

TROUBLESHOOTING



COMPACT 1.6



Date: 02.11.2015

Page: 1/8

Molpir s.r.o. sídlo: SNP 129, 919 04 Smolenice; prevádzka: Hrachová 30, 821 05 Bratislava, Slovenská republika, Tel.: 00421 2 4319 1219, Fax: 00421 2 4319 1220, e-mail: obchod@molpir.com, www.molpir.com, www.shop.molpir.com

IČO: 31431372, IČpD: SK 2020391560, Tatra banka Bratislava, č. ú.: 2628020575/1100, register: OS Trnava, odd: Sro, vlož.: 1045/T

MOLPIR GROUP CZ a.s., Technologická 838/14, 779 00 Olomouc, Holic, Česká republika, Tel.: 00420 585 315 017, Fax: 00420 585 315 021, e-mail: molpir_o@molpir.cz, www.molpir.cz

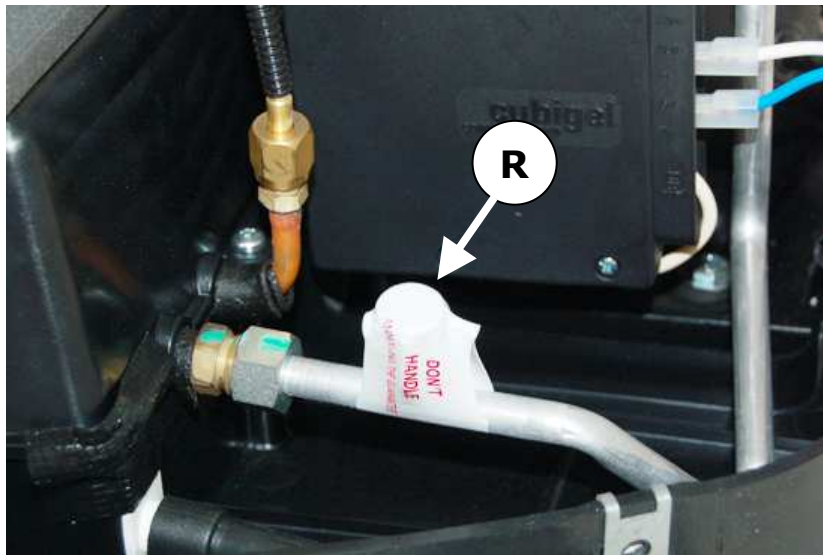
MOLPIR GROUP CZ a.s., Business centrum Klamovka, Plzeňská 155/113, 150 00 Praha 5 – Košíře, Tel.: 00420 724 606 000, e-mail: jsvoboda@molpir.cz, www.molpir.cz

IČO: 25828843, DIČ: CZ25828843, ČSOB Olomouc, č. ú.: 377913723/0300, Registrace: KOS, OR Ostrava, oddíl B, vložka č. 2094

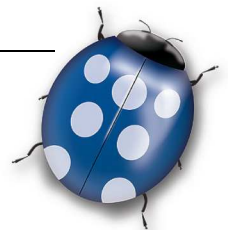
ATTENTION !

Unit pre-loaded of gas R134a with high precision machine.

- A- by manipulating the load of the unit leaves it out of warranty!**
- B- The charge fittings of the (R) unit are autosealed. If these are manipulated, THE WARRANTY is automatically lost!**
- C- The connection to the battery or any authorised point set in the mounting instructions is absolutely compulsory !**
In case of not doing so, the battery control is lost and the electronics will be damaged irreversibly cancelling the warranty of the unit !



SYMPTOM	CAUSE
<p>A If the unit does not come on or the display and the unit go off during</p>	<ul style="list-style-type: none"> ⚙ Power fuse blown or disconnected (in 30A power supply cable) ⚙ Electronic control defective ⚙ Power cable disconnected, with poor contact or cut ⚙ Electronic control power fuse (15A) disconnected or blown ⚙ Power cable polarity inverted
<p>B When the unit starts up or runs, the display switches EO and CA (return air sensor failure). The unit works during this error, but without return air sensor regulation (and the temperature cannot be changed). Press the ON/OFF button on the keypad or remote control once to turn off.</p>	<ul style="list-style-type: none"> ⚙ Poor connection in return air sensor cables or terminals ⚙ Return air sensor disconnected or faulty
<p>C The display shows E6 flashing</p>	<ul style="list-style-type: none"> ⚙ Poor connection in anti-freeze sensor cables or terminals ⚙ Anti-freeze sensor disconnected or faulty
<p>D When the unit starts up or runs, it gives out a beeping sound followed by the display showing Lb (low battery). The unit shuts down automatically.</p>	<ul style="list-style-type: none"> ⚙ Poor contact in power terminals or connections ⚙ Battery discharged or defective
<p>E The display shows E2 and the unit goes off automatically, with the display continuing to show error E2 until the anomaly is repaired. To remove from the display, press the ON/OFF key once on the keypad or remote control</p>	<ul style="list-style-type: none"> ⚙ Centrifugal blower or condenser fan blocked in short-circuit or disconnected ⚙ 7.5A fuse of the centrifugal blower or the condenser fan blown ⚙ Electronic control defective
<p>F A compressor does not work</p>	<ul style="list-style-type: none"> ⚙ Poor terminal connection ⚙ Compressor electronic module defective ⚙ Compressor failed ⚙ A lot of pressure in the circuit due to excess load or very high temperature
<p>G The unit does not respond to the remote control</p>	<ul style="list-style-type: none"> ⚙ Remote control not programmed ⚙ Remote control battery flat, the LED does not come on ⚙ Electronic control faulty ⚙ Remote control defective



H	The unit gives out a beeping sound	<ul style="list-style-type: none">☛ Control panel and electronic control connection cable poorly connected or inverted in electronic control or control panel
I	When the unit starts up or runs, the display shows E9 (<i>compressor protection</i>). The unit goes off automatically, with the display showing E9 until the unit has a slant of less than 45°	<ul style="list-style-type: none">☛ Unit slant 45° or over
J	Water is entering the cabin or is filtering in from outside	<ul style="list-style-type: none">☛ Valves or wastewater pipes obstructed☛ EPDM seal poorly attached or defective☛ The cable outputs which protrude from the inside cover of the evaporator cabin and the centrifugal blower are not properly sealed
K	The equipment works but does not cool	<ul style="list-style-type: none">☛ Too much or too little load in the circuit☛ Condenser fan terminal inverted☛ Dirt in the capacitor☛ Condenser fan defective☛ Blockage in the circuit



SOLUTION

-
- ⚙️ Connect or replace the power cable fuse
 - ⚙️ Replace the electronic control
 - ⚙️ Check and correct any possible poor contacts, splits or disconnections of the power cable
- A**
- ⚙️ Connect or replace the electronic control power fuse (*first take down the interior air distribution panel*)
 - ⚙️ Check and correct the position of the power cables (*az with 30A fuse to + and M to -*)

⚠️ (*if the error persists, contact the Authorised Technical Service*)

-
- ⚙️ Check and correct any possible poor contacts in cables or terminals of the return air sensor
- B**
- ⚙️ Connect or replace the return air sensor

⚠️ (*if the error persists, contact the Authorised Technical Service*)

-
- ⚙️ Check and correct any possible poor contacts in cables or terminals of the antifreeze sensor
- C**
- ⚙️ Connect or replace the anti-freeze sensor

⚠️ (*if the error persists, contact the Authorised Technical Service*)

-
- ⚙️ Check and correct any possible poor contacts in connections or terminals of the power cable
- D**
- ⚙️ Charge or replace the battery

⚠️ (*if the error persists, contact the Authorised Technical Service*)

-
- ⚙️ Repair the possible obstruction of the centrifugal blower or the condenser fan; if the error persists, replace the centrifugal blower or the condenser fan (*remove the outside cover of the unit order to access the blower or the electro; for the centrifugal blower, also remove the evaporator cover*)
- E**
- ⚙️ Replace the 7.5A fuse. To access the condenser fan or centrifugal blower fuses, it is necessary to take down the interior air distribution panel
 - ⚙️ Replace the electronic control

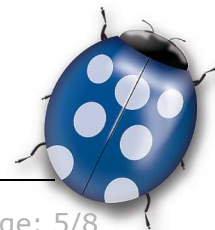
⚠️ (*if the error persists, contact the Authorised Technical Service*)

-
- ⚙️ Correctly connect the terminal of the compressor's electronic module. (see attached wiring diagram)
 - ⚙️ Replace the compressor's electronic module
 - ⚙️ Replace the compressor
- F**
- ⚙️ Check the pressure (the compressors disconnect as of 6 bars); if necessary, recover gas and load 520g again in the circuit
To access the compressors, modules or load points it is necessary to take down the unit's outside cover

⚠️ (*if the error persists, contact the Authorised Technical Service*)

-
- ⚙️ Reprogramme the remote control
 - ⚙️ Replace the remote control's battery and reprogramme
 - ⚙️ Replace electronic control
- G**
- ⚙️ Replace the remote control

⚠️ (*if the error persists, contact the Authorised Technical Service*)



-
- H** ⚙️ Take down the interior air distribution panel and correctly connect the electronic control and control panel connection cable
-
- I** ⚙️ Position the unit with a slant of less than 45° (*the unit should not work with a slant of 45° or over as it may result in damage in the compressor*). The electronic control detects the slant, meaning it must also be less than 45°
-
- J** ⚙️ Clear the valve and water pipe obstruction (*Remove the outer cover of the unit for access*)
- J** ⚙️ Replace the EPDM seal (*take down the unit and thoroughly clean the surface where the EPDM seal is to be attached*)
- J** ⚙️ Seal the wire output in the blower and evaporator cabin cover (*Remove the unit's outside cover for access*)
-
- K** ⚙️ Verify the load by checking the pressure; if it is below 0.5bars or above 5.0bars with the unit running, recover the load in the faulty circuit and empty for at least 30minutes, then introduce 520g.*
- K** ⚙️ Check and correct the condenser fan cable clamp connection.
- K** ⚙️ Clean the capacitor with pressurised air
- K** ⚙️ Replace the condenser fan.
- K** ⚙️ Check the pressure; if it is below 0.5bars with the unit running, clean the faulty circuit or replace obstructed components (*possibly the continuous flow capillary tube, as this is the component with least diameter*).
-

* Gas recovery must be precise, since part of the gas remains in the tubes of the pressure gauges.



IMPORTANT WARNING !

Take care not to invert polarities when connecting the unit to the power supply. If this were to happen, the unit will not work and irreparable damage will be caused to the compressor modules.



EFFICIENCY DIAGNOSIS CHART

Validity: System A/C COMPACT 1.6
 Data: To be collected with dual digital thermometer
T1: Temperature of recycled air. Recirculation Inlet
T2: Temperature of blower air. Outlet

Conditions:

- Cabin to be placed out of direct sun
- Battery full charged. 24 Vdc. Minimum at Compact 1.6 current inlet
- Door & windows closed along the whole test
- Stop the vehicle engine. Let the system work 15 minutes at maximum power & blower
- Take the data after 15 minutes running. Be sure the 2nd. compressor is still running
- Temperatures measured in °C
- Just one person on the cabin
- Don't smoke and do any physical activity along the test
- External temperature equal or less than 35°

T2 (°C) > OUTLET temperature

T1	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6
35	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
34	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
33	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
32	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
30	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
29		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
28			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
27				0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
26					0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
25						0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
24							0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
23								0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
22									0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
21										0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
20											0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
19												0	1	2	3	4	5	6	7	8	9	10	11	12	13
18													0	1	2	3	4	5	6	7	8	9	10	11	12
17														0	1	2	3	4	5	6	7	8	9	10	11
16															0	1	2	3	4	5	6	7	8	9	10
15																0	1	2	3	4	5	6	7	8	9
14																	0	1	2	3	4	5	6	7	8

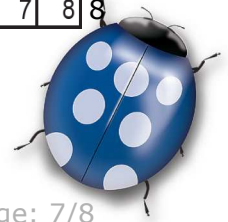


Good

Slightly poor

Poor

As per J.I.S norm



ELECTRIC WIRING

