

**Simplified control unit
handbook for
System D2NA**

Model

Ganga 1999/2000



ArSilicii

Warnings

The material described herein is the property of ArSilicii s.r.l. and may not be reproduced photostatically, electronically or in any other way without the prior written permission of same.

ArSilicii s.r.l.

Località Fosci, 25/F
53036 Poggibonsi (SI)
ITALY

ArSilicii@ArSilicii.com
<http://www.ArSilicii.com>
tel. +39.577.985872
fax +39.577.992558

The manufacturer declines any liability for damage to persons or things deriving from the information contained herein or due to improper use of the material described.
The products may be altered without prior notice.

Printed on 02 Sept. 1999

SUMMARY

ENGINE ACCUMULATOR BUTTON _____	6
220V MAINS WARNING LED _____	6
AUXILIARY ACCUMULATOR BUTTON _____	6
AUXILIARY ACCUMULATOR BUTTON WARNING LED _____	7
PUMP BUTTON _____	7
PUMP BUTTON WARNING LED _____	7
TANK LEVEL BUTTON _____	7
TANK LEVEL BUTTON WARNING LED _____	8
MAIN ON/OFF BUTTON _____	8
Warning light _____	8
CONTROL UNIT GANG-PSH-1.01 alfa WITH 98/99 SYSTEM _____	9
WHAT TO DO IF.... _____	10
The control unit fails to turn on when the ON button is pressed. _____	10
The control unit turns on but the distribution elements are not activated. _____	10
A LED does not light up even if the situation would require it to. _____	10
The 220V MAINS warning light fails to turn on. _____	10
When the water tank level button is pressed the bottom red LED flashes. _____	10
When the engine accumulator button is pressed the bottom red led flashes. _____	10
It is impossible to turn on the lights and the control unit is on and working perfectly. _____	10

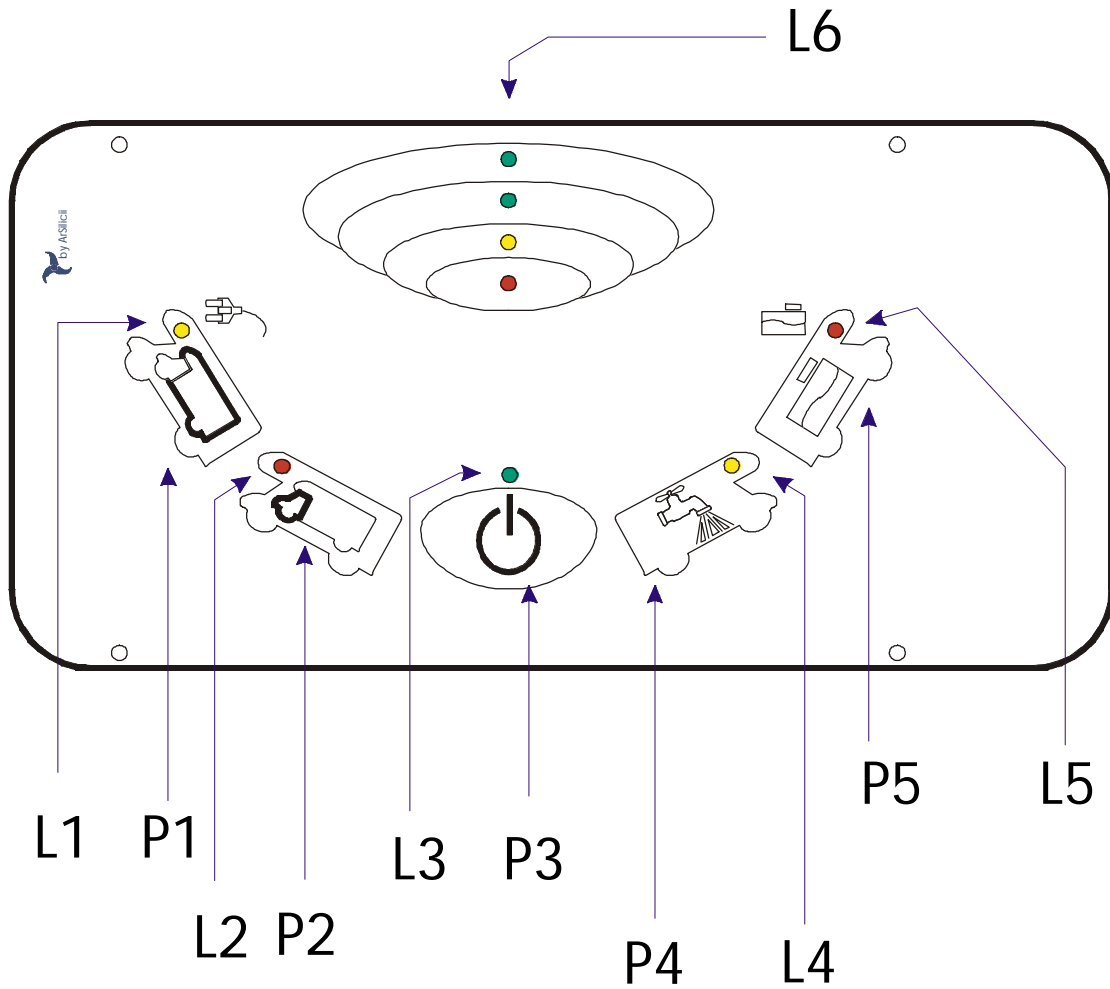


Fig. 1 “Control unit series Ganga 1999/2000”

L1	220V mains warning led
P1	Engine accumulator test button
L2	Auxiliary accumulator flat warning led
P2	Auxiliary accumulator test button
L3	Control unit active warning led
P3	Control unit and electric system on/off button
L4	Pump on and pump short circuit warning led
P4	Pump on/off button
L5	Recovery tank full warning led
P5	Fresh water level test button
L6	Led indicator bar

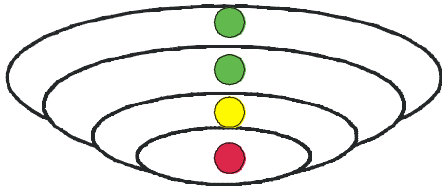
ENGINE ACCUMULATOR BUTTON



Pressing the button the LED indicator will show the engine accumulator voltage level. If the voltage measured is very low, the red LED at the bottom of the indicator will flash. In the event of an overload, the whole LED indicator will flash. In other cases the voltage level displayed will be approx.:

- | | | | |
|---------------|----------------|------------|---|
| 1- GREEN LED | from 13.5 Volt | to 15 Volt | → |
| 2- GREEN LED | above | 11.5 Volt | → |
| 3- YELLOW LED | above | 10.5 Volt | → |
| 4- RED LED | above | 8 Volt | → |

RED LED flashing	Voltage below 8 Volt
All LEDs flashing	Voltage above 15 Volt

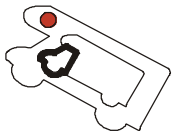


220V MAINS WARNING LED

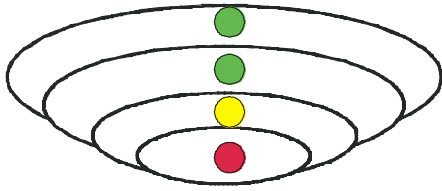


This is on when the vehicle receives energy from the external socket, namely, when the power unit is connected to the mains.

AUXILIARY ACCUMULATOR BUTTON



Pressing the button the LED indicator will display the voltage level of the auxiliary accumulator. If the voltage measured is very low, the red LED at the bottom of the indicator will flash. In the event of an overload, the whole LED indicator will flash. In other cases the voltage level displayed will be approx.:



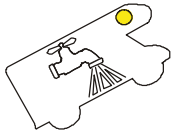
- 1- GREEN LED from 13.5 Volt to 15 Volt →
- 2- GREEN LED above 11.5 Volt →
- 3- YELLOW LED above 10.5 Volt →
- 4- RED LED above 8 Volt →

RED LED flashing Voltage below 8 Volt
 All LEDs flashing Voltage above 15 Volt

AUXILIARY ACCUMULATOR BUTTON WARNING LED

The warning led of the auxiliary accumulator button, L2 in Fig. 1, if flashing indicates that the AUXILIARY ACCUMULATOR is FLAT and it should therefore be charged to avoid possible damage to it.

PUMP BUTTON



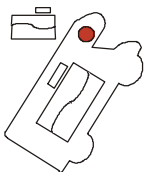
Pressing the button it is possible to turn the water pump on or off.
 If the **warning light flashes** a **Short Circuit** has occurred on the pump.

PUMP BUTTON WARNING LED

Indicates the condition of the pump:

Warning light on Pump on
 Warning light off Pump off
 Warning light Flashing Fast/Slow Pump Short Circuit

TANK LEVEL BUTTON



Pressing the button the LED indicator displays the level in the fresh water tank, starting from the tank full with all the LEDs on, down to reserve with only the lowest LED (RED) on.

- 1- GREEN LED Tank full
- 2- GREEN LED Tank over half full
- 3- YELLOW LED Tank below half full
- 4- RED LED Tank in reserve

When an abnormal condition is detected on the level sensor the bottom led (RED) will flash..

TANK LEVEL BUTTON WARNING LED



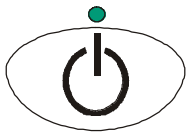
This Led flashes when the **drain water** tank is full.

Note:

When two recovery tanks are installed the difference between the flashing frequency of the warning led identifies the full tanks:

off	first and second recovery tank not full
flashing slowly	first recovery tank full
flashing quickly	second recovery tank full
steady glow	both recovery tanks full

MAIN ON/OFF BUTTON



Pressing the button the control unit will be turned on or off.

When turning on and only when turning on the control unit all the home cell energy distribution elements will be activated. Likewise, when turning off and only when turning off they will be deactivated.

Important:

Once the control unit is off it can only be activated again after two seconds.

Note:

When the control unit is turned on all the LEDs will light up for about half a second to check that they are working properly. To avoid surprises, it is wise to always check the LEDs at switch-on

Warning light

This shows the condition of the control unit

If the **warning light flashes** it means that a **Short Circuit downstream of the distributors has occurred.**

Warning light condition:

Warning light on	Control unit active
Warning light off	Control unit deactivated
Warning light flashing	Short Circuit downstream of distributors

CONTROL UNIT GANG -PSH-1.01 alfa WITH 98/99 SYSTEM

The control unit is perfectly interchangeable with the LCD control unit, the functions described above remain unchanged with the 98/99 electric system with the exception of the following two items:

- At switch-on the distribution elements will not be activated, as they are always active
- Any Short Circuit downstream of the NODES will not be indicated.

WHAT TO DO IF....

The control unit fails to turn on when the ON button is pressed.

- Check whether the connector behind the control unit is connected properly, if necessary check whether battery voltage is present between the RED wire and the BLACK wire.
- Contact skilled personnel.

The control unit turns on but the distribution elements are not activated.

- If the control unit turns on and off correctly but the distribution elements stationary in one condition and it is only possible to switch the lights on and off with the entrance switch, pump control is no longer possible. In this case, too, check that the connector behind the control unit is connected properly, particularly with regard to the orange and grey wires.
- Contact skilled personnel.

A LED does not light up even if the situation would require it to.

- Turn the control unit off and on again to check whether the LEDs are working properly.
- Contact skilled personnel.

The 220V MAINS warning light fails to turn on.

- Check whether the external socket is connected to the 220V mains.
- Turn the control unit off and on again to check that the LEDs are working properly.
- Check whether the differential switch in correspondence with the socket but inside the home cell is active.
- Check whether the power supply unit plug is inserted correctly in its socket.
- Contact skilled personnel.

When the water tank level button is pressed the bottom red LED flashes.

- If the pump turns on and off normally but when the water tank level button is pressed the bottom red LED flashes, try cleaning the level sensor rods which may be dirty.
- Contact skilled personnel.

When the engine accumulator button is pressed the bottom red led flashes.

- Engine accumulator broken.
- The fuse next to the engine accumulator positive terminal may have blown.
- Contact skilled personnel.

It is impossible to turn on the lights and the control unit is on and working perfectly.

- If it is possible to display all the ratings from the control unit and control the pump but the lights cannot be turned on from the local switches, try turning on the lights from the entrance switch ⁽¹⁾ or turn the control unit off and on again.
- Contact skilled personnel.

Note 1:

The entrance switch works from the main ceiling switch. Therefore it is possible to turn all the lights off with the control unit on. This condition remains until the next time the control unit is turned on.