

DIP-SWITCH SETTINGS (= irrelevant)

| DIP switch | ON | OFF |
|---------------------------------------|---------------|---------|
| DSW1 in main pieceboard 501335 | configuration | normal |
| DIP 1 - dental unit mode | disabled | enabled |
| DIP 2 - hot water outlet for spraying | - | - |
| DIP 3 - not used | - | - |
| DIP 4 - not used | - | - |

SETPONTS

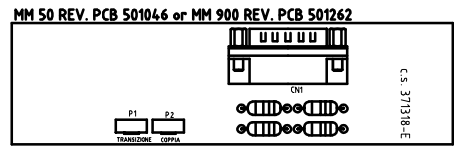
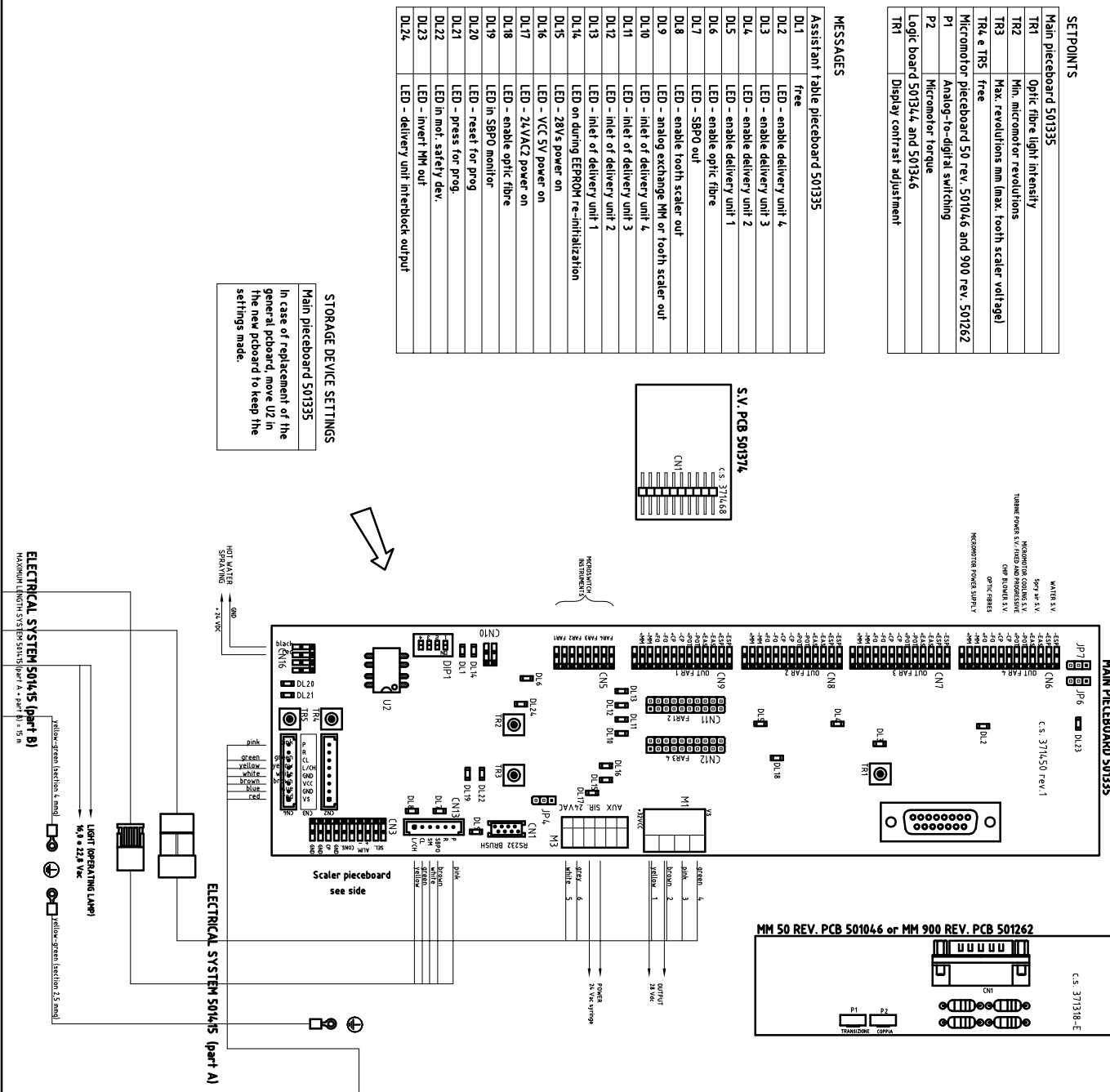
| Main pieceboard 501335 | Setting |
|-------------------------------|---|
| TR1 | Optic fibre light intensity |
| TR2 | Min. micromotor revolutions |
| TR3 | Max. revolutions mm (max. tooth scaler voltage) |
| TR4 & TR5 | Free |
| Micromotor | Analog-to-digital switching |
| P1 | Micromotor torque |
| P2 | Micromotor torque |
| Logic board 501344 and 501346 | |
| TR1 | Display contrast adjustment |

MESSAGES

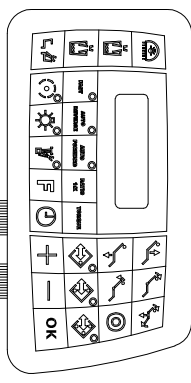
| Assistant table pieceboard 501335 | Message |
|-----------------------------------|--|
| DL1 | free |
| DL2 | LED - enable delivery unit 4 |
| DL3 | LED - enable delivery unit 3 |
| DL4 | LED - enable delivery unit 2 |
| DL5 | LED - enable delivery unit 1 |
| DL6 | LED - enable optic fibre |
| DL7 | LED - SBPO out |
| DL8 | LED - enable tooth scaler out |
| DL9 | LED - analog exchange MM or tooth scaler out |
| DL10 | LED - inlet of delivery unit 4 |
| DL11 | LED - inlet of delivery unit 3 |
| DL12 | LED - inlet of delivery unit 2 |
| DL13 | LED - inlet of delivery unit 1 |
| DL14 | LED on during LEPRODH re-initialization |
| DL15 | LED - 28V's power on |
| DL16 | LED - YCC 5V power on |
| DL17 | LED - 24VACZ power on |
| DL18 | LED - enable optic fibre |
| DL19 | LED in SBPO monitor |
| DL20 | LED - reset for prog. |
| DL21 | LED - press for prog. |
| DL22 | LED in mot. safety dev. |
| DL23 | LED - invert MM out |
| DL24 | LED - delivery unit interlock output |

STORAGE DEVICE SETTINGS

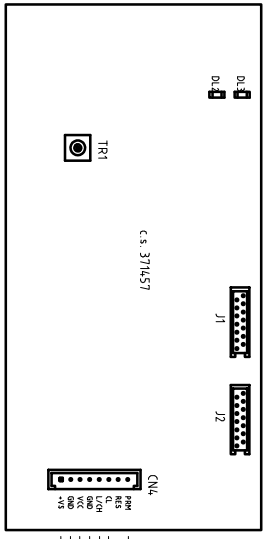
Main pieceboard 501335
 In case of replacement of the general pboard, move U2 in the new pboard to keep the settings made.



THE ERRORS LISTED IN THE DISPLAY ARE DESCRIBED IN THE OPERATING INSTRUCTIONS.



FOR INSTALLATION BRUSHLESS MICROMOTOR SEE DIAGRAM 520535 MEMBRANA PLUS 37282 + PIECEBOARD 501348

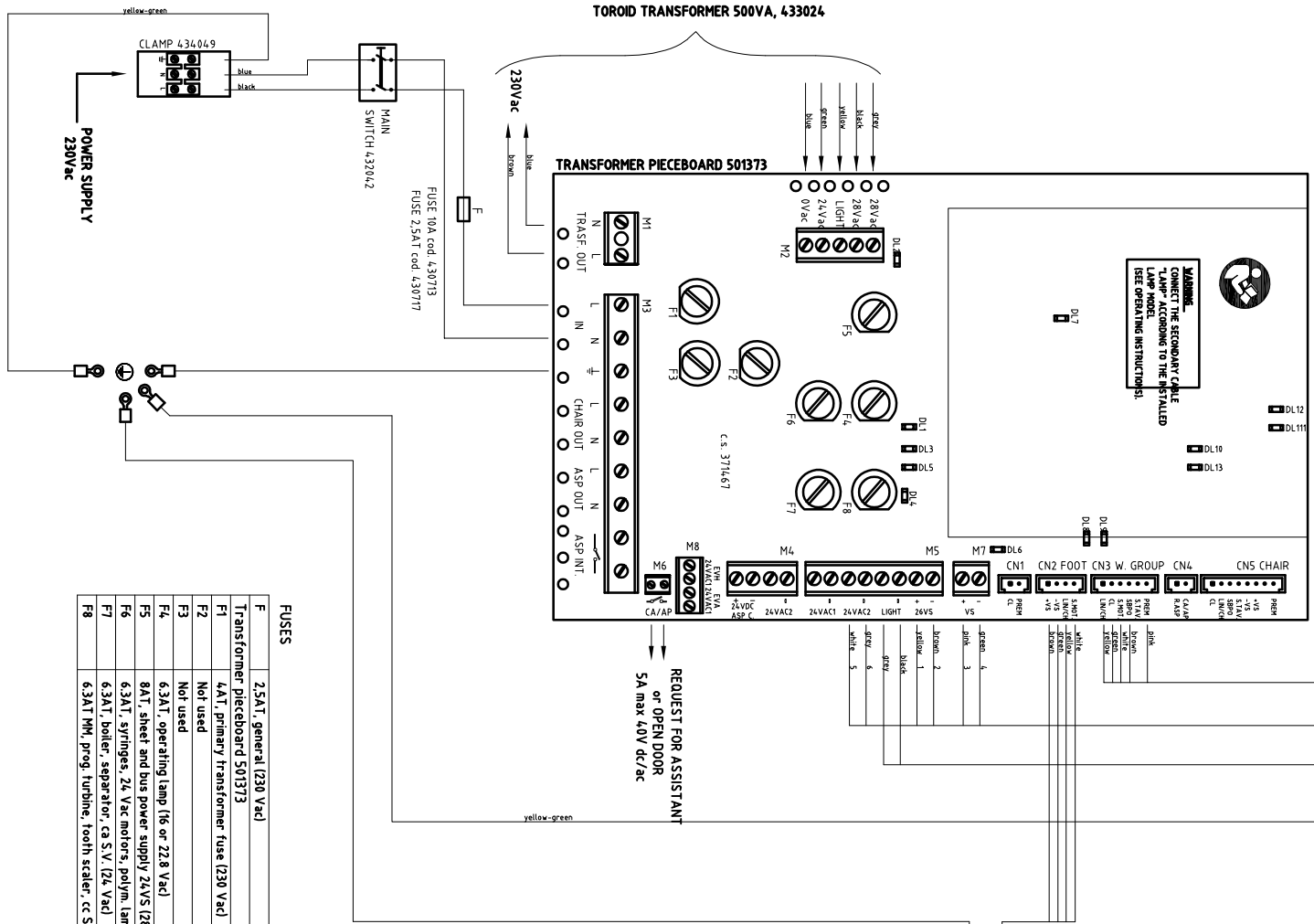


REV.2 UPDATED ON 30/03/2017

OWMS
 OMBILE DI SERRAZZO
 (PROM) -ITALY-

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| DESCRIPTION | GENERAL DIAGRAM UNIVERSAL STAR WITH SEPARATED FLOORBOX (TABLE 1/3) |
|---|--|
| MATERIAL | |
| DATE | 25/10/2012 |
| DRAWN BY | UPPER SECT. SERIAL NO. |
| ADMISSIBLE ERROR: VALUES WITHOUT TOLERANCE CODE LA.V. | |
| SCALE | DRAWING NO. 52054.2 |

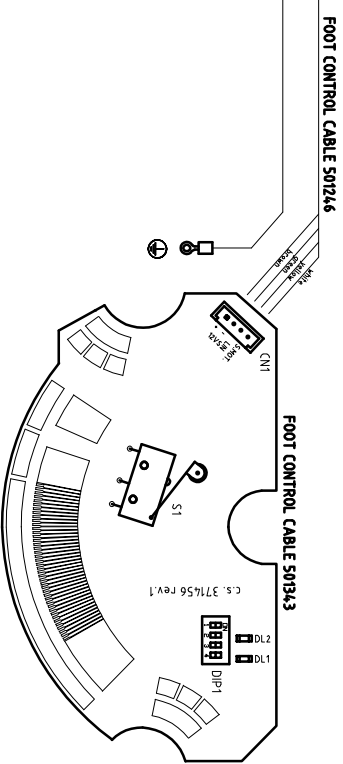


FUSES

| | |
|----|---|
| F | 2.5AT, general (230 Vac) |
| F1 | Transformer pieceboard 501373 |
| F2 | 4AT, primary transformer fuse (230 Vac) |
| F3 | Not used |
| F4 | Not used |
| F5 | 6.3AT, operating lamp (16 or 22.8 Vac) |
| F6 | 6.3AT, sheet and bus power supply 24V/5 (28 Vac) |
| F7 | 6.3AT, syringes, 24 Vac motors, polyim. lamp (24 Vac) |
| F8 | 6.3AT, boiler, separator, ca S.V. (24 Vac) |

DIP-SWITCH SETPOINTS: FOOT CONTROL FUNCTIONS

| | | | | |
|---|----|-----|-----|-----|
| DSW1 in foot control pieceboard 501343 | 1 | 2 | 3 | 4 |
| Levers - controlled dental chair movements | on | off | off | off |
| Levers - controlled dental chair movements, main lever - controlled cups and operating lamp | on | on | off | off |



MESSAGES

Transformer pieceboard 501373

| | |
|------|---|
| DL1 | LED - fuse F4 in lamp malfunctioning |
| DL2 | LED - 28VAC fuse F5 in lamp malfunctioning |
| DL3 | LED - 24VAC2 fuse F6 in lamp malfunctioning |
| DL4 | LED - 28V5 fuse F8 in lamp malfunctioning |
| DL5 | LED - 24VAC1 fuse F7 in lamp malfunctioning |
| DL6 | LED - VS fuse F9 in lamp malfunctioning |
| DL7 | LED - 28VDC power |
| DL8 | LED - CA/AP relay out monitor |
| DL9 | LED - ASP relay out monitor |
| DL10 | LED flashing if program is being correctly executed |
| DL11 | LED press for flashing |
| DL12 | LED reset ext per col |
| DL13 | LED flashing with LIN bus active |

Foot control pieceboard 501343

| | |
|-----|----------------------|
| DL1 | LED - input's active |
| DL2 | LED - BUS active |

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 OMBILE IN SERVIZIO
 (PROMO) - 7447 -


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| | |
|--|--|
| DESCRIPTION | GENERAL DIAGRAM UNIVERSAL STAR WITH SEPARATED FLOORBOX (TABLE 2/3) |
| MATERIAL | |
| DATE | 25/10/2012 |
| DRAWN BY | |
| ADMISSIBLE ERROR: VALUES WITHOUT TOLERANCE CODE L.V. | |
| SCALE | |
| DRAWING NO | 520542 |

LIST OF DISPLAYED ERRORS

| | |
|------|--|
| E000 | foot control pcbard is not connected or is malfunctioning |
| E001 | pushbutton panel pcbard is not connected or is malfunctioning |
| E002 | pcbard of the floor-mounted box not connected or malfunctioning |
| E003 | pcbard of the assistant table is not connected or is malfunctioning |
| E004 | dental chair pcbard is not connected or is malfunctioning |
| E005 | main pcbard is not connected or is malfunctioning |
| E006 | water group pcbard is not connected or is malfunctioning |
| E007 | faulty drive micromotor |
| E016 | other error |
| E017 | power protection |
| E018 | motor phase missing |
| E019 | serial communication timeout |
| E020 | invalid EEPROM error |
| E021 | over temperature error |
| E022 | under voltage error |
| E023 | over voltage error |
| E024 | additional board disconnected (after startup) error |
| E025 | timeout with additional board error |
| E026 | invalid additional board version error |
| E027 | invalid EEPROM in additional board error |
| E028 | invalid mode error |
| E029 | not used (free) |
| E030 | frame error |
| E031 | communication error between RS232 |
| E032 | 28DC power fuse broken (fuse F8) |
| E033 | 24AC power fuse 1 broken (fuse F7) |
| E034 | Lamp fuse broken (fuse F4) |
| E035 | 24AC power fuse 2 broken (fuse F6) |
| E036 | output suction short circuit |
| E037 | output assistant call short circuit |
| E038 | overcurrent in branch 2, 24 AC |
| E039 | pcbards and bus overcurrent |
| E040 | switching overheated |
| E041 | stabilised 28 DC voltage error |
| E042 | rectified 28 DC voltage error |
| E043 | 24 AC voltage error |
| E044 | Lamp voltage error |
| E045 | stabilised 24 DC voltage error |
| E046 | overcurrent in branch 1, 24 AC |
| E047 | Lamp overcurrent |
| E064 | "motor safety device" signal error |
| E065 | EEPROM error water group pcbard |
| E066 | EEPROM error main pcbard |
| E067 | EEPROM error pushbutton panel pcbard |
| E068 | a touch is stuck in the instrument table pushbutton panel |
| E069 | a touch is stuck in the assistant table pushbutton panel |
| E070 | DAC error: dc micromotor and scaler |
| E071 | overheating micromotor driver error |
| E072 | battery error/pedal wireless |
| EP01 | power solenoid valve short circuit |
| EP03 | short circuit power solenoid valve to grounding system |
| EA01 | water solenoid valve short circuit |
| EA03 | short circuit water solenoid valve to grounding system |
| EC01 | chip blower solenoid valve short circuit |
| EC03 | short circuit chip blower solenoid valve to grounding system |
| ES01 | spray solenoid valve short circuit |
| ES03 | short circuit spray solenoid valve to grounding system |
| EL01 | wash output short circuit |
| EL03 | short circuit wash output to grounding system |
| EZ01 | shutter output short circuit |
| EZ03 | short circuit shutter output to grounding system |
| EX01 | shutter output 1 short circuit |
| EX03 | short circuit shutter output 1 to grounding system |
| EY01 | shutter output 2 short circuit |
| EY03 | short circuit shutter output 2 to grounding system |
| EH01 | assistant call / open door output short circuit |
| EH03 | short circuit assistente call/open door output to grounding system |
| ER01 | suction output short circuit |
| ER03 | short circuit suction output to grounding system |
| EO01 | short circuit in distilled / standard water exchange output |
| EO03 | short circuit to grounding system of distilled/standard water exchange out |
| EB01 | chair release piston output short circuit |
| EB03 | short circuit to grounding system of chair release piston output |

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|---|-------------------------------------|-------------------------------------|--------|
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| | | WITH SEPARATED FLOORBOX (TABLE 3/3) | |
| DESCRIPTION | | | |
| MATERIAL | | | |
| DATE | 25/10/2012 | UPPER SECT. | |
| DRAWN BY | | SERIAL NO. | |
| ADMISSIBLE ERROR: | VALUES WITHOUT TOLERANCE CODE LA.V. | DRAWING NO | 520542 |
| SCALE | | | |