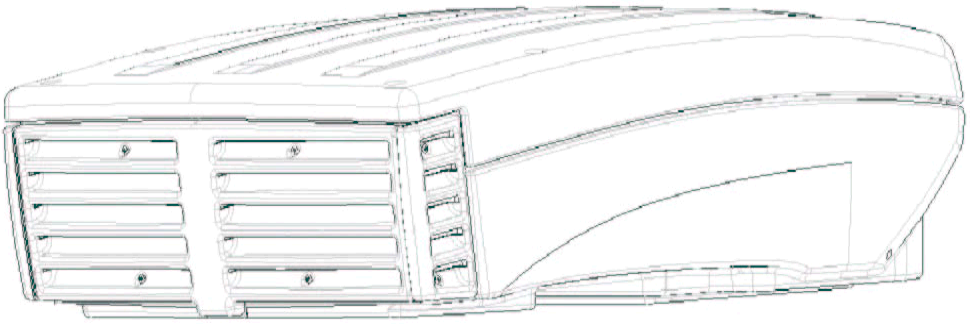
OXYCOM

AIR FOR A BETTER FUTURE



CABIN 400

TROUBLE-SHOOT-LIST

Trouble Shoot List CABIN 400

In case you have any problems with your Cabin 400, please use this trouble shoot list to help you to locate and solve the problems.

A manual for installation of the Cabin 400 can be downloaded on : www.???????.nl

1. Checklist in case problems occur immediately after installation:

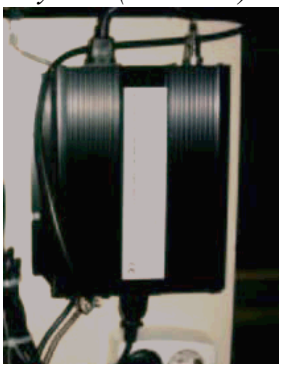
The Cabin 400 can be split up in 3 main parts:
1. The Roof unit with the Oxycell

2. The water tank (2 types)
from February 2005 *till the end of 2004*

3. **The inverter (2 Types)**

Mobitronic (Waeco)

Oxycom (Kotronic)



1.1 The Roof unit

The instruction how to mount the Roof unit can be found in chapter § 2.1, 2. 3 and 2.4 in the Installation manual from the CABIN 400. The mounting instructions for the Oxyzone can be found in chapter § 2.6.

Problems that can occur after installation of the Roof unit are:

Problem	**Solution**
Ventilor is making more noise than usual	Re-adjust the venitlator
Cooling is not working	Check water supply to the roof unit
Water is running over the roof instead of back into the water tank	Check if water refund pump is working sufficient
Water is coming out of the Oxycom into the vehicle	- sprinkler blister is broken - Oxycell is leaking on tape sealing - rubber sealing underneath Oxycell is out of position

1.2. The water tank and hoses

The instruction how to mount the hoses can be found in chapter §2.2 in the Installation manual from the CABIN 400. Instructions for the water tank in § 2.11.

1.2.1 Hoses

By following problems with the water supply to the roof unit, the way the hoses are placed has to be checked.
Possible problems when the hoses are not placed rightly are:

- Sprinklers are turning to slow.
- Water flows over the roof
- Bad cooling.

Solutions:

- Check if there are kinks in the hoses.
- Hoses can still be “moved” after installation.
- Hoses must have space enough to mount the protective springs in corners.

1.2.2 Water tank

Problems that can start up after mounting the water tank are:

Problem	**Solution**
Watertank is overflowing after automatically filling	- No magnet valve in water supply - Magnet valve placed the wrong - Upper level switch defect - Level switch blocked (by pump or filter)
Watertank is not filling automatically	- Electric connection with fresh water tank is not correct. - Magnet valve is not connected with connector print tank.
Water flowing over the roof instead of back into the tank	- Both pumps must be positioned right in the tank
Bad cooling	- Return pump is not positioned well underneath the water level in the tank. Both pumps must be positioned right. - 12 V + and – are wrongly connected - 12 V has to less power. 5 A power is needed.

1.3. The inverter

2 Types of inverters are used by Oxycom.

1.3.1 WAECO / Mobitronic

(The picture left on page 1 shows the WAECO Mobitronic)

The inverter from WAECO has a main output from 500 Watt (Getakteten Sinus). This feature has a relay box, which makes an automatically switch between 12 and 220 V possible. The Mobitronic inverter can be recognized easily through this extra relays box. On behalf of the HYMER- Group an extra battery relays (Batteriewächter) is mounted, this relays will switch of the inverter when the power reaches 11,3 V (HYMER Number 009-005-0014-342). Without this battery relays the inverter will switch of automatically at 10.2V. At 10.7 V starts an acoustic signal .

1.3.2 OXYCOM / Kotronic

This inverter is developed and assembled specially for OXYCOM. All functions are integrated in this inverter. There is no extra relays box mounted next to the inverter. This inverter is supplied with al necessary cables included.

Cables Oxycom inverter

- Cable for 230 V input including plug. (Fuse T3 A in net entry inverter
- Cable between inverter and Cabin (230 V output).
- The grey cable with the BNC plug is to switch the inverter on and off.
- Battery cable, between battery and inverter (12 V input).

If the red and white cable are connected with each other the inverter is switched on (standard there is a relays supplied with the inverter that can be connected with the 12 V board power).
The inverter switches automatically of at 11.5 V , at 11.6 V starts an acoustic signal.

To get the full power from the inverter it is important that the cable between the battery and the inverter has a minimum diameter from 10 AWG (6mm2) and a maximum length of 2 meter.

Electrical problems of the Cabin 400:

Problem	Solution
Cabin runs only at 12V, not 220V	The 220V is not coming into the inverter. Check the 3A fuse in the inverter
Cabin runs only at 220V, not 12V	Check the 30 A fuse in the battery cable to the inverter. Inverter might be broken.
The ventilator has different speeds affected from problems caused by electrical communication	Replace ventilator for a 180W type
Other problems	Replace the main print (is positioned underneath the Oxyzone)

2. OXYCOM Watertank

From February 2005 a new OXYCOM water tank is in our program.
Advantages of this new tank are:

1. Water tank cannot overflow: a magnet valve pre-assembled directly to the tank avoids this. Also when an extra pump (PU2) is placed in the fresh water tank (specially Buerstner) of the vehicle, it is recommended to leave the magnet valve in the water supply system.
2. The magnet valve is pre-assembled into this tank.
3. Wrong electrical connection is less because of the pre-assembled tank. Furthermore a redesign of the installation manual will create less mistakes during installation.
4. Pumps are fixed in this tank: broken level switches and connections will be avoided
5. Foam filter has new shape (round) and diameter: decreases movement in the tank and it is easier to position or change the pump or filter.
6. Fixed position from the pump:
   the cooling capacity can't go down after app. 1 hour (in old water tank caused by the inlet of the sprinkler pump (PU 1) which could be on a higher level than the lower level switch)
7. Height of the tank:
   the height of the tank (20 cm.) makes it possible to mount the tank as well in a double floor vehicle.
8. Mounting against the wall is easier: the cover of the connector print is also the bracket to mount the tank against the wall.
9. Optically, all tubes and wires are integrated on the back side of the tank. The tubes and wires can be placed either on the left, right or on topside.
10. Tubes, drain for the tank and other accessories are packed within the box .

3. Checklist to check if your Cabin 400 is working properly

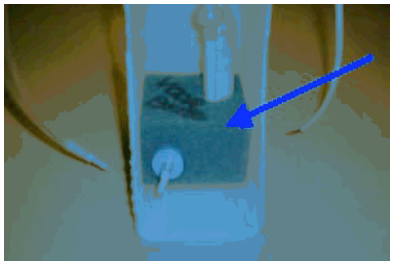
1. Take of the white cover on top of the roof unit and check if the sprinklers are turning around hard enough and spreading the water around the hole surface of the heat exchanger (Oxycell). Heat exchangers from the first production badge should be upgraded with a new sprinkler replacement set (art.nr.10850).

Take off old sprinklers

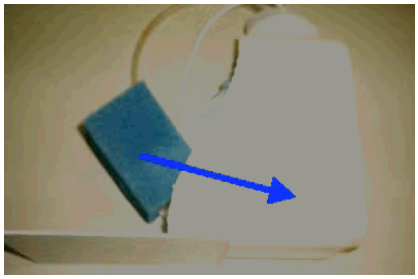
Replace with new sprinklers

2. Is the connection of the tube to the sprinkler pump still OK (not broken)?

3. Are both pumps placed well in the blue foam filter (old model water tank)?



4. Check if the blue filter with both pumps is not laying down on the bottom of the water tank?In the picture below it's wrong, the filter should be underneath the opening. Otherwise the level switches are activated by the pump in stead of the water level. At a certain moment the pump will get no water.



5. To get the full power from the inverter it is important that the cable between the battery and the inverter has a minimum diameter from 10 AWG (6mm2) and that the maximum length is 2 meter.