

PRODUCT MODELS

- C-EP Cover (software 7CA24V04 S9)
- Legend and LegendX Covers (software 7CA24V04 S9)

PURPOSE OF THE TESTING PROCEDURE

This procedure should be performed when a unit does not move or slightly moves or is stuck unlevelled, with or without a 4 or 5 flash alarm. It is not applicable for a unit with visually noticeable mechanical malfunctions.

PREPARATION

Make sure that no sleeve gets caught and that there is no interference with the jacks. If some interference of any kind is visible, please contact Covana (e.g.: fully extended cover, cannot get into reset

mode, etc.). At any point, if the problem seems rectified, proceed with Annex A on page 4.

TOOLS REQUIRED

5/32" (4 mm) Allen key	Adjustable wrench
7/16" (11 mm) socket wrench & spanner	48" (122 cm) level
1/2" (13 mm) socket wrench & spanner	Robertson screwdriver
Camera	Black marker

PARTS REQUIRED

PARTS REQUIRED	QTY
Motor post	2
Control box with power supply	1
Cable	2

Version française à la page 5.

NOTE

The following will have to be sent to Covana:

- All replaced parts (for engineering audit purposes).
- Pictures of the unit itself and the foundation on which it is installed.
- Video of the malfunction.

- Date of the installation; will determine the time frame between the installation date and the reported problem.
- Proof of purchase.
- Serial number.
- Installation check list.

⚠ WARNING

This procedure must be performed by a certified Covana installer.

STEP BY STEP PROCEDURE

1- COMPLETE THE INSTALLATION CHECKLIST

To ensure proper installation, carefully read this checklist and ensure that you have completed every step of the installation. The customer must receive a completed copy of this checklist. Please check each box when verified.

- The foundation preparation steps are done correctly (Location and Foundation preparation sections).
- The installation steps were done correctly (Uncrating, Cover assembly, Lifting mechanism, and Electrical hook-up sections).
- The seal was properly installed and there is no steam leaking out around the cover (Seal application section).
- The wiper brackets were properly installed to ensure the cover is watertight (Applying the wiper brackets section).
- The key switch is permanently installed 5 ft (1.5 m) away from the swim spa and 5 ft (1.5 m) from the ground.
- All the parts that came with the COVANA cover were installed.
- The start-up procedure is complete (the key sequence responds correctly and Testing the COVANA cover section is performed).
- The all-weather seal functions properly (the cover raises and lowers properly).
- The middle sleeves slide freely (manually slide the middle sleeve up and down when the cover is half open).

2- IDENTIFY THE SYMPTOMS AND TEST THE VOLTAGE

Flash alarm:

- 4 flashes = motor 1
- 5 flashes = motor 2

To determine the defective jack assembly, simply identify the concerned motor from the flash alarm and follow the wire up to the attached jack. This jack will either be on the control box side or on the opposite side.

- Voltage input _____ (see image 1, no. 1)
- Voltage output (AC unit) _____ (see image 1, no. 2)
- Flash alarm (how many blinks) _____
- Which jack is involved:

Control box side Opposite side of control box

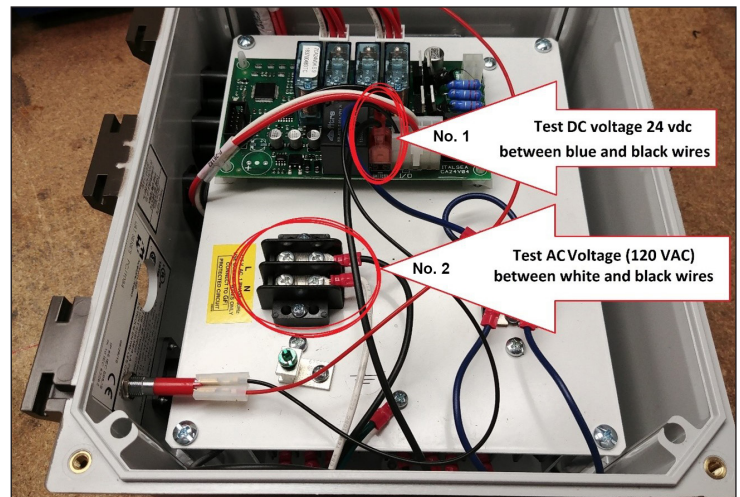


IMAGE 1

3- LOWER LIMIT RESET PROCEDURE

When executing this procedure, make sure to keep the same cable pattern when reconnecting the cables in the control box.

NOTE

Using the key switch, execute the following steps without interruption during sequences.

⚠ WARNING

- When following this procedure, the cover will lose its upper and lower limits. This means the mechanism can break if operated too high or too low.
- Never go to the upper limit of the cover while proceeding with the initialisation process. This will freeze the mechanism and prevent the cover from lifting or descending.
- If the unit is battery operated, always make sure that you are working with a freshly charged battery pack.

- 1) The cover needs to be raised 4" above the lowest position.
- 2) Unplug the motors (remove both motor plug harnesses from the control box).
- 3) Wait until the LED turns off, or disconnect the battery, or cut power off at the breaker panel for an AC unit.
- 4) If you have waited for the LED to turn off, go to step 5. If not, reconnect the battery, or turn power on at the breaker panel for an AC unit (required to reboot the system).
- 5) Using the key switch, turn the key DOWN (⬇ arrow) and hold for at least 15 seconds.
- 6) Release the key.
- 7) Turn the key DOWN (⬇ arrow) 15 times within 10 seconds.
- 8) If the LED of the control box is flashing about once every 3 seconds, the process is starting with success.
- 9) **You now have 30 seconds** to plug the motors and set the lower limit height of the cover. Use the key to lower the cover.
- 10) Lower the cover completely, then raise it just enough to have the spa sealed but without crushing the seal (about 1/4" between the acrylic and the fiberglass panel). Ensure the seal is touching the entire perimeter.
- 11) Once satisfied with the cover height, wait until the LED turns off, or disconnect the battery, or cut power off at the breaker panel for an AC unit (required to save the new limit).
- 12) If you have waited for the LED to turn off, the lower limit reset is now completed. If not, reconnect the battery, or turn power on at the breaker panel for an AC unit (required to reboot the system).

⚠ CAUTION

Wait until the LED turns off before operating the cover.

After completing the Lower Limit Reset Procedure, is the cover now moving properly? Is the problem persisting?

If the cover gets at an tilted position, which side stops first?

Control box side Opposite side of control box

4- Replace the control box with the "calibrated one"

Did the calibrated control box rectify the problem:

Is the unit still having the same symptoms? (commentaries / observation)

5- EM CABLES**NOTE**

Visually inspect the cables to assess if they are damaged or pinched. If so, it is a good indication that there is a problem. At any point through the following steps make sure that the cables are secured in the sockets by pushing on the plug until you hear a click.

Swap cable outside the control box. Was the problem transferred? Yes No _____

Any change in the flash alarm (how many blinks)? Yes No _____

Swap cable inside the control box. Was the problem transferred? Yes No _____

Any change in the flash alarm? Yes No _____

Swap the EM cables between both motor jacks: The short cable on the jack on the opposite side of the control box, then the long cable on the side of the control box.

Was the problem transferred from one jack to the other? Yes No _____

Replace the cable that transferred the problem.

Which cable has been replaced: Short Cable Long Cable

6- REPLACE ONE MOTOR JACK (THE ONE THAT KEEPS ON MOVING)

IDENTIFY, with a black marker, if the replaced jack is on the control box side or on the opposite side (of the old jack). If the problem is not resolved, go to step 7.

If the problem is not resolved, is the unit still having the same symptoms? If not, what are the new symptoms? _____

Which jack has been replaced: Control box side Opposite side of control box

Confirm the gas spring strength (take same pictures as images 2, 3 and 4 on page 4).

7- REPLACE THE SECOND MOTOR JACK

IDENTIFY, with a black marker, if the replaced jack is on the control box side or on the opposite side (of the old jack).

If the problem is not resolved, is the unit still having the same symptoms? If not, what are the new symptoms? _____

Which jack has been replaced: Control box side Opposite side of control box

Confirm the gas spring strength (take same pictures as images 2, 3 and 4 on page 4).



IMAGE 2



IMAGE 3

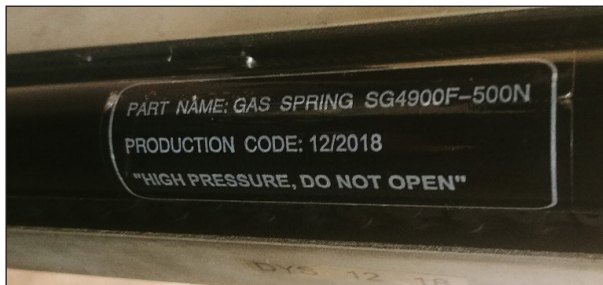


IMAGE 4

ANNEX A

If the problem seems resolved, proceed with the following steps to ensure that the case is closed.

1. Raise and lower the cover to its minimum and maximum, five times.
2. Wait 10 minutes.
3. Raise and lower the cover to its minimum and maximum, five times.
4. Do a close follow up with the customer, in case the problem would be environmental, intermittent or user related.