, the system will automatically **lock** any door that has been previously unlocked, opened and closed.

### Secure Lock Option

Before it can remote-start your vehicle, the module must first disarm the factory security system. The Secure Lock feature may be required on certain vehicle models with factory security systems that automatically unlock the doors when the security system is disarmed.

To keep your vehicle protected when the factory security system is disarmed for a remote start, Secure Lock will relock your doors as soon as the vehicle has started.

Once the engine run cycle ends, Secure Lock will rearm your factory security system.

### Priority Door Access Option

When programmed, this safety feature lets you selectively unlock either all doors simultaneously, or the driver’s door (leaving all other doors locked). See **Priority Door Access** on p. 6 for details.
Horn Confirmation Option
If the Horn Confirmation option is configured at installation, you will hear the horn when you press the lock button to confirm the locking and arming of the vehicle. (This feature may be configured for confirmation upon either the first or the second press of the lock button.) Horn Confirmation is required for using Panic Mode.

Engine Run Time
If you have a gas engine, your system can be programmed to run the engine for 4, 15, or 25 minutes (15 minutes by default). If you have a diesel engine, the module can be programmed to run the engine for 9, 20, or 30 minutes (20 minutes by default).

Key Sense Option
If your Unit is installed with Key Sense, when in Passive Mode the Starter Kill will not rearm if the ignition key is detected in the ignition switch. Likewise, Secure Lock (if configured – see p. 7) will not lock nor rearm your vehicle when the ignition key is detected in the ignition switch.

The AUX 1, AUX 2 and AUX 3 Outputs
Your Module is delivered with three configurable auxiliary outputs allowing the user to remotely control several features such as horn confirmation upon the first or second lock, priority door access, remote trunk release, headlight illumination, dome-light control, power-window / sun-roof closure...

It should be noted that the AUX 1 output is activated upon the second press of the UNLOCK button, while AUX 2 is activated by simultaneously pressing the LOCK and UNLOCK buttons.

If your vehicle is equipped with electric trunk release, the system can be configured to allow you to open the trunk using the remote control. The TRUNK button can be configured to disarm the factory alarm before the trunk is opened, or to fulfill various other functions such as headlight illumination, dome-light control, power-window / sun-roof closure...

Multi-car Operation
This system allows for Multi-car Operation. This allows the owner of two identically-equipped systems, installed on two vehicles, to control both systems with one Transmitter. (Both vehicles must be equipped with an identical Module.)

The remote Transmitter of the primary vehicle can control the Starter Kill system, the Door Locks and the remote Starter and Trunk operation of the second vehicle. The remote Transmitter of the second vehicle can also operate the primary vehicle.

To control the 2nd vehicle, simultaneously press the TRUNK button and the button of the function you wish to use:

- Press TRUNK + LOCK button simultaneously: .... LOCK
- Press TRUNK + UNLOCK: ........................................ UNLOCK
- Press TRUNK + START: ........................................ START
- Press TRUNK + STOP: ........................................ STOP
- Press TRUNK + LOCK + UNLOCK: ....... TRUNK

Home Valet Mode:
- Press TRUNK + LOCK
- Within 3 seconds, press TRUNK + STOP

Starting or stopping the vehicle in Safe Start Mode:
- Press TRUNK + START ...
- Within 3 seconds press TRUNK + START again

Starting or stopping the vehicle in Swap Start Mode:
- Press TRUNK + LOCK + UNLOCK simultaneously

Troubleshooting Poor Transmitting Range
Many factors may affect the operating range of the transmitter. Some of these are:
- The condition of the battery in the transmitter.
• The operating environment (for example: downtown radio-frequency noise, airports, cellular phone towers…)
• Metal: any type of metal will affect operating range. This includes the metal in the car.
• The shape of the vehicle can affect range as well; vans in general have an especially poor range.
• The shape of the roof and A-pillars brings about considerable radio-frequency deflection (in this case the signal from the remote control). As a result, the direction in which the vehicle is facing in relation to the remote control can affect the range. Straight on – standing in front of the vehicle – generally gives you the greatest range; the second best performance is from the back. Using the remote control from either side of the vehicle will usually give the lowest range.
• The range will be significantly lower in a crowded parking lot than in open space.
• Always hold the transmitter high, approximately at shoulder height. Holding the transmitter against your chin will also increase your range: your head acts as an antenna.
• The operating range will be somewhat lower on vehicles equipped with an aftermarket or factory alarm.
## Diagnostics – Parking Lights Flash Rate (Normal Operation)

<table>
<thead>
<tr>
<th>Flashes</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1       | • Doors locked, Alarm and Starter Kill armed.  
          • End of Run Time.  
          • TRUNK button pressed  
          • Start signal received by the Module.  
          • Cold Weather Mode cancelled.  
          • Cannot start after maximum number of attempts is reached. |
| 2       | • Remote start attempt cancelled by remote.  
          • Run Time cancelled.  
          • Doors unlocked, Alarm and Starter Kill disarmed. |
| 3       | • Entering **Cold Weather Mode**. |
| 4       | • +12 V where detected on the brake line and cranking was cancelled.  
          • Entering Tach-Programming Mode |
| 5       | • New Transmitter Programmed.  
          • Tach Programming. |
| 6       | • A remote start was attempted while a Tach or a vacuum signal was detected before cranking. |
| 8       | • Unit reset: occurs when the Unit is reset to the factory defaults. |
| 10      | • The Hood Switch line went to ground during cranking or Run Time.  
          • There was an attempt to start the vehicle while the latter was in Valet Mode.  
          • There was an attempt to start the vehicle while the latter was in Home Valet Mode. |
| 1 – pause – 2 | • Cold Weather Mode: the Brake Pedal is being held down (automatic-transmission models only). |
| 2 – pause – 2 | • The Hood is up and the Hood Switch line went to ground. This is step one of the Programming Modes. |
| ON solid |  • First press of the **START** button under Safe Start. |
| ON 2 sec. |  • Locking or unlocking a Door (with Door pulses configured to 4 sec.) |
| ON 4 sec. |  • If the Hood Pin-switch has been pressed twice: the Unit went into step 1 of the Programming cycle and no Transmitter activity was detected for 20 seconds  
          • Or the Unit went into step 1 of the Transmitter Code Programming procedure and no activity was detected for a few seconds. The Unit has exited the Transmitter Code Programming procedure. |
| ON 25 sec. |  • If the unit gives irregular signals (1 to 10 flashes followed by a pause, followed by further flashes), the system is playing back event-logging codes. This occurs when the Hood Pin-switch is pressed three times. |
| Irregular |  • Panic Mode. |
| Constant flashes up to 30 sec. |  • Panic Mode. |