LIMITED LIFETIME WARRANTY

Products manufactured and sold by Omega Research & Development, Inc. (the Company), are warranted to be free from defects in materials and workmanship under normal use. If a product sold by the Company proves to be defective, the Company will repair or replace it free of charge within the first year and thereafter all parts to be repaired will be free with only a nominal charge for Omega's labor and return shipping, during the lifetime of the car in which it was originally installed.

All products for warranty repair must be sent postage prepaid to Omega Research & Development, Inc., P.O. Box 508, Douglasville, Georgia 30133, with bill of sale or other dated proof of purchase. This warranty is nontransferable and does not apply to any product damaged by accident, physical or electrical misuse or abuse, improper installation, alteration, any use contrary to its intended function, unauthorized service, fire, flood, lightning, or other acts of God.

This warranty limits the Company's liability to the repair or replacement of the product. The Company shall not be responsible for removal and/or reinstallation drarges, damage to or theft of the vehicle or its contents, or any incidental or consequential dranges caused by any failure or alleged failure of the product to function properly. Under No Circumstances Should This Warranty, Or The Product Covered By It, Be Construed As A Guarantee Or Insurance Policy Against Loss. The Company neither assumes nor authorizes any person or organization to make any Warranties or assume any liability in connection with the sale, installation, or use of this product.

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"Protect Yourself And Your Investment"

OWNER'S MANUAL

For model:

AL-100-H

Security System For Factory Installed Keyless Entry Systems

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6) While parked and sitting in your vehicle, always keep your doors locked, windows rolled up and engine idling if possible. If you are approached by a potential carjacker, use your transmitter to Panic the system to scare the attacker away.

7) Control access of your keys and transmitters. Never leave your transmitter, house keys or other keys with a valet parking attendant or mechanic.

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7) Control access of your keys and transmitters. Never leave your transmitter, house keys or other keys with a valet parking attendant or mechanic.

Tips To Avoid Becoming A Victim

1) Always be aware of your surroundings. An alert and aware person is less likely to become a crime victim than someone who is preoccupied and easily approached.

2) While driving in high crime areas, always keep your doors locked and your windows up. Your Omega System can automatically lock your doors when the ignition switch is turned "on".

3) Always attempt to park your vehicle in a well lit and visible location with your system anned and doors locked. If your system has interior/exterior light illumination, take advantage of this feature to lock in and around your vehicle.

4) While in parking garage structures, always attempt to back-in to your parking space. This will provide a less visually encurbered and quicker way to exit your parking space if you are being pursued. This will also allow you to better see the flashing exterior light confirmation, if equipped.

5) While driving or stopped at an intersection, if your vehicle is burged in the near by another vehicle or the vehicle behind you is flashing it's headlights, consider the coopants of the vehicle hostile and immediately drive to the nearest police or fire station. "Burp and nun" thieves and carjackers are becoming an increasingly severe problem.

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Introduction

Congratulations on your purchase of an Onega Security system. The Onega series of personal convenience and security products are designed by Onega Research and Development, a leader in vehicle security since 1976. When beginning to use this system, you will be suprised at its user-friendly design, considering the system delivers features and barefits that not only anticipate but exceed your expectations.

The Orega AL-100-H is a fully-featured antitheft system which can detect an unauthorized entry and respond by flashing the exterior lights, honking the horn and relocking the doors (if an optional interface is installed). The AL-100-H becomes anned when you use your existing factory renote keyless entry transmitter to lock your doors, and becomes disanned when your transmitter unlocks the doors. An Easy ValetTM Switch, in conjunction with the ignition key, allows you to disam and temporally override the security system in the event of your transmitter becoming increable or being lost.

Being that the AL-100-H is a universal add-on security system for existing keyless entry systems, the exact operations of the AL-100-H are determined in some extent to the particular vehicle and/or keyless entry system. Please remember that this guide outlines average operating parameters of the system. Please ask your new car salesperson to anange a demonstration of the operation of your new security system.

In learning how to operate your security system, please become familiar with the following three principal components: your existing factory Keyless Entry Remote Transmitter, the Red LED Status Indicator and the Easy ValetTM Switch.

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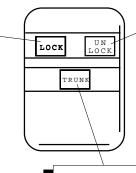
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Operation

LOCK BUTTON Pressing the transmitter Lock htton, inadiition to locking all of the doors, will also arm the AL-100-H. The security system will respond by horking the hom or chinping the optional siren once and flashing the parking lights once.



UNLOCK BUTTON Pressing the transmitter Unlock button, in addition to unlocking the doors, will also disarm the AL-100-H. The security system will respond by honking the horn or chinping the optional sizen twice and turning on the parking lights for 60 securds.

TRUNK BUTTON Pressing the Trunk Release button will also disarm the security system in most applications, as well as opening or unlocking the trunk compartment.

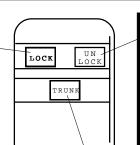
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Power Doorlock Interface: The AL-100-H is designed to add a fully-featured security system to an existing factory-equipped Remote Keyless Entry system. While the factory transmitter allows remote locking and unlocking of the doors, the AL-100-H can also operate the power doorlocks as part of it's operation. If a thief triggers the security system or activates the Prevaming feature, the AL-100-H will automatically relock the doors. If a door is operad, this advanced feature will wait for the door to shut and then relock the doors. The AL-100-H can also be programmed to automatically lock the doors when the ignition switch is turned "On" and unlock them when the ignition switch is turned "Off". These features requires the installation of an optional doorlock interface.

Optional Electronic Siren: The AL-100-H can use either the vehicle's existing hom or an optional electronic siren. The AL-72 Electronic Siren has a 127 dB (decidel) sound level and features six police siren sounds which change every 5 seconds to produce twelve sounds per minute.

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Remote Panic Feature

Remote Panic Activation From The Transmitter: Should you feel threatened or the need to attract attention at any time you can activate the Remote Panic feature by depressing your vehicle's factory transmitter's Lock or Uhlock button two to three times (varies from car to car) within six seconds. Your system will respond by activating the hom or optional siren, locking the doors and flashing the exterior lights for 60 seconds. To disengage Remote Panic, simply press either transmitter button. Pressing Lock will disengage Remote Panic and leave the system anned; pressing Uhlock will disengage Remote Panic and leave the system disanned. The Remote Panic feature will operate regardless of the security system's status: anned, disanned or Valet Mode. This feature will also operate while the ignition switch is "On".

Options

Optional Plug-In Sensor Port

Your AL-100-H security system features a plug-in port which allows an optional sensor to easily be added to increase the effectiveness of your system. The comprehensive line of optional sensors include those that monitor shock to the vehicle, detect charges in atmospheric pressure within the vehicle, and radar sensors that can detect motion inside and outside the vehicle. Your Onega dealer can provide more details on the complete line of sensors, and help you determine which sensor or sensors are best suited to your personal needs. Many of the sensors feature dual zone capability, which allows you take advantage of your security system's prevam feature.

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Arming The System

Active Arming: The AL-100-H may be actively armed at any time when the ignition switch is "Off" by using the existing factory keyless entry transmitter to lock the doors. A passive form of arming, Automatic Last Door Arming, is optional and is discussed on Page 14. The system will respond with one horn hork or one optional size chinp and one parking light flash unless the Active Arming Bypass feature is activated.

The AL-100-H features an Automatic Rearming feature which prevents accidental disarming. This commonly occurs when the transmitter button is accidentally pressed while walking away from the vehicle as the keys are being put into a pocket or purse. This feature is discussed in detail on Page 12.

Active Aming Bypass: Upon active aming (using the transmitter), if the hood and truck protection circuit or if an optional sensor is in a triggered state, the AL-100-Hwill still am. However, it's confirmation response will charge to <u>three hom horks</u> (or sizen chirps) and <u>three parking light flashes</u>. This will indicate that the truck or hood is not secure or that an optional sensor is in a state that mornally occurs only when the sensor detects an intrusion or shock to the vehicle. This allows securing of the truck or hood, or inspection of the sensor.

Place note that the other protection circuits, such as the doors and current sensing (explained on Page 15), are fully operational and will activate the security system if violated. The system will remain operational except for the bypassed circuit(s). Thus, if the Active Arming Bypass is activated by a defective sensing switch or optional sensor, the AL-100-H can still be used until the problem is corrected. If the bypassed circuit is corrected while the system is anned, protection will resure on that circuit.

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Note: If the security system was triggered and reset while you were away from the vehicle the disarm confirmation changes to <u>four horn horks</u> (or siren chirps) and <u>four parking light</u> <u>flashes</u> before the parking lights turn on for the normal 60 seconds.

Note: The Automatic Rearming feature will rearm the system 90 seconds after disarming unless a door is opened. If the Last Door Arming feature has not been selected, this will stop any further automatic arming.

If the Last Door Anning feature has been selected, however, once a door has been opened, shutting the door will start this process, indicated by a hom hock (or siren chinp) and the parking lights flashing off once (the parking lights stay on for 10 seconds after opening the door). Turning the ignition switch "On" will prevent the security system from anning 30 seconds after the door was shut upon entering the vehicle.

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Disaming The System Without The Transmitter: In the event the transmitter is lost, damaged, or its batteries become exhausted, the Easy ValetTM Switch <u>and</u> your ignition key can be used to disam the system. The Easy ValetTM Switch is a small push-button that is Race - 6 trigger becaus ungrounded, the security system will becaue fully amed thirty seconds later. Note: All of the doors and the truck must have the proper connection of the control module's wiring. This feature allows unfurried passenger exit and truck access, as the Last Door Anning process does not start until the last door or truck is closed, and opening any door or the truck will interrupt the process. You can still, of course, actively am the security system with the transmitter at any time.

- 4) Automatic Locking Of Doors With Ignition Turned "On" And Unlocking With Ignition Turned "OFF": With this feature ON, the security system will automatically lock the doors 1 second after the ignition switch is turned "On" and unlock them when the ignition switch is turned "Off".
- 5) Current Sensing: With this feature turned ON, when the security system is anned, current sensing can detect a positive current draw from the vehicle's battery. (Example: the done light comes on when a door is opened or the brake lights come on when the brake pedal is pressed). The security system will trigger if a current draw is detected.
- 6) Fifteen Second Entry Delay: With this feature turned ON, letting the security system automatically and itself by Last Door Anning will allow a 15 second delay before the system triggers after opening a door. This feature is designed to allow operation of the security system even if the transmitter is lost or its battery becomes exhausted. Please note that actively anning the system by using the transmitter will bypass this feature.

Page - 15

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Programmable Features

Your AL-100-H security system has six programable features that allow your system to be automized to fit your personal needs. These features are selectable by Dual Inline Pin (DIP) switches inside the security system control module. Please see your dealer or installer for more details, as we recommend that the installer change any of the following features:

- 1) Horn Honk Or Siren Chirp Confirmation On Or Off: With this feature is turned ON, when the security system is armed and disarmed the horn will hork or the optional siren will drip to confirm that the system has responded to command from the transmitter. With this feature turned OFF, there will be no confirmation horks or chirps. Turning this feature OFF does not affect the optional Prevaming feature.
- 2) The Doors Will Also Lock With Automatic Last Door Arming: With this feature turned ON, when the security system passively arms from the Last Door Arming feature, the doors will also lock if an optional doorlock interface was added. This will occur when the system becomes fully armed 30 seconds after closing the last door.
- 3) Automatic Last Door Arming: With this feature turned ON the security system will ann itself automatically when the vehicle's last door is closed. At the moment the last door is closed the horn will hork or the siren will chirp, the exterior lights will flash one, and the Status LED will flash fast. Thirty seconds later the siren will chirp once again, the lights will flash, and the Status LED will flash slow, indicating that the security system is fully armed. If feature #2 is selected, the doors will also look. If the negative instant trigger is grounded at any time during the thirty second countdown (Example: opening the trunk), the Automatic Last Door Anning feature will be interrupted. When the negative instant Page - 14

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usually located in unabtrusive location accessible to the driver. In addition to providing a method to disarm the system without the transmitter, this switch also enters the AL-100-H into Valet Mode, which is discussed on Page 9. To disarm, follow this procedure:

- STEP 1. With the system in the armed condition, enter via the driver's door (be aware that the security system will trigger the instant the door is opened, sounding the horn or optional siren and flashing the parking lights).
- SIEP 2. Use the ignition key to turn "on" the ignition switch.
- STEP 3. Within 5 seconds, press the Easy Valet Switch. The security system will instantly disarm.

System Armed

While the AL-100-H is armed, the Red LED Status Indicator will be flashing. In addition to visual deterrence, the LED Status Indicator shows events that have occurred or actions that will take place in the system's operation. It is normally mounted in a conspicuous location easily seen from outside the vehicle.

The Starter Interrupt output will also activate. The Starter Interrupt will prevent the engine from starting when an attempt is made to start the engine. To minimize battery drain, this device does not draw electrical current unless the ignition switch is turned to the "Start" position.

While armed, the AL-100-H monitors all protected circuits for an intrusion attempt. If an optional sensor is utilized, the sensor will also be activated to monitor intrusion attempts. Sensors are available which include those that monitor shock to the vehicle, detect charges in atmospheric pressure within the vehicle, and radar sensors that can detect motion inside and outside the vehicle. Paqe - 7

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While armed, the AL-100-H monitors all protected circuits for an intrusion attempt. If an optional sensor is utilized, the sensor will also be activated to monitor intrusion attempts. Sensors are available which include those that monitor shock to the vehicle, detect charges in atmospheric pressure within the vehicle, and radar sensors that can detect motion inside and outside the vehicle. Pape - 7

System Activated

While the AL-100-H is armed, should any intrusion attempt occur, the security system will instantly activate or "trigger". One triggered, the security system will respond by:

- 1) There will be an audible response. The horn will hork in pulses or the optional electronic siren will be activated.
- 2) The exterior lights will flash.
- 3) If the system has been connected to the vehicle's doorlocking system with an optional interface, the doors will relock so that the thief cannot easily regain entry.

The horn or optional sizen and lights will stay activated for 60 seconds, unless the system is disamed with the transmitter or placed in Valet Mode. If all protected entries are secure at the end of 60 seconds, the system will rearmautomatically. However, if there is a protected entry still open or a sensor still in a triggered state at the end of the 60 seconds, the system will retrigger for two more 60 second cycles. Should this occur the system will stop after a total of 3 minutes, while ignoring only the open entry or triggered circuit. Should the entry be closed, protection will resume instantly for that circuit.

After the searity system has been triggered, when it resets the disam confirmation will no longer be 2 chings and the exterior lights turning on immediately and staying on for 60 seconds. Instead, the system will respond by producing 4 sinen chings and flashing the lights 4 times before the lights stay on for 60 seconds.

The LED Status Indicator will indicate which zone activated the system. This is accomplished by the status indicator flashing one to three times between pauses, as defined on page 11, until the ignition key is turned "On". This Zone Violation feature does not require the system to reset at 60 seconds as an aid in diagnosis of the system.

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The horn or optional sizen and lights will stay activated for 60 seconds, unless the system is disamed with the transmitter or placed in Valet Mode. If all protected entries are secure at the end of 60 seconds, the system will rearm automatically. However, if there is a protected entry still open or a sensor still in a triggered state at the end of the 60 seconds, the system will retrigger for two more 60 second cycles. Should this occur the system will stop after a total of 3 minutes, while ignoring only the open entry or triggered circuit. Should the entry be closed, protection will resume instantly for that circuit.

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- 4) Power-Maze •: If the Vehicle's battery is disconnected or if the searcity system's power wire is at, the Power-Maze feature will allow the system to trigger as soon as the ignition circuit is hot-wired or receives power. The searcity system will stay activated as long as the ignition is hot-wired.
- 5) The Security System Activates When Power Is First Applied: If the vehicle's battery is disconnected and then reconnected, most other security systems will disam. The AL-100-H security system will activate instantly when power is first applied.
- 6) Triggered Circuit Aming Bypass: Upon active aming (using the transmitter), if the hood and truck protection circuit or if an optional sensor is in a triggered state, the AL-100-H will still am but it's confirmation response will drange to <u>three hom honks</u> (or siren drinps) and <u>three parking light flashes</u>. This will indicate that the truck or hood is not secure or that an optional sensor is in a state that momally occurs only when the sensor detects an intrusion or shock to the vehicle. This allows securing of the truck or hood, or inspection of the sensor. This feature does not operate with Last Door Arming.
- 7) Defective Circuit Bypass: When the security system is activated, if a trigger circuit stays in a triggered state, the system will stop sounding and flashing the exterior lights after three minutes and automatically ream, bypassing the triggered circuit. If this circuit returns to a normal status, protection of that circuit will resume.

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- 4) Two horn honks or siren chirps and lights stay on for 60 seconds: The security system has just disammed.
- 5) Two horn honks or siren chirps and two light flashes: The security system has entered the Valet Mode.
- 6) Three horn horks or siren chirps and three light flashes: The system is anning with a protected circuit still open (such as the hood or trurk) or an optional sensor in a triggered state, and indicating that these circuits will be bypassed.
- 7) Four horn horks or siren chirps & four light flashes, then the lights stay on 60 seconds: The security system has just disamed and was triggered and reset while you were away.
- 8) Three horn horks or siren chirps and the lights flash once while the security system is anned: The Prevann feature has been activated.

Automatic Functions And Features

- 1) Parking Lights Stay On For 60 Seconds After Disaming: After disaming the security system, the parking lights will turn on and stay on for sixty seconds before automatically turning off. This feature lights the way to your vehicle.
- 2) The Doors Will Instantly Lock If The Security System Is Triggered (Patent Pending): If a thief triggers the security system the doors will automatically relock. If a door is opened, this advanced feature will wait for the door to shut and then relock the doors. This feature requires the installation of an optional doorlock interface.
- 3) 90 Second Automatic Rearming: Should you unknowingly activate your transmitter, which results in the doors unlocking and the security system disarming, the system will Page 12

the security system is disamed or in Valet Mode.

- 4) Two horn honks or siren chirps and lights stay on for 60 seconds: The security system has just disarmed.
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- 7) Four horn horks or siren chirps & four light flashes, then the lights stay on 60 seconds: The security system has just disamed and was triggered and reset while you were away.
- 8) Three horn horks or siren chirps and the lights flash once while the security system is anned: The Prewarm feature has been activated.

Automatic Functions And Features

- 1) Parking Lights Stay On For 60 Seconds After Disaming: After disaming the security system, the parking lights will turn on and stay on for sixty seconds before automatically turning off. This feature lights the way to your vehicle.
- 2) The Doors Will Instantly Lock If The Security System Is Triggered (Retent Pending): If a thief triggers the security system the doors will automatically relock. If a door is opened, this advanced feature will wait for the door to shut and then relock the doors. This feature requires the installation of an optional doorlock interface.
- 3) 90 Second Automatic Rearming: Should you unknowingly activate your transmitter, which results in the doors unlocking and the security system disarming, the system will page 12

Using The Easy Valet $^{\text{TM}}$ Switch

The primary function of the Easy ValetTM Switch is to enable you to enter your security system into the Valet (override) Mode, which prevents the system from aming. You will find this useful when stopping at service stations, having your vehicle serviced, having your car valet parked or while having your car washed. As discussed on Page 6, the Easy ValetTM Switch, <u>in conjunction with the ignition key</u>, can be used to temporarily disarm the system should your transmitter be lost or become incpenable. The Easy ValetTM Switch is normally monted in an undertusive location that is accessible to the driver. Be sure your dealer indicates the location of the Easy Valet SwitchTM to you to avoid potential inconvenience.

There are two procedures to follow to enter the Valet Mode. Normally, the ignition key is required to enter and exit the Valet Mode. With Easy ValetTM the ignition key is only required while disarming the system when the transmitter is not available.

Operating The Easy ValetTM: This unique feature can be activated anytime the system is not in an amed state. This patent-pending feature allows you to enter the Valet Mode by simply depressing the Easy ValetTM switch. However, if the system is anned or in the triggered state, the ignition must be turned "On" and then the Easy ValetTM Switch pressed within 5 seconds to disam the system by entering the Valet Mode.

Simply press and hold the Easy Valet[™] Switch for 2 seconds to activate the Valet Mode. The system will confirm that it is in the Valet Mode by honking the horn (or chirping the siren twice), flashing the parking lights twice and the LED Status Indicator turning on constant. The security system will hold memory of the Valet Mode when the ignition switch is "On" or "Off". While in the Valet Mode the system will not arm but the Panic feature and the remote locking and unlocking of doors from the transmitter will still function. In addition, the doors locking

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To Turn Off The Easy ValetTM simply press the switch. Instantly the system will exit the Valet Mode and start a 90 second Automatic Anning sequence, indicated by the LED Status Indicator flashing fast. This sequence will stop when the ignition switch is turned "On". When this occurs, the system is completely out of the Valet Mode and the LED Status Indicator will turn off.

Regular Valet: Regular Valet is identical in every respect to Easy ValetTM except the ignition switch is "On" when the Easy ValetTM Switch is pressed. The only operating differences are:

- The system can only be disarmed by pressing the Easy Valet[™] Switch within 5 seconds after the ignition switch is turned "On".
- 2) If Regular Valet is used to enter the Valet Mode, pressing the Easy Valet[™] Switch without the ignition switch "On", will result in the system coming out of Valet Mode immediately and <u>not</u> start the 90 second Automatic Arming countdown.

Red LED Status Indicator

The LED Status Indicator feature is a visual indicator of what state or condition the security system is in at any given time. It is normally positioned in a location that is easily observed by the driver. There are 7 possible conditions that the security system can be in, and are reflected by the LED Status Indicator:

1) Off

= The security system is disamed and not performing any automatic functions. Page - 10

with ignition "On" and unlocking with ignition "Off" ' feature (with optional doorlock interface) will still operate.

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1) Off = The security system is disamed and not performing any automatic functions.

- 2) On Constant = The system is in the Valet Mode.
- 3) Flashing Slow = The system is Fully Armed.
- 4) Flashing Fast = The 30 second Last Door Anning feature or 90 second Automatic Rearning feature is in progress.
- 5) Flash 1x & Pause = The system was triggered by an optional sensor.
- 6) Flash 2x & Pause = The system was triggered by the hood or trunk circuit.
- 7) Flash 3x & Pause = The system was triggered by the door circuit or current sensing.

Audible And Visual Confirmation

The vehicle's horn or an optional electronic siren and the vehicle's exterior lights primary function is to attract attention to your vehicle if the security system is triggered. In addition, they are also used to communicate with you, as a way of confirming actions that have taken place, or, that may be in process of automatically taking place. A chinp is the short, sharp sound the optional siren makes as part of this communication. The exterior lights referred to are the vehicle's parking lights. We do not recommend flashing the headlights. The halogen headlights found in modern vehicles are not designed to be rapidly turned on and off. If connected to the security system, a reduction of their useful life may be noticed.

Horn Honk Or Siren Chirp With Light Flash Confirmation For Arming, Disarming & Valet Activation: The following horn honks or siren chirps and flashing exterior light actions inform you of these conditions of the security system:

1) One hom homk or sinen chinp and one light flash: The system has armed.

2) Two horn horks or siren chirps (and no lights): Trunk release has been activated while

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Horn Honk Or Siren Chirp With Light Flash Confirmation For Arming, Disarming & Valet Activation: The following horn honks or siren chirps and flashing exterior light actions inform you of these conditions of the security system:

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