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 Delphi-Delco SJB Receiver

Model: SJB

FCC ID: L2C0019R IC: 3432A-0019R

USER'S MANUAL INFORMATION

(PRELIMINARY)

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

FCC ID: L2C0019R IC: 3432A-0019R

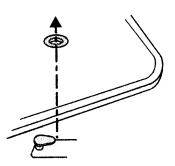
This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- (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.

Position the floor mat so that the eyelet is over the pointed end of the retention post and rotate forward to lock in. Make sure that the mat does not interfere with the operation of the accelerator or the brake pedal. To remove the floor mat, reverse the installation procedure.



art=exdcf079_a

To install floor mats that have a screw in retainer:

- 1. Move the driver's seat to the most rearward position
- 2. Position the driver's side floor mat with the rear of the mat against left (outboard) front edge of seat track mounting bracket.
- 3. Use a screwdriver to screw locator post into vehicle carpeting. Exert pressure while turning to pierce the carpeting.

When installed properly, the locator will not screw down tightly, but will rotate freely.

Use only Ford original Equipment floor mats. Do not stack multiple floor mats over the Ford original equipment floor mats as they are not positively retained.

com_remote_entry_sys.win1

REMOTE ENTRY SYSTEM

The remote entry system allows you to:

- lock or unlock all vehicle doors and liftgate without a key.
- unlock/open a RH power sliding door and/or LH power sliding door (if equipped).
- activate the personal alarm.
- arm and disarm the perimeter anti-theft system (if equipped).

The lock/unlock and power sliding door features will operate with the vehicle in P (Park) or N (Neutral) and the ignition in the OFF, ACC or RUN positions. The panic control feature only operates with the ignition in the OFF position.

104

REVIEW COPY:

If there is any potential remote keyless entry problem with your vehicle, ensure **ALL key fobs** (remote entry transmitters) are brought to the dealership, to aid in troubleshooting.

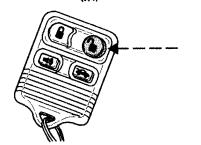
Unlocking the doors

• 3-button remote

com_remote_unlock.win1

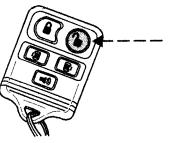
art=navcf307_a

• 4-button remote



art=concf301_a

• 5-button remote



art=wincf311_c

Press this control to unlock the driver door and disarm the anti-theft system (if equipped). The interior lamps will illuminate.

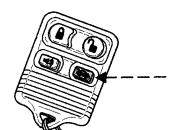
Press the control again within three seconds to unlock all doors and liftgate.

105

REVIEW COPY:

Opening power sliding doors

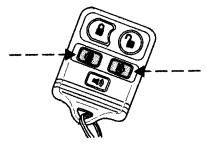
• 4-button remote



art=concf302_a

com_remote_opendoor.win3

• 5-button remote



art=wincf313_b

Press this control twice within three seconds to open the power sliding door (if equipped). The interior lamps will illuminate. Press this control another two times within three seconds to close the power sliding door and turn off the interior lights.

106

REVIEW COPY:

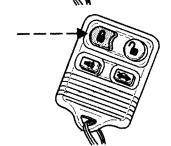
Locking the doors

• 3-button remote

com_remote_lock.win1

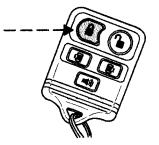
art=navcf306_a

• 4-button remote



art=concf300_a

• 5-button remote



art=wincf312_b

Press this control to lock all doors and liftgate, turn off the interior lights (if they were on) and arm the perimeter anti-theft system (if equipped).

To confirm doors/hood are closed and locked, press the control a second time within three seconds. The door(s) will lock again and the horn will chirp once.

If any of the doors are open or ajar, the horn will make two quick chirps, reminding you to properly close all doors/hood.

107

REVIEW COPY:

Sounding a panic alarm

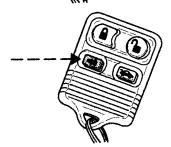
• 3-button remote



art=navcf308_a

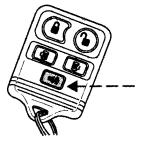
com_sounding_panic.win

• 4-button remote



art=concf303_a

• 5-button remote



art=wincf314_b

Press this control to activate the personal panic alarm.

The personal panic alarm will cycle the horn and turn signals on/off plus illuminate the interior lights.

To deactivate the alarm, press the control again or turn the ignition to $\mbox{\sc RUN}$ or ACC.

This device complies with part 15 of the FCC rules and with RS-210 of Industry Canada. Operation is subject to the following two conditions: $\frac{1}{2}$

108

REVIEW COPY:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

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

liluminated entry

The interior lights will illuminate when the remote entry Unlock or Panic control is pressed with the doors closed or when unlocking or opening a power sliding door (if equipped).

The system automatically turns off after 25 seconds or when the ignition is turned to the RUN position. The panel dimmer control must **not** be set to the OFF position for the illuminated entry to operate.

The inside lights will not turn off if:

- they have been turned on with the instrument panel dimmer control or
- any door is open.

The battery saver will shut off the interior lamps 30 minutes after the last door is closed even if the panel dimmer control is left on.

Illuminated exit

The interior lights will illuminate when the key is removed from the ignition. When the headlamp control is on the "sleeping baby mode", only the lower interior lights will illuminate.

The system automatically turns off after $25\ \text{seconds}$. The panel dimmer control must not be set to the OFF position for the illuminated entry to operate.

Keyless entry system

With the keyless entry keypad, you can:

• lock or unlock the vehicle doors without using the key.

Your vehicle has a factory set 5 digit code that operates the keyless entry system. You can also program your own 5 digit personal entry code. The factory-set code is located:

- on the owner's wallet card in the glove compartment
- taped to the computer module.

109

com_illuminate.win

com_illuminate.win2

com_keyless_program.04

REVIEW COPY:

When pressing the controls on the keyless entry keypad, press the middle of the controls to ensure a good activation.

Programming your own personal entry code

To program your own code:

- 1. Enter factory set code (keypad will illuminate when pressed).
- 2. Press 1/2 control within five seconds of step 1.
- 3. Enter your personal 5 digit code. Enter each digit within five seconds of previous one.

Do not set a code that includes five of the same number or presents them in sequential order. Thieves can easily figure out these types of codes.

1-2 3-4 5-6 7-8 9-0

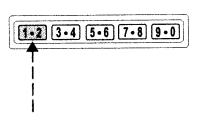
art=mntcf301_a

Your personal code does not replace the permanent code that the dealership gave you. You can use either code to unlock your vehicle. If a second personal code is entered, the module will erase it in favor of the new code.

If you wish to erase your personal code, use the following instructions:

- 1. Enter factory set code.
- 2. Press 1/2 control within five seconds of step one.
- 3. Press 7/8 control and 9/0 control at the same time within five seconds of step 2.

The system will now only respond to the factory set code.



art=mntcf301_a

com_keyless_anti-theft.01

Unlocking the doors with the keyless entry system

To unlock the driver door, enter either the factory set code or the personal code (each digit must be pressed within five seconds of the prior digit). The interior lamps will also illuminate.

To unlock all doors, enter the factory set code or personal code (driver door unlocks) and press the 3/4 control within five seconds.

110

REVIEW COPY:

Locking the doors with the keyless entry system

It is not necessary to enter the factory or personal code prior to locking all doors. To lock the doors:

• Press the 7/8 control and the 9/0 control at the same time.

Activating/deactivating autolock with the keyless entry system

Before following the activation or deactivation procedures, make sure that the anti-theft system (if equipped) is not armed, ignition is off, and all vehicle doors and liftgate window are closed.

- 1. Enter 5 digit entry code
- 2. Press and hold 7/8 control
- 3. Press and release 3/4 control while holding 7/8 control
- 4. Release 7/8 control.

The horn will chirp once if autolock was deactivated or twice (one short and one long chirp) if autolock was activated.

To re-activate autolock, repeat steps 1-4.

com_remote_battery.01

Replacing the battery

The remote transmitter is powered by one coin type three-volt lithium battery CR2032 or equivalent. Typical operating range will allow you to be up to 10 meters (33 feet) away from your vehicle. A decrease in operating range can be caused by:

- weather conditions
- nearby radio towers
- · structures around the vehicle
- other vehicles parked next to the vehicle

To replace the battery:

111

REVIEW COPY:

2001 Windstar (win), Owners Guide (owners),

Market: USA English (fus)

- 1. Twist a thin coin between the two halves of the transmitter near the key ring. DO NOT TAKE THE FRONT PART OF THE TRANSMITTER APART.
- 2. Place the positive (+) side of new battery in the same orientation. Refer to the diagram inside the transmitter unit.
- 3. Snap the two halves back together.

Replacement of the battery will not cause the remote transmitter to become deprogrammed from your vehicle. The remote transmitter should operate normally after battery replacement.

Replacing lost transmitters

• 3-button remote



• 4-button remote



art=concf304_a



art=navcf305_a

art=dewcf305_b

112

REVIEW COPY:

5-button remote



art=wincf315_b

If a transmitter has been lost or if you would like to purchase additional transmitters for your vehicle (up to four may be programmed into memory), take **all** your vehicle's transmitters to your dealer or perform the reprogramming procedure yourself. It will be necessary to reprogram **all** the transmitters to the vehicle at the same time while performing this procedure.

Reprogramming transmitters

To reprogram the transmitters yourself, place the key in the ignition and turn from OFF to ON eight times in rapid succession (within 10 seconds) ending in the ON position. After doors lock/unlock, press any control on all transmitters (up to four). With each control press of the transmitters, the door should cycle (lock/unlock) to confirm programming. When completed, turn the ignition to OFF. The door locks should cycle (lock/unlock) one last time to confirm completion of programming.

Memory seat/mirrors/adjustable pedal feature (if equipped)

The memory feature allows automatic positioning of the driver seat, side mirrors and adjustable pedals to three programmable positions.

- To program position one, move the driver seat, both side mirrors, and adjustable pedals to the desired positions. Press the SET control. The SET control indicator light will briefly illuminate. While the light is illuminated, press control 1.
- To program position two, repeat the previous procedure using control 2.
- To program position three, repeat the previous procedure but press controls 1 and 2 simultaneously.

com_memory_feature_cntrl.nav

113

REVIEW COPY:

The memory feature also allows you to recall previously stored positions with your remote transmitter(s). Up to three remote transmitters can be activated to utilize the memory recall positions.

Press the memory feature control to move to the previously stored seat/mirror/adjustable pedal positions.

Activating/deactivating the memory feature on your remote transmitter

The memory feature from the remote transmitter can be turned off/on, however, the memory control buttons will continue to operate. Before following the procedure, make sure that the ignition is OFF and all doors and the liftgate window are closed. You must complete steps 1–7 within 30 seconds or the procedure will have to be repeated. If the procedure needs to be repeated, you must wait 30 seconds.

- 1. Turn the ignition key to ON.
- 2. Press the power door unlock control three times.
- 3. Turn the ignition key from ON to OFF.
- 4. Press the power door unlock control three times.
- 5. Turn the ignition back to ON. The horn will chirp.
- 6. Press the power door unlock control two times, then press the power lock control once. The horn will chirp twice if the memory feature was deactivated or three times (two short and one long) if the memory feature was activated.
- 7. Turn ignition to OFF. The horn will chirp once to confirm the procedure is complete.

com_autolock_feature.win

Autolock

This feature automatically locks all doors when:

- · all vehicle doors are closed
- the ignition is in the ON/START position
- you shift into or through R (Reverse)

Relock

The autolock feature repeats when:

- the ignition is in the ON/START position
- the vehicle speed is below 5 km/h (3 mph) and any door is opened then closed

114

REVIEW COPY:

the vehicle speed exceeds 5 km/h (3 mph)

Deactivating/activating the autolock feature

Before following the procedure, make sure that the ignition is OFF and all vehicle doors and the liftgate window are closed.

You must complete steps 1-7 within 30 seconds or the procedure will have to be repeated. If the procedure needs to be repeated, you must wait 30 seconds.

- 1. Turn the ignition key to ON.
- 2. Press the power door unlock control three times.
- 3. Turn the ignition key from ON to OFF.
- 4. Press the power door unlock control three times.
- 5. Turn the ignition back to ON. The horn will chirp.
- 6. Press the unlock control, then press the lock control. The horn will chirp once if autolock was deactivated or twice (one short and one long chirp) if autolock was activated.
- $7.\ \mathrm{Turn}$ the ignition to OFF. The horn will chirp once to confirm the procedure is complete.

Deactivating/activating the illuminated exit feature

The illuminated exit feature can be turned off by your dealer.

PERIMETER ALARM SYSTEM (IF EQUIPPED)

The perimeter anti-theft system will help prevent your vehicle from unauthorized entry.

If there is any potential perimeter anti-theft problem with your vehicle, ensure **ALL key fobs** (remote entry transmitters) are brought to the dealership, to aid in troubleshooting.

Arming the system

When armed, this system will help protect your vehicle from unauthorized entry. When unauthorized entry occurs, the system will flash the turn signal lamps and side repeaters and honk the horn.

The system is ready to arm whenever the key is removed from the ignition. Any of the following actions will prearm the alarm system:

- · Press the remote entry lock control
- Press the interior power door lock control while the door is open

com_illuminate-exit.win

com_perim-theft.03

com_arming_theft.win

115

REVIEW COPY: