

LifeBelt© presents its Seat Belt Management System....

With the passing of a new federal law requiring all motorists to have their seat belts fastened while driving, LifeBelt© has developed an exciting new product to ensure that all drivers fasten their seat belts before starting their car engine.

A sensor is easily attached to the seat belt latching mechanism, and an actuating device to the seat belt near the seat belt clip. When the seat belt is inserted into the latch a radio signal is sent to the Ignition Controller Unit (mounted under the dashboard) which enables the engine to start. For youth drivers, there is an additional feature to disable the car radio if the seat belt is not fastened.

Operation is simple, and effective. The driver seat belt **MUST** be fastened before the motor will start. When the ignition switch is turned on, if the seat belt has not been fastened, the motor start will be prevented and an audible alarm is sounded. With the seat belt fastened motor start is permitted. Should a seat belt be removed, for **SAFETY** reasons, the motor will continue to run, but, an audible alarm will sound, and the radio will be disabled. When the seat belt is re-fastened the alarm will silence and the radio will be enabled again.

For cold weather starts, a provision has been provided to allow operation of the engine at temperatures of 41 degrees F or less. An audible alarm will sound, and the radio inhibited in this mode. This feature facilitates cold weather starts and engine warm-ups via remote control.



Figure 1 Ignition Control Unit

Installation is accomplished by following a few easy steps, and can be completed in approximately 10 minutes.

Installation of the Ignition Controller Unit:

1. Remove all the components from the shipping container; verify that the kit is complete. Select the fuse type ends that fit your fuse panel and attach them to the Ignition Controller Unit matching colors. There are three types of fuses supported: Glass fuse, Standard automotive, and European automotive.
2. Be sure the ignition is turned off.
3. Attach the **RED** & **BLACK** from the Ignition Controller Unit by fastening the Black wire with ring-tong connector to the vehicle ground. Use a screw that is attached to the car body to fasten the lead to ground. Attach the **RED** wire clip onto the down side leg of the DOME LIGHT fuse, and re-insert the fuse back into the fuse panel. The down side leg is found by temporarily touching each side of the DOME LIGHT fuse holder with the **RED** terminal and listening for the Controller Unit to click. Attach the terminal to the fuse leg that does not click when you attach it. See picture below for example of inserting blade fuse connector.

(NEED PICTURE OF FUSE CLIP ON RED WIRE PLACED HERE)

Figure 2. Fuse **RED** wire Clip Indicating Attachment to Fused Leg

Remove the “IGNITION” fuse from the fuse panel and insert this fuse into the fuse holder marked **IGN** on the Ignition Control Unit. Insert the **GREEN** cables from the Ignition Controller Unit into the vacated ignition fuse slot in the vehicle fuse panel. Note: This fuse is the Ignition Fuse in most vehicles. Its function is to enable start of the vehicle motor. It may be labeled as IGN, MOTOR, INSTRUMENT CLUSTER etc.

4. Turn the ignition switch to the ON position. The Ignition Controller Unit should begin to beep. If the Ignition Controller Unit buzzes while beeping, remove the cable from the fuse panel, rotate it 180 degrees and re-insert. The unit will not be damaged if the **GREEN** wires are plugged in backwards, but will not function properly unless they are properly inserted as indicated above. If neither Beeps or Buzzes, check the power wiring (Red and Black wires). See Step 3 Above.

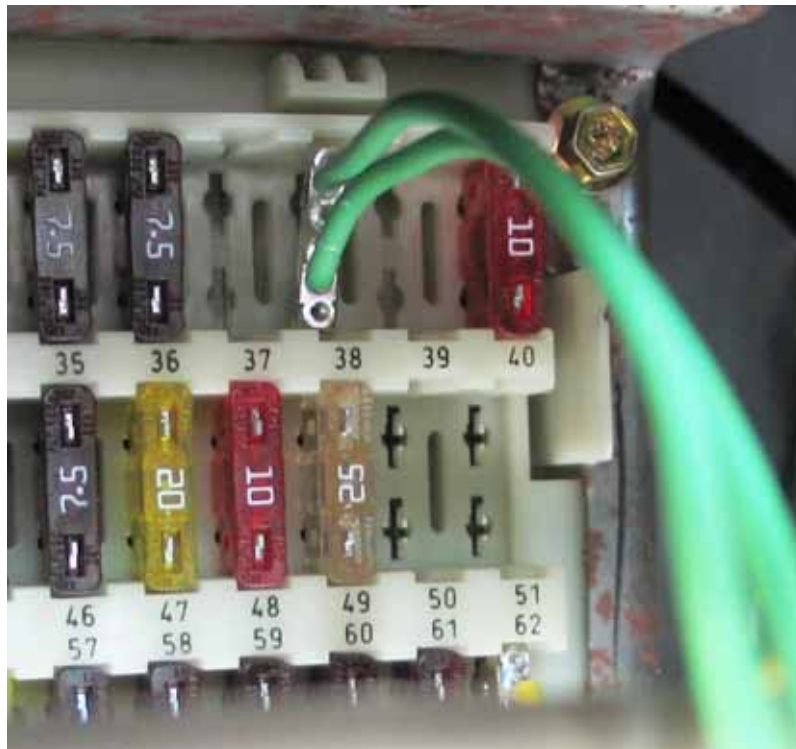


Figure 3. Attached Ignition Cable

5. If you wish to use the RADIO feature, turn the ignition switch off. Remove the radio fuse from the fuse panel and insert it into the fuse holder marked **RADIO** in the Ignition Controller Unit. Attach the **YELLOW** wires from the Ignition Controller Unit into the vacated Radio Fuse holder in the vehicle fuse panel with the radio turned on. If the relay and or radio buzz while the alarm is beeping remove the cable from the fuse panel, rotate it 180 degrees and re-insert. The unit will not be damaged if the **YELLOW** wires are plugged in backwards, but will not function properly unless they are properly connected as indicated above.



Figure 4. Attached Radio Cable

6. Fasten the Ignition Control Unit under the dash by using the provided cable ties to fasten the unit in place. For best performance be sure and dress the wire antenna (single 6" wire) away from other wires and metal objects. Keep the antenna straight as possible.
7. Installation of the Ignition Control Unit is complete.

Installation of the Remote Switch Unit:

1. Insert the seat belt into the seat belt receptacle.
2. With the seat belt properly fastened, the ACTUATOR needs to be positioned on the same side of the seat belt as the Remote Switch unit will attached. It needs to be as close to the receptacle as possible. Note the Remote Switch Unit and the Actuator must be mounted so that they are not hindering insertion or removal of the seat belt from the seat belt receptacle.



Figure 5. Mounted Actuator

3. Fasten the Remote Switch Unit to the seat belt latch receptacle. Position the Remote Switch Unit with the LED facing the Actuator, until the LED on the Remote Switch Unit illuminates. (approximately 1 inch). Thoroughly clean the surface of the seat belt latch and expose the adhesive backing and attach the Remote Switch Unit to the seat belt receptacle. Be sure to mount the Remote Switch Unit so that it is not hindering insertion or removal of the seat belt from the seat belt receptacle

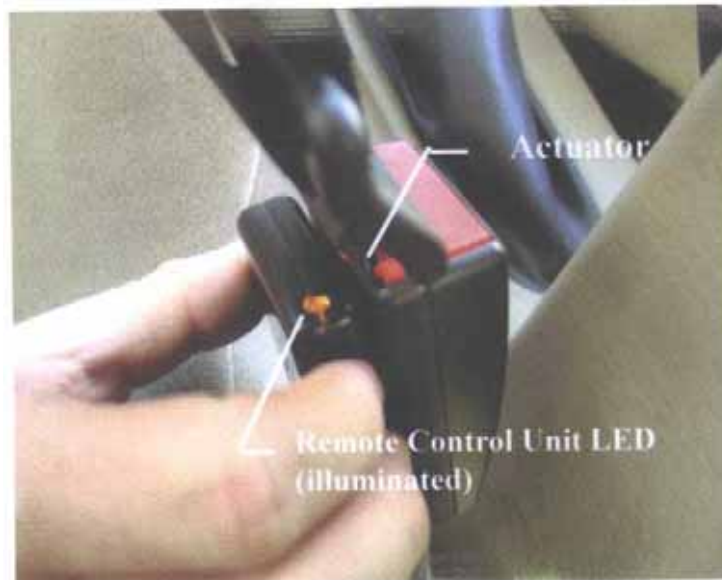


Figure 6. Mounting Remote Switch Unit



Figure 7. Typical Remote Switch Unit and Actuator mounting.
****Repeat installation step for additional transmitters***

Operational alarms:

LifeBelt© operational alarms:

When the seat belt is fastened, the driver will hear three tones (short- long- short). This signifies that the seat belt has been fastened.

When the seat belt is unfastened the driver will hear three tones (short-short-short). This signifies that the seat belt has been unfastened

The same three tones will be also heard approximately 15 seconds after the ignition switch has been turned off, signifying that the unit has timed out and is ready for another ignition sequence. This feature insures that the seat belt will have to be refastened each time before the vehicle is started.

Operational Check-Out:

With the ignition switch off, look under the dash at the bypass switch panel. The LED located on the Control Unit next to the Bypass Switch Door should be not be lighted.

Turn on the ignition switch with the seat belt unfastened. The LED will remain extinguished, and an alarm will sound indicating that the seat belt is not fastened. Operation of the radio will be disabled.

Fasten the seat belt. The LED should illuminate, the alarm will silence, and the radio if turned on, will begin to play. When the seat belt is fastened the operator will hear a series of tones as mentioned above (short long short) signifying that the seat belt has been fastened. If this does not happen, re-position the antenna on the Ignition Control Unit and try re-fastening the seat belt again.

While the vehicle is running, remove the seat belt. An audible alarm should sound, first three short beeps then a continuous beeping alarm. If the radio function has been installed the radio will be disabled. **Note: for safety reasons, once the vehicle motor is running removal of the seat belt will not disable the vehicle motor.** Fasten the seat belt again, three tones (short-long-short) will be sounded and the alarm will silence, and the radio can be used again..

After the vehicle has started, turn off the vehicle. A few moments later the audible alarm should sound with three short tones, indicating it has timed out. This is a feature that will enable the driver to attempt a restart should the vehicle not start on the first try. The operator will then have a few moments to try re-starting the engine again. If it does time out, merely re-fasten the seat belt to enable the Ignition Control Unit for vehicle operation.

Should it be needed, there is an Emergency Bypass Switch on the side of the Ignition Controller. To bypass the Ignition Controller Unit, remove the cover over the switch and slide the actuator away from the LED. This switch is set in the enable position at the factory. Note: The unit will alarm continuously until the bypass switch is restored to its original position. **This is an emergency function only.**

Specifications:

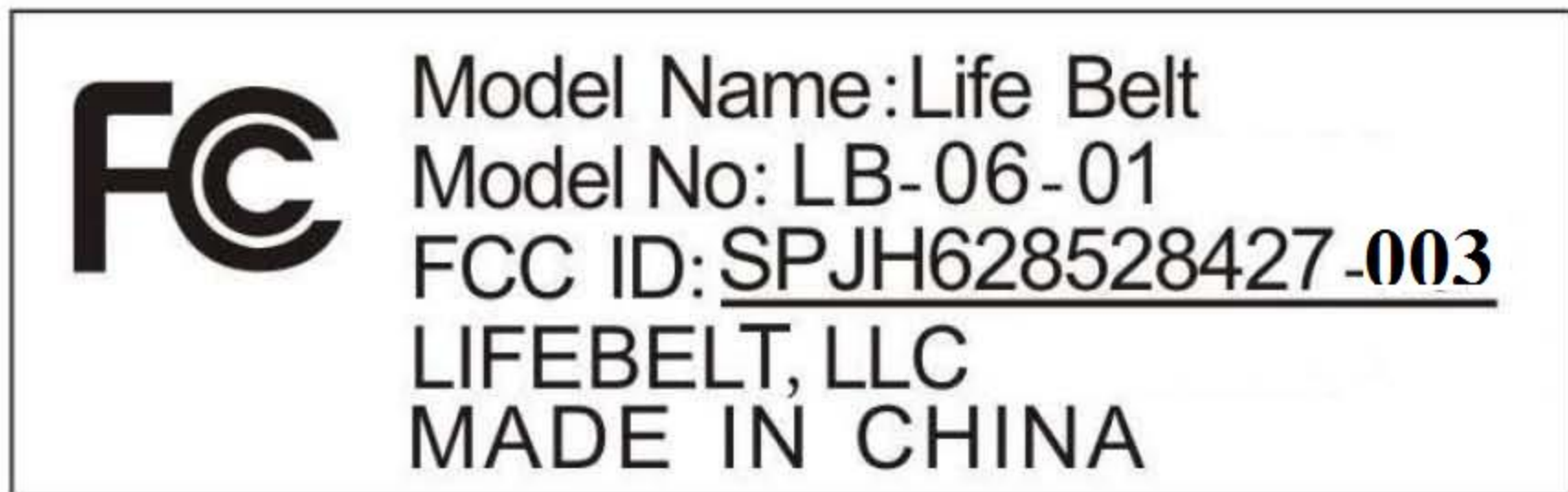
The Remote Switch runs on a coin battery. It should run with normal use for 1 yr. The battery is mounted in a battery socket to allow replacement. After the transmitter is activated, the transmission will cease operation after approximately 3 seconds.

The Unit will function from -20 degrees C to 85 degrees C.

At temperatures below 40 degrees F, engine start is enabled without seat belt, but alarm sounds. This is to facilitate remote starting in cold weather.

Power consumption of the Ignition Control Unit is less than 60ma in the inhibited mode and less than 25ma in the enabled mode. This is not enough power drain to effect the vehicle battery for normal vehicle operation. For long storage periods, removing the battery terminal is recommended by most automobile manufacturers.

FCC ID: SPJH628528427-003



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

Caution

Keep all its parts and accessories out of young children's reach.

Keep dry. Precipitation, humidity, and liquids, contain minerals that will corrode electronic circuits.

Do not use or store in dusty, dirty areas.

Do not store in hot areas. High temperatures can shorten the life of electronic devices and warp or melt certain plastics.

Do not store in very cold areas. Moisture can form inside the case, which may damage electronic circuit boards.

Do not attempt to open the case. Non-expert handling of the device may damage the system.

Avoid dropping and strong impact.

Do not change or modification. It is not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.