

University Of Michigan

COLLEGE OF ENGINEERING
THE RADIATION LABORATORY
DEPARTMENT OF ELECTRICAL ENGINEERING
AND COMPUTER SCIENCE

3228 EECS BUILDING 1301 BEAL AVENUE ANN ARBOR, MICHIGAN 48109-2122 734 764-0500 FAX 734 647-2106 http://www.eecs.umich.edu/RADLAB/

Re: Certification for Visteon RXRES Receiver

Model: RXRES

FCC ID: NT8-14B115RXSNOOK

IC: 3043A-RXSNOOK

USER'S MANUAL INFORMATION

(PRELIMINARY)

The User's Manual is in preparation. The following material will be contained in the manual:

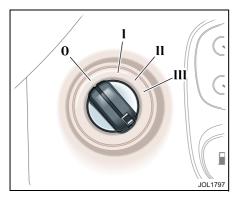
FCC ID: NT8-14B115RXSNOOK IC: 3043A-RXSNOOK

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. 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.

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

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.



Ignition switch

The fascia-mounted ignition switch, on the right-hand side of the steering column, has four key positions:

- Ignition OFF Is the only position in which the key can be inserted and removed.
- Auxiliary Allows use of some electrical circuits, for example, radio and window operation.

Note: The airbag system is activated in position 'l'.

- 11 Ignition ON - All electrical circuits except the starter motor are activated. The key remains in this position when driving.
- Engine start The starter motor is operated for as long as the key is held in this position, against spring pressure.

When the key is turned back to the OFF position, the delayed accessory feature becomes active.

The circuits available in the auxiliary position remain activated for a preset timed period or until a front door is opened.

To remove the ignition key

Automatic transmission vehicles have a key interlock feature.

Apply the electric parkbrake, move the gear selector to the Park 'P' position and turn the key to position '0'.

The automatic transmission gear selector must be placed in Park 'P' before the key can be removed from the ignition switch.

When the key is removed, the gear selector will be locked in Park.

Steering column lock

The steering column lock is controlled by the ignition switch.

When the key is removed from the ignition switch, you will hear the steering column lock engage.

When the key is inserted into the ignition switch, you will hear the steering column lock disengage.

In rare circumstances, it may be necessary to gently turn the steering wheel from side to side to release the steering column lock.

Gear-shift interlock

A brake pedal/gear-shift interlock system is incorporated in the automatic transmission gear selector mechanism.

To move the gear selector from Park:

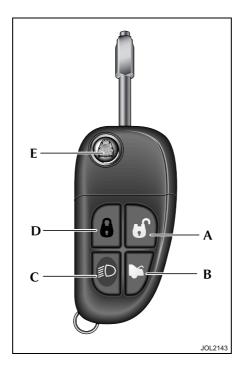
- 1. Turn the ignition key to position 'll' or start the engine.
- 2. Press the brake pedal.

2-2 Security and locks

Vehicle security

When the vehicle is unoccupied or unattended, you are advised to do the following:

- Apply the electronic parkbrake and move the gear selector to the Park 'P' position.
- For maximum security ensure that the doors are double-locked (if enabled).
- Do not leave children or pets in the vehicle unattended.
- Do not leave luggage or valuables on display.
- Remove all keys, including remote transmitters, from the vehicle prior to locking the doors, even when the vehicle is in your garage.
- Close all windows, bonnet and luggage compartment, and doublelock all the doors.
- Park the vehicle where it can be seen.
 At night, park in a well-lit area.



Key transmitter

The security system is controlled remotely by a radio frequency, battery-operated, integrated transmitter key.

The transmitter is activated by pressing one of the operating buttons.

- (A) Unlocks and disarms the vehicle.
- (B) Releases the luggage compartment lock.
- (C) Activates the convenience headlamp feature and sounds the panic alarm. For further information on the convenience headlamp feature, see **Headlight convenience** in Section 4.
- (D) Locks/double-locks and arms the vehicle.
- (E) Locks/unlocks the key.

To free the key, press the release button (E). When not required press and hold the button and fold the key into the transmitter housing.

Note:

- 1. The key transmitter may not operate correctly in areas which are subject to interference from other radio equipment operating on the same frequency. Interference may emanate from sources such as amateur radio, medical equipment, telecommunications devices and other remote controls or alarms. Where such interference is experienced operate the key transmitter as close as possible to the vehicle, or use the key in the drivers door lock.
- 2. All buttons on the key transmitter will not operate if a key is in the ignition switch, however, if the doors, bonnet or luggage compartment are open, only button (D) will not operate.

Each integrated key will operate all the locks on your vehicle.

Additional integrated key transmitters can be obtained from your Jaguar Dealer. See Additional keys on page 2-5.

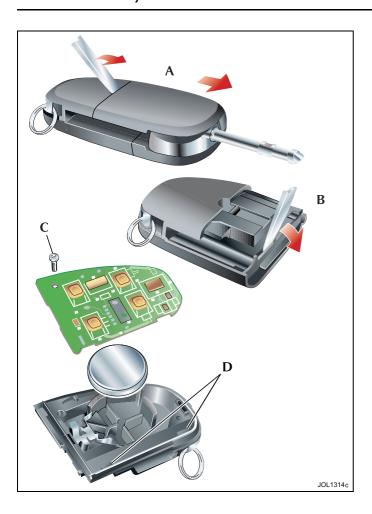
Care of key transmitters

The key transmitters must be treated with care. Do not expose to extremes of heat, dust, humidity or fluids. Do not leave the transmitter exposed to direct sunlight. The battery is the only serviceable part.

Caution: Should a key transmitter be lost, a new one can be obtained and programmed to the vehicle by a Jaguar Dealer, who will ask for proof of vehicle ownership. It is advisable to notify a Dealer as soon as a key transmitter is lost or stolen and have the remaining key transmitter(s) reprogrammed. This will then prevent the lost or stolen key transmitter from being used to disarm and unlock the vehicle.

Note: Dealers keep a log of all enquiries for replacement keys and notify Jaguar Cars Ltd. of any such requests.

2-4 Security and locks



Key transmitter battery renewal

When the battery needs renewal there will be a significant decrease in the effective range of the key transmitter. To renew the battery, follow the procedure below.

- Insert a small, flat-blade, screwdriver at an angle of about 45 degrees, into the slot on the back of the key transmitter as shown (A). Apply light pressure to the screwdriver and lever the screwdriver forward to separate the two halves of the key transmitter. Finally, pull the transmitter from the key body.
- Insert the screwdriver into the slot between the transmitter covers adjacent to the key stowage area as shown (B). Apply light pressure to the screwdriver and lever the screwdriver downward to separate the covers.
- Unscrew and remove the small screw (C) and remove the printed circuit board, taking care not to touch the battery terminals. Remove the battery and dispose of it safely.
- Fit a new battery cell, type CR2032 (available from your Jaguar Dealer), with the side marked with the positive symbol (+) downwards in the battery receptacle. Avoid touching the new battery as moisture/oil from the fingers can reduce the life of the battery and corrode the contacts.
- Replace the printed circuit board making sure to engage the board under the securing tabs (D), and secure with the screw.
- Refit the cover and click into place with thumb pressure.
- Slide the transmitter back onto the key body until it clicks into place.

Keys

Vehicles are supplied with three keys, two integrated transmitter keys and one green-headed 'valet' key.

Integrated transmitter key

The integrated transmitter key is comprised of the key body, which is integrated with a remote transmitter. The key operates all the locks on your vehicle.

Green-headed 'valet' key

The green-headed 'valet' key is not integrated with a remote transmitter. The key operates the driver's door lock and the ignition switch, but does not operate the luggage compartment lock.

Black-headed key

The black-headed key is not integrated with a remote transmitter, but it does operate all the locks and the ignition switch on your vehicle. The key is not supplied with your vehicle. For further details, contact a Jaguar Dealer.

Additional keys

Five additional keys can be programmed to operate the locks on your vehicle.

Note: A maximum of three additional integrated transmitter keys can be used.

All additional keys must be obtained from and programmed by, a Jaguar Dealer.

Key number label

The key number is recorded on an adhesive label which is affixed to the rear of the integrated transmitter keys. Peel off the label and keep safely, not in the vehicle.

Immobilisation system

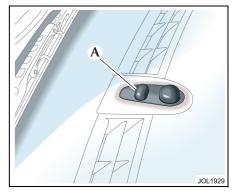
This vehicle is fitted with an immobilisation system. The system prevents the vehicle being driven away by unauthorised persons. The features of the system include the following:

Programmable key

An electronic device is fitted in the head of each key which is programmed to the vehicle electronic systems.

When a programmed key is inserted into the ignition switch it is recognised and accepted by the vehicle's electronic systems.

The engine cannot be started with a key that is not programmed to the vehicle electronic systems.



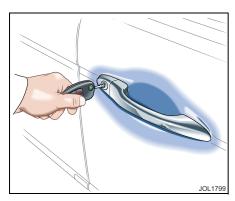
Immobilisation system status light

The immobilisation system status is shown by a Light Emitting Diode (LED), which is located on the top surface of the fascia panel (A).

If an ignition key is put into the ignition switch and turned to position 'll', and the LED remains flashing after three seconds, it is possible that the engine will not start.

Should this occur, please contact a Jaguar Dealer, who will investigate the cause of the flashing LED.

2-6 Security and locks



Door locks and handles

All doors can be centrally locked and unlocked remotely, using the key transmitter buttons.

Only the driver's door is equipped with an external key lock, which activates the central locking, double-locking and twostage unlocking.

Vehicle locking and unlocking lock the vehicle and set the alarm

- Ensure windows and sunroof (if fitted) are fully closed.
- Press the lock button on the key transmitter, or;

 Put the key in the driver's door lock, turn the key towards the rear of the vehicle and release.

The direction indicators will flash once, the security light on the centre console will start flashing and, after 20 seconds, the alarm will be set.

If a door, the bonnet or the luggage compartment are open and an attempt is made to lock the vehicle, the direction indicators will flash five times (if enabled) and an audible warning will sound twice as a warning that the vehicle is not secure.

Double-locking



WARNING:

When the vehicle is double-locked the doors cannot be opened, either from inside or outside the vehicle, except with the correct key or key transmitter. Breaking a window will not allow a thief access by opening a door. Therefore, double-locking should not be used when persons are inside the vehicle as they will not be able to vacate, or be released from the vehicle if an emergency arises.

Note: It will not be possible to double-lock the vehicle if any door is open, a key is in the ignition switch or the inertia switch has been tripped.

With all doors closed, press the lock button on the key transmitter twice within three seconds to double-lock the vehicle and set the alarm.

Alternatively, place the key in the driver's door lock, turn the key towards the front of the vehicle and then towards the rear within three seconds.

The exterior direction indicators will flash once as locking takes place and a longer, second flash as double-locking takes place. An audible tone will be produced to confirm that the vehicle has been double-locked, and the security system has been armed.

Drive-away door locking

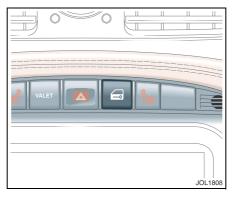
With the ignition key at position 'II' and all the doors closed, all doors will lock when the gear selector is moved from position 'P' or 'N'. The gear selector has to be moved from 'P' or 'N', and into a different gear, for longer than one second. If a door is opened during the one second period the drive-away door locking feature is cancelled.

If the vehicle is stopped and a door is opened and closed, the doors will lock again when the gear selector is moved from position 'P' or 'N'.

If the vehicle is stopped and a door is opened and subsequently closed, but the gear selector is not moved from position 'P' or 'N', the doors will remain unlocked.

All vehicles except those for the Japanese market, have the drive-away door locking feature installed during manufacture.

This feature can be disabled. or reinstated, by a Jaguar Dealer, if required.



Central locking switch

This switch can be used to prevent uninvited entry when the vehicle is stationary, e.g. at road junctions or traffic lights.

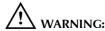
With the ignition switch in either position 'l' or 'll' and all the doors closed and unlocked, one press of the switch will lock all of the doors and the luggage compartment.

If the vehicle is unlocked, press and hold the switch for more than two seconds to centrally lock the vehicle and close all the windows and sunroof (if fitted). Releasing the switch will halt the operation of the windows and sunroof (if fitted).

If the vehicle is locked, press and hold the switch for more than two seconds to unlock the vehicle and open all the windows and sunroof (if fitted). Releasing the switch will halt the operation of the windows and sunroof (if fitted).

If the central locking switch is pressed when the ignition switch is not in position 'l' or 'll' the security systems tilt and intrusion sensors (if fitted) will not operate for one arming period. The security LED in the fascia will flash for 5 seconds to indicate that this has occurred.

Note: All windows must be 'taught' to the vehicle for this function to operate. See Section 4.



- 1. Make sure that all occupants are kept clear of the windows and sunroof aperture.
- 2. When an interior door release lever is pulled, the door will unlatch.

After using the central locking switch, it will be necessary to press the switch again or pull a front door interior release lever to resume normal operation.

Smart locking

This feature helps prevent locking the key in the vehicle.

If a door is open or ajar and an attempt is made to lock the doors using a front door interior locking lever, all doors will become unlocked.

If a door is open or ajar and an attempt is made to lock the doors using a rear door interior locking lever, only the door on which the lever is operated will lock, the remaining doors will remain unlocked.

If a door, bonnet or luggage compartment is open, the vehicle can only be locked from the outside by using a key in the driver's door lock.

It will not be possible to lock the vehicle with a key transmitter if a door, luggage compartment or bonnet is open, or a key is left in the ignition.

Global closing



WARNING:

Make sure that all occupants are kept clear of the windows and sunroof aperture.

Key in the driver's door: Turn and hold the key towards the rear of the vehicle, for more than 2 seconds duration, to close all the electrically operated windows and sunroof (if fitted). If the key is released, the global closing action stops immediately.

Key transmitter: Press and hold the lock button for longer than 2 seconds to close all the electrically operated windows and sunroof (if fitted – one-touch operation). Pressing any button again while global closing is taking place will stop all movement.

Unlock the vehicle and disarm the alarm

Using a key transmitter:

Press the unlock button on the key transmitter.

Single stage unlocking – This unlocks all doors and the luggage compartment and turns on the interior lights.

Global opening

Key in the drivers door: Turn and hold the key towards the front of the vehicle for more than 2 seconds duration, to open all the electrically operated windows and sunroof (if fitted). If the key is released, the global opening action stops immediately.

Key transmitter: Press and hold the unlock button for longer than 2 seconds to open all the electrically operated windows and sunroof (if fitted – one shot operation). Pressing any button again while global opening is taking place will stop all movement.

Auto-relocking (Dealer enable option)

This feature automatically centrally locks and arms the vehicle (if security is enabled) if the vehicle has been unlocked with the key transmitter:

- and no door, bonnet or luggage compartment has been opened for 45 seconds or,
- if the ignition remains off for 45 seconds.

This feature can be enabled or disabled, by a Jaguar Dealer, if required.

Two stage unlocking

This only unlocks the driver's door and luggage compartment and turns on the interior lights. A second press is required to unlock all doors (Dealer programmable or key fob selectable).

Using a key

Single stage unlocking: Put the key in the driver's door lock, turn the key towards the front of the vehicle and release. This will unlock all the doors, the luggage compartment, and turn on the interior lighting.

Two stage unlocking: Put the key in the driver's door lock, turn the key towards the front of the vehicle and release.

This will unlock the drivers door, luggage compartment and turn on the interior lighting.

Turning the key towards the front of the vehicle a second time will unlock all the remaining doors.

European countries only: If the vehicle is unlocked with a key, a ticking sound will be heard when the driver's door is opened.

This is a warning to indicate that the vehicle alarm will activate after 7 seconds if the vehicle is actively armed, and after 15 seconds if the vehicle is passively armed.

The full alarm will activate, as previously described, unless the security system is disarmed, either by pressing the unlock button on the key transmitter, or by placing a valid key into the ignition switch and turning the key to position 'Il'.

Note:

- If a passenger door is opened before the driver's door, or during this period, before the vehicle is disarmed, the alarm will sound immediately.
- The security system is not disarmed when unlocking with the key. This feature gives additional protection against vehicle theft.

For certain countries: Unlocking the vehicle, using a key in the driver's door lock, will disarm the alarm system.

Selecting single stage or two stage unlocking

The procedure for changing from single stage to two stage unlocking (if enabled), or vice versa, is as follows:

 Press and hold the lock and unlock buttons on the key transmitter simultaneously for four seconds.

Note:

- 1. The direction indicators will flash twice to confirm the action.
- 2. To revert to the previous condition, repeat the procedure described above.
- 3. For operation of the two stage unlocking feature when the vehicle is equipped with a touch-screen, please refer to the Touch-screen Handbook.

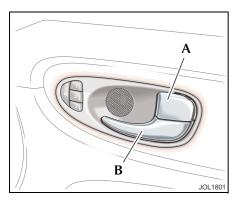
Direction indicator unlock alerts

The exterior direction indicators give two flashes as unlocking takes place.

Note:

- If a fault exists with the intrusion sensing or inclination sensing systems, the exterior direction indicators will flash three times accompanied by one audible sound, or, the exterior direction indicators will flash seven times. You can choose either method of fault indication. For further information, contact your Jaguar Dealer.
- If the audible method is enabled then the direction indicator method is disabled.

2-10 Security and locks



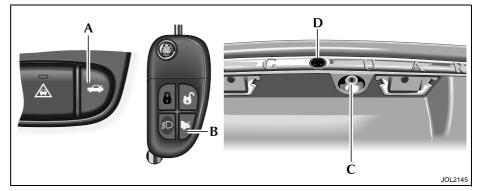
Internal door locking and unlocking

To centrally lock all doors, press the lock lever (A) on the driver's or front passenger's door. Each rear door will lock/unlock and open independently by operating the door release levers.

To unlock a front or rear door, pull the release handle (B) or the lock lever (A).

The driver's or front passenger's door lock lever will unlock all doors.

Note: Operating the locks more than 15 times within 20 seconds will cause the central locking to be inhibited for 20 seconds. If required, the locks may be operated individually during the 20 second waiting period.



Luggage compartment

The luggage compartment is locked and unlocked electrically in conjunction with the doors.

To open the luggage compartment, use any of the methods that follow:

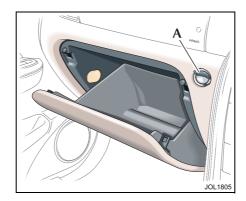
- Press the luggage compartment lid release switch (A), which is located on the fascia switchpack. This switch will not operate if the vehicle speed exceeds 8 km/h (5 mph).
- Press the luggage compartment button (B) on the key transmitter (see the Note below).

- Insert a key into the luggage compartment lock (C), however, opening with the key when the vehicle is armed will cause the alarm to sound immediately. Should this occur, use a transmitter, or place the key in the ignition, to disarm the alarm system.
- With the vehicle unlocked, press the release button (D) on the luggage compartment lid. The button will not operate unless 'Park' or 'Neutral' have been selected.
- The luggage compartment locks automatically when the lid is closed.

Note: If the vehicle alarm system is armed and the luggage compartment is opened using the key transmitter, the alarm will not sound. The system will be rearmed when the lid is closed, provided the vehicle has not been disarmed.

Neither the luggage compartment lid release switch on the fascia switchpack nor the lid release button will operate when the vehicle is armed, or in 'valet' mode. An attempt to operate these switches will result in an audible warning chime.

Note: Operating the internal, external or remote luggage compartment switches more than 15 times within 20 seconds. or opening and closing the luggage compartment will cause opening to be inhibited for 20 seconds. Should this happen wait 20 seconds for normal operation to resume. If required, the luggage compartment may be opened by using the key during the 20 second waiting period.



Glove compartment

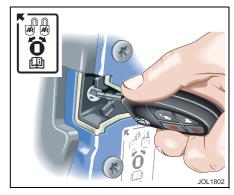
To open the glove, press and release the button (A).

If the glove release button is pressed more that 15 times within a 20 second duration, the glove opening function will be inhibited.

It will then be necessary to wait for 20 seconds before the glove opening function will be reactivated.

The glove cannot be opened when the following conditions occur:

- 1. The vehicle is being driven using the green-headed 'valet' key, or;
- 2. The vehicle is centrally or double-locked



Child safety locks

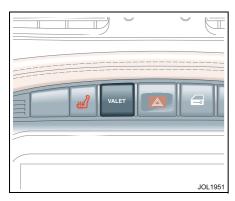
Child safety locks are fitted to the rear doors.

Open a rear door, insert the ignition key into the lock and turn the key outwards. This immobilises that door interior handle. Repeat this for the opposite rear door.

After setting the child lock the door(s) can only be opened using the exterior door handle.

To remove the child lock feature, open the door and using a key, move the control to its original unlock position.

2-12 Security and locks



Valet key locking

Before locking the vehicle and handing the green-headed 'valet' key to a parking attendant, press the 'valet' switch to inhibit the luggage compartment interior release switch, external luggage compartment switch, and the glove compartment switch. The vehicle can then be parked by an attendant who can lock the vehicle after parking, but cannot open the luggage compartment or glove box. The luggage compartment can then only be unlocked with the black-headed key or the key transmitter. To cancel 'valet' mode operate the key transmitter unlock button.

When in 'valet' mode each operation of the interior luggage compartment release switch, exterior luggage compartment switch or the glove compartment switch, will result in a chime being emitted which indicates that 'valet' mode has been selected. If the ignition is set to position 'Il' a message will appear on the message centre display indicating that an unauthorised attempt has been made to open the glove box or luggage compartment.

Note: Do not use the green-headed key for normal driving as the luggage compartment and glove box cannot be opened.

Radio frequency approval

If the type approval of your key transmitter requires inspection, refer to the table below.

Type Exam. Certificate Number: CERT 980154-01

Korean Market Certification Number: R-LPD1-02-00-0018

Country	Approval No.
All EU and EFTA countries	(€ 0700 ①

Alarms and audible signals

Note: In certain markets, legislation prohibits the use of audible confirmation signals. In such cases, the sound source has been removed from the system.

Audible signals

Two audible signals will be heard if an attempt is made to lock the vehicle with the key transmitter if a door, the bonnet or the luggage compartment is not fully closed or, a key is in the ignition switch.

European/United Kingdom countries only

If the vehicle is unlocked with a key when it is armed, a ticking sound will be heard when the driver's door is opened.

This is a warning to indicate that the vehicle alarm will activate after 7 seconds if the vehicle is actively armed, and after 15 seconds if the vehicle is passively armed, unless the security system is disarmed with either the key transmitter or by turning a valid ignition key to position 'II'.

Note: If the vehicle is unlocked with a key when it is armed and any door other than the driver's door is opened, the alarm will sound immediately.

Full alarm

Once armed, any of the following circumstances will create a full alarm state, sound the horns, sound the siren, or a combination of both (as regional legislation dictates) and flash the direction indicators:

- Opening a door, luggage compartment lid (except with transmitter) or bonnet.
- Movement in the passenger area (if intrusion sensors are fitted).
- Using a key in the ignition switch which is not programmed to the vehicle.
- If, after 15 seconds (passively armed), from opening the driver's door with a key (as regional legislation dictates), the key is not inserted into the ignition switch and turned to position 'll'.

- If, after 7 seconds (actively armed), from opening the driver door with a key (as regional legislation dictates) the key is not inserted into the ignition and turned to position 'II'.
- If the inclination sensor (if fitted) is activated.
- Any attempt is made to remove the radio or the front navigation system (if fitted).
- Pressing the headlamp convenience button on the remote transmitter 3 times within 3 seconds activates the panic alarm (if enabled).

2-14 Security and locks

Error audible signal

Two audible signals will be heard whenever one of the following conditions are present:

- If any door is open when an attempt is made to lock the vehicle.
- The luggage compartment or the bonnet is not properly closed when an attempt is made to lock the vehicle.
- A key is present in the ignition switch.
- See Direction indicator unlock alerts on page 2-9 for the Notes regarding error signals during failure of intrusion sensor (if fitted), and inclination sensor (if fitted).

Note: If error audible signal is disabled the direction indicator flash option can be enabled by a Jaguar Dealer.

Error flash signal (Dealer enable option)

The direction indicators will flash five times whenever one of the following conditions are present.

- If any door is open when an attempt is made to lock the vehicle.
- The luggage compartment or bonnet are not fully closed when an attempt is made to lock the vehicle.
- A key is present in the ignition switch.
- See Direction indicator unlock alerts on page 2-9 for the Notes regarding error signals during failure of intrusion sensor (if fitted), and inclination sensor (if fitted).

Audible signals

An audible signal will sound when:

- The vehicle is deadlocked (when fitted).
- The 'valet' switch is pressed with the luggage compartment closed.
- The vehicle is in 'valet' mode and the interior/luggage compartment release button, or glove box switch is pressed.
- A door is opened if the vehicle has been actively armed (United Kingdom and Europe only). This mode can be cancelled by disarming the security system using the key transmitter, or by switching the ignition to position 'll'.

Security features

The security system has been designed for:

- Prevention of theft of the vehicle.
- Prevention of theft of items from the vehicle.
- Personal security.

The security system is integrated with the vehicle electronics and engine management systems making it far more difficult for a thief to penetrate and steal the vehicle.

Intrusion sensing (if fitted)

A further enhancement to the security system is the addition of intrusion sensing.

When the vehicle is armed movement within the vehicle interior will activate the alarm.

The luggage compartment can be unlocked, using the key transmitter button, without sounding the alarm.

When the security system is disarmed the intrusion sensors are also disarmed.

Note: If the vehicle has double-locking disabled, then the intrusion sensor is active upon centrally locking using the key transmitter or the key in the drivers door.

Inclination (tilt) sensing protection (if fitted)

This feature protects against unauthorised towing away or jacking up. When the vehicle is double-locked and armed, any tilting of the vehicle, such as jacking or lifting, will activate the alarm.

Note:

- 1. If the vehicle is being transported by road, rail or sea, press the central locking switch, located on the facia panel, prior to locking the vehicle. This prevents the intrusion and the inclination system from being armed for one alarm cycle, and sounding the alarm as the vehicle pitches and rolls.
- 2. If the vehicle has double-locking disabled the inclination sensor is active when the vehicle has been locked using the key transmitter, or the key in the drivers door lock.

Panic alarm (if enabled)

When in or near the vehicle, the alarm can be set off to deter a possible offender. For this feature to operate, the key must not be in the ignition switch.

Pressing the headlamp convenience/panic button on the key transmitter three times within three seconds will activate the 'Panic Alarm'.

The alarm is stopped by:

• Putting the key into the ignition switch and turning to position 'll'.

Note:

- The key transmitter cannot be used to cancel the panic alarm. This prevents unauthorised cancellation in an emergency.
- The panic alarm is normally disabled. If required, this feature can be enabled or disable by a Jaguar Dealer.

Passive Arming (Dealer option)

Passive arming will not lock the doors, it only arms the security alarm system.

Passive arming, if enabled by a Jaguar Dealer, will automatically arm the vehicle alarm system 30 seconds after the last protected entry (door, luggage compartment) is closed following the key being removed from the ignition switch.

When passive arming occurs the direction indicators will flash once and a single tone will be heard (when enabled). The red security light on the fascia will start to flash and will continue for as long as the alarm is armed.

Opening a protected entry causes a warning sound which continues for 15 seconds before the vehicle goes into the full alarm state.

If the system has been passively armed it can be disarmed by either using the key transmitter, by switching the ignition to position 'll', or by unlocking the driver's door with the key.

Note: The security system will not passively arm if a key is in the ignition switch or if any protected entry is open.

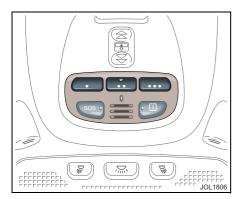
Battery reconnection

If the battery has been disconnected and is subsequently reconnected, the alarm system will resume the same state as before the battery was disconnected.

If the alarm was sounding when the battery was disconnected it will sound again when the battery is reconnected and will need the transmitter unlock button to be pressed or key placed in the ignition switch and turned to position 'II' to disarm it.

Battery backed sounder

In certain markets a separate, self-contained, battery backed sounder is fitted. This device will sound the full alarm if the vehicle alarm is activated or if the vehicle battery or the sounder is disconnected when the security system is armed.



Garage door opener transceiver

The garage door opener transceiver (where fitted) is located in the roof console. The transceiver can be programmed to transmit the radio frequencies of up to three different transmitters used to activate garage doors, gates, home lighting, security systems, or other radio frequency operated devices.

For information on the range of available compatible products or accessories, contact your Jaguar Dealer.



WARNING:

- 1. Do not use the transceiver with any garage door opener that lacks the safety stop and reverse feature as required by safety standards. A garage door opener which cannot detect an object, signalling the door to stop and reverse, does not meet current safety standards. Using a garage door opener without these features increases risk of serious injury or death.
- 2. When programming the transceiver to a garage door opener or entry gate, make sure that people, the vehicle and objects are out of the way to prevent potential harm or damage as the gate or garage door will activate during the programme.
- 3. This device may suffer from interference if operated in the vicinity of a TETRA transmitter (mobile or fixed station type). This interference is likely to affect the original transmitter as well as the in-car transceiver.

Programming

Note: For best results, fit a new battery to the hand-held transmitter of the garage door opener (or other device) before programming. If your garage door opener receiver (located in the garage) is equipped with an antenna, ensure that the antenna is hanging straight down.

- 1. Switch off the engine.
- 2. Press and hold the two outermost buttons (1 and 3) on the transceiver, releasing only when the indicator light begins to flash after 20 seconds.

Note: Do not repeat step 2 when programming the additional buttons.

- 3. Hold the end of the hand-held transmitter approximately 50 to 150 mm (2 to 6 inches) away from the transceiver in the roof console, keeping the indicator light in view.
- 4. Using both hands, simultaneously push the hand-held transmitter button and the chosen transceiver button (1, 2 or 3). The transceiver indicator light will flash, first slowly and then rapidly. When the indicator light flashes rapidly, release both buttons. The rapid flashing light indicates successful programming of the frequency signal.

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- Press and hold the programmed transceiver button to activate the programmed device and release when the device begins to activate.
- 6. If, after 90 seconds, the indicator light does not flash rapidly, release both the transceiver and the hand-held transmitter buttons and repeat the procedure starting with Step 2. However, position the hand-held transmitter at a different angle and/or distance.
- The device must now be 'trained' for operation from the transceiver. See Training procedure on page 2-19.

Programming hints and tips

If the device does not operate you may need to complete the steps outlined in the section **Rolling code programming**.

Some entry gates and garage door openers may require you to replace Step 4 with the procedures in the section **Gate programming**.

If you are programming a rolling code equipped device, continue with the procedures outlined in the section Rolling code programming.

Note: Keep the original transmitter for future use or programming procedures if, for example, you purchase a new vehicle.

Caution: It is recommended that when you sell or dispose of the vehicle, the programmed transceiver buttons be erased for security purposes.

Gate programming

The technology of some entry gates, requires you to press and re-press (cycle) the hand-held transmitter button every two seconds during programming.

Continue to press and hold the desired transceiver button while you cycle your hand-held transmitter until the indicator light flashes rapidly.

Note: When programming a garage door opener or entry gate, unplug the device during the 'cycling' process to prevent possible motor failure.

Rolling code programming

Rolling code garage door openers (or other rolling code devices) which are 'code protected' may be determined by the following:

Reference the device owner's instruction manual for verification.

- The hand-held transmitter appears to programme the transceiver correctly, but does not activate the garage door.
- Press and hold the programmed transceiver button. The device has the rolling code feature if the transceiver indicator light flashes rapidly and then turns solid after two seconds.

To programme a garage door opener or other device with the rolling code feature, follow these steps after completing the section **Programming** on page 2-17.

Information and assistance

For information on the range of available compatible products or accessories, or for assistance, contact your Jaguar Dealer.

You can also contact the supplier's helpline on 0 0800 0466 354 65. This toll-free number can be called from anywhere within Europe. No separate country code is required. (The first zero is not required when calling from within Germany.) If you experience difficulty using this number, then you may use the alternative number 0049 6838 907227.

Contact can also be made via the internet. The website address is www.eurohomelink.com. The e-mail address is info@eurohomelink.com.

Training procedure

Note: The aid of a second person may make the following training procedure quicker and easier.

 Locate the training button on the garage door opener receiver (or other device). Exact location and colour of the button may vary. If there is difficulty locating this button, refer to the instruction manual supplied with the device.

Note: Following step 2 there are 30 seconds in which to initiate step 3.

- 2. Firmly press and release the training button on the receiver which will activate the training light.
- 3. Firmly press and release the transceiver button. Press and release the transceiver button a second time to complete the training process. Some devices may require you to do this step a third time to complete the training.

The device should now recognise the transceiver signal and activate when the transceiver button is pressed.

The remaining buttons may now be programmed if this has not been previously done.

Reprogramming a transceiver button

To programme a device using a button that has previously trained, follow these steps:

- Press and hold the desired transceiver button. Do not release until step 4 has been completed.
- 2. When the indicator light begins to flash slowly (after 20 seconds), position the hand-held transmitter 50 to 150 mm (2 to 6 inches) away from the transceiver surface.
- 3. Press and hold the hand-held transmitter button.
- 4. The transceiver indicator light will flash, first slowly and then rapidly. When the indicator light begins to flash rapidly, release both buttons.

The previous device has now been erased and the new device can be activated by pushing the transceiver button that has just been programmed. This procedure will not affect any other programmed transceiver buttons.

Erasing programmed transceiver buttons

Individual buttons cannot be erased, however, to erase all three programmed buttons:

- Press and hold the two outermost buttons until the indicator light begins to flash after 20 seconds.
- 2. Release both buttons.

The transceiver is now in the train, or learning, mode and can be programmed at any time following steps 3 and 4 in the section **Programming** on page 2-17.



WARNING:

The manufacturer is not responsible for any radio or TV interference caused by unauthorised modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

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Approvals for radio transceiver

Country	Approval No.
Austria	GZ104569-ZB/98
Belgium	RTT/D/X2064
Cyprus	MCW129/95 12/2000
Czech Republic	CTU 2000 3 R 1194
Denmark	98.3142-266
Finland	F198080106
France	97619 RD
Germany	D800038K
Greece	JCI 05JUL2000 RTTE *
Hungary	BB-5793-1/2000
Iceland	IS-3418-00
Ireland	TRA 24/5/109/5
Italy	DGPGF/4/341032/TB 0002573

Country	Approval No.
Luxembourg	L2433/10510-03J
Malta	WT/122/98
Netherlands	NL99030970
Norway	NO20000026
Poland	Not available
Portugal	Not supplied
Slovak Republic	Not available
Spain	0416 00
Sweden	Ue990195
Switzerland	BAKOM 98.0746.K.P
Turkey	0425/TGM-TR/JOCO-EURO
United Kingdom	RTTE-3-59 / 20754