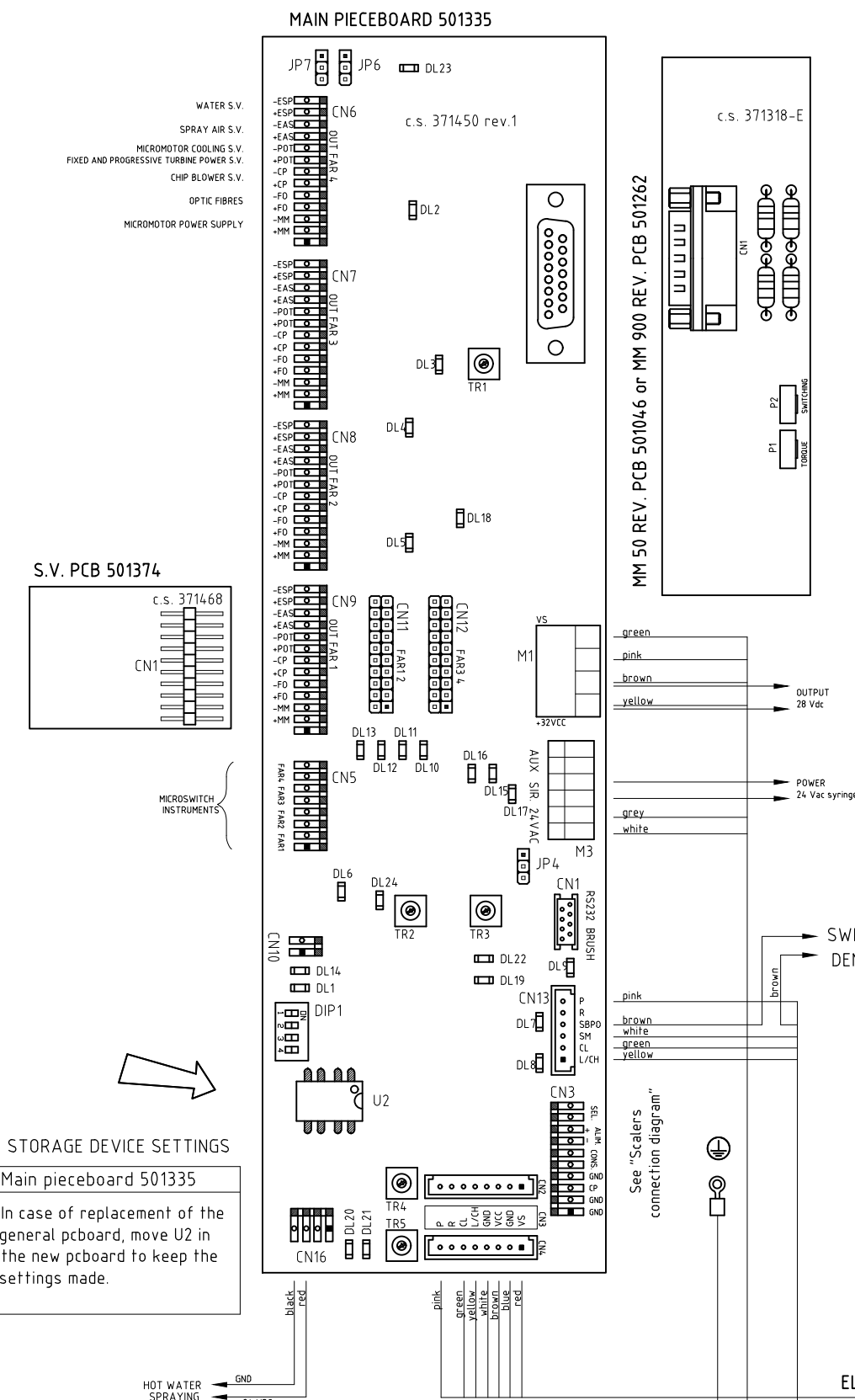


LIST OF DISPLAYED ERRORS	
E000	foot control pboard is not connected or is malfunctioning
E001	pushbutton panel pboard is not connected or is malfunctioning
E002	pboard of the floor-mounted box not connected or malfunctioning
E003	pboard of the assistant table is not connected or is malfunctioning
E004	dental chair pboard is not connected or is malfunctioning
E005	main pboard is not connected or is malfunctioning
E006	water group pboard is not connected or is malfunctioning
E007	faulty drive micromotor
E016	other error DMX
E017	power protection DMX
E018	motor phase missing DMX
E019	serial communication timeout DMX
E020	invalid EEPROM error DMX
E021	over temperature error DMX
E022	under voltage error DMX
E023	over voltage error DMX
E024	additional board disconnected (after startup) error DMX
E025	timeout with additional board error DMX
E026	invalid additional board version error DMX
E027	invalid EEPROM in additional board error DMX
E028	invalid mode error DMX
E029	not used (free)
E030	frame error DMX
E031	communication error between RS232 and DMX
E032	28DC power fuse broken (fuse F8)
E033	24 AC power fuse 1 broken (fuse F7)
E034	Lamp fuse broken (fuse F4)
E035	24 AC 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	pboards 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 pboard
E066	EEPROM error main pboard
E067	EEPROM error pushbutton panel pboard
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
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
EQ01	short circuit in distilled / standard water exchange output
EQ03	short circuit to grounding system of distill./st.d. water exchange out
EB01	chair release piston output short circuit
EB03	short circuit to grounding system of chair release piston output

DIP-SWITCH SETTINGS (- = irrelevant)

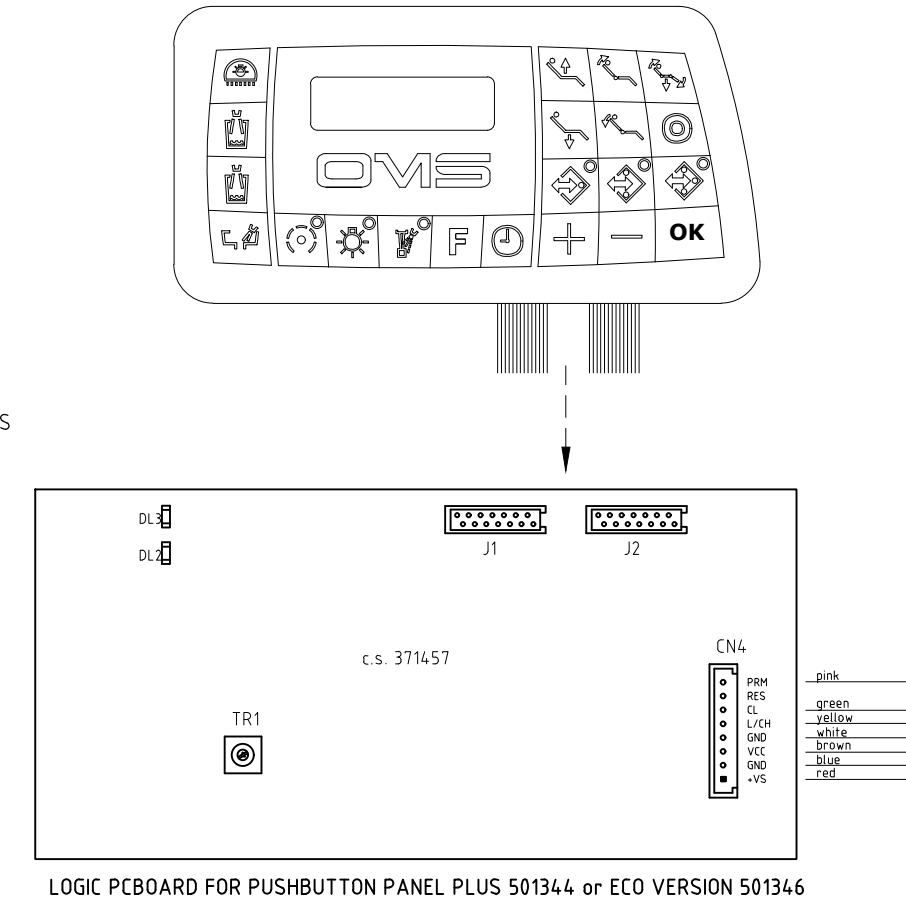
DSW1 in main pieceboard 501335	ON	OFF
DIP 1 - dental unit mode	configuration	normal
DIP 2 - hot water outlet for spraying	disabled	enabled
DIP 3 - not used	-	-
DIP 4 - not used	-	-



WARNING SIGNS

Main pieceboard 501335		Main pieceboard 501335	
DL1	free	TR1	Optic fibre light intensity
DL2	LED - enable delivery unit 4	TR4 e TR5	free
DL3	LED - enable delivery unit 3		Micromotor pieceboard 50 rev. 501046 and 900 rev. 501262
DL4	LED - enable delivery unit 2	P1	Analog-to-digital switching
DL5	LED - enable delivery unit 1	P2	Micromotor torque
DL6	LED - enable optic fibre		Logic pboard 501344 and 501346
DL7	LED - SBPO out	TR1	Display contrast adjustment
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 EEPROM re-initialization		
DL15	LED - 28Vs power on		
DL16	LED - VCC 5V power on		
DL17	LED - 24 VAC2 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 interblock output		

FOR INSTALLATION BRUSHLESS MICROMOTOR SEE DIAGRAM 520535
 PUSHBUTTON ECO 372260 +PCBOARD 501367 or PUSHBUTTON PLUS 372262 + PCBOARD 501368



REV.8 UPDATED ON 17/12/2018

DESCRIPTION	CARVING GENERAL DIAGRAM (TABLE 1/4)		
MATERIAL			
DATE	14/06/2010	UPPER SECT.	
DRAWN BY		MAT. CODE	
		PRJ. CODE	
SCALE		DWG. NO.	520531

CASELLE DI SELVAZZANO (PADOVA) -ITALY-
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WARNING SIGNS

Water unit pieceboard 501372	
DL1	LED - press for flashing
DL2	LED reset ext per col
DL3	LED - full level
DL4	LED - intermediate level
DL5	LED flashing with LIN bus active
DL6	LED flashing if program is being correctly executed
DL7	LED - enable camera
DL8	LED - operating lamp out
DL9	LED - spittoon out
DL10	LED - cup 2 out
DL11	LED - cup 1 out
DL12	LED - CA/AP out
DL13	LED - washing S.V. out
DL14	LED - dental chair release S.V. out
DL15	LED - par1 out
DL16	LED - asp relay out
DL17	LED - partialization S.V. out
DL18	LED - water exchange S.V. out
DL19	LED - par2 out

JUMPER AND ADJUSTMENTS

Water unit pieceboard 501372	
JP4, JP5	1-2 closed: N.O. contact is obtained in E/C PAR2 (LIM.2) of CN6 2-3 closed: 28Vdc is obtained in E/C PAR2 (LIM.2) of CN6
JP6, JP7	1-2 closed: N.O. contact is obtained in E/C PAR1 (LIM.1) of CN6 2-3 closed: 28Vdc is obtained in E/C PAR1 (LIM.1) of CN6

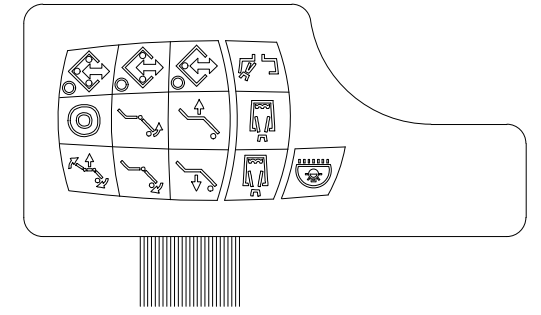
DIP-SWITCH SETTINGS (- = irrelevant)

DSW1 in water unit pieceboard 501372	ON	OFF
DIP 1 - enable spittoon S.V. after cup filling	enabled	disabled
DIP 2 - control of spittoon	on/off	timed
DIP 3 - delay in aspiration switch-off	0 s	5 s
DIP 4 - free	-	-

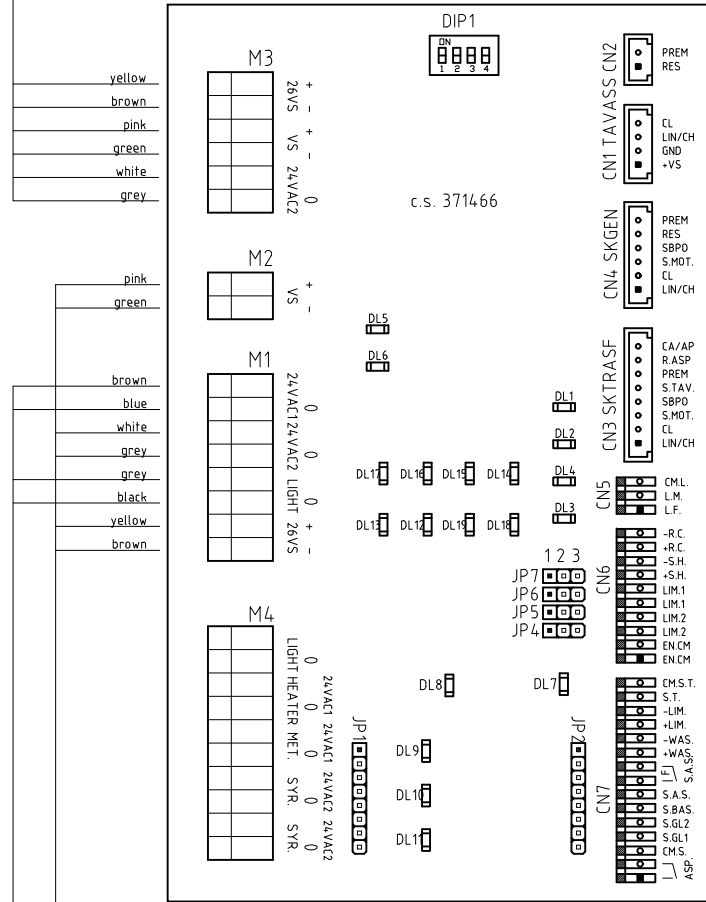
CUP AND SPITTOON TIME SETUP

Water group pcboard 501372
Hold the button pressed until a beep is heard. Release the button when the cup has been filled to the desired level or the required time for basin rinsing has elapsed.

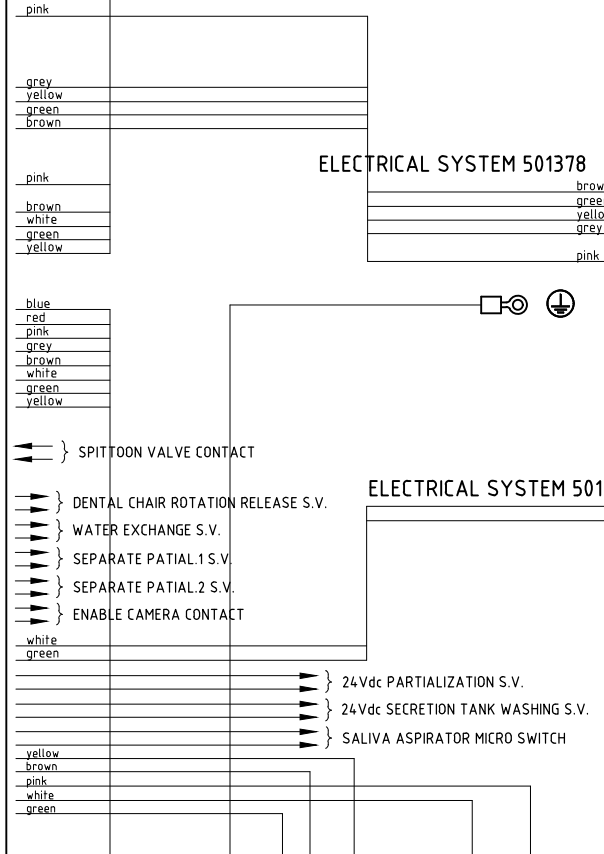
ASSISTANT TABLE PUSHBUTTON 372263



WATER UNIT PIECEBOARD 501372

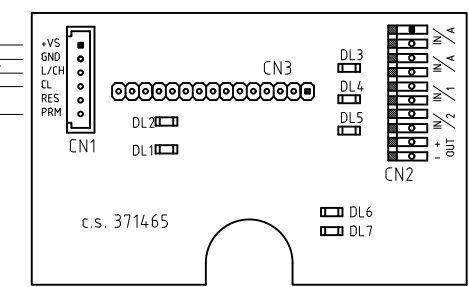
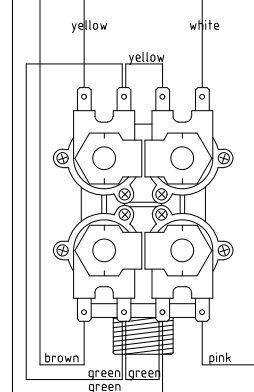


ELECTRICAL SYSTEM 501378



ELECTRICAL SYSTEM 501378

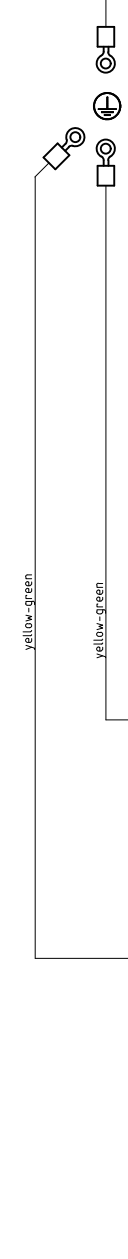
ELECTRICAL SYSTEM 501244



ASSISTANT TABLE PIECEBOARD 501371

WARNING SIGNS

Assistant table pieceboard 501371	
DL1	LED - press for flashing
DL2	LED reset ext per col.
DL3	LED - ASP cannulas 1
DL4	LED - ASP cannulas 2
DL5	LED - enable camera out
DL6	LED flashing with LIN bus active
DL7	LED flashing if program is being correctly executed

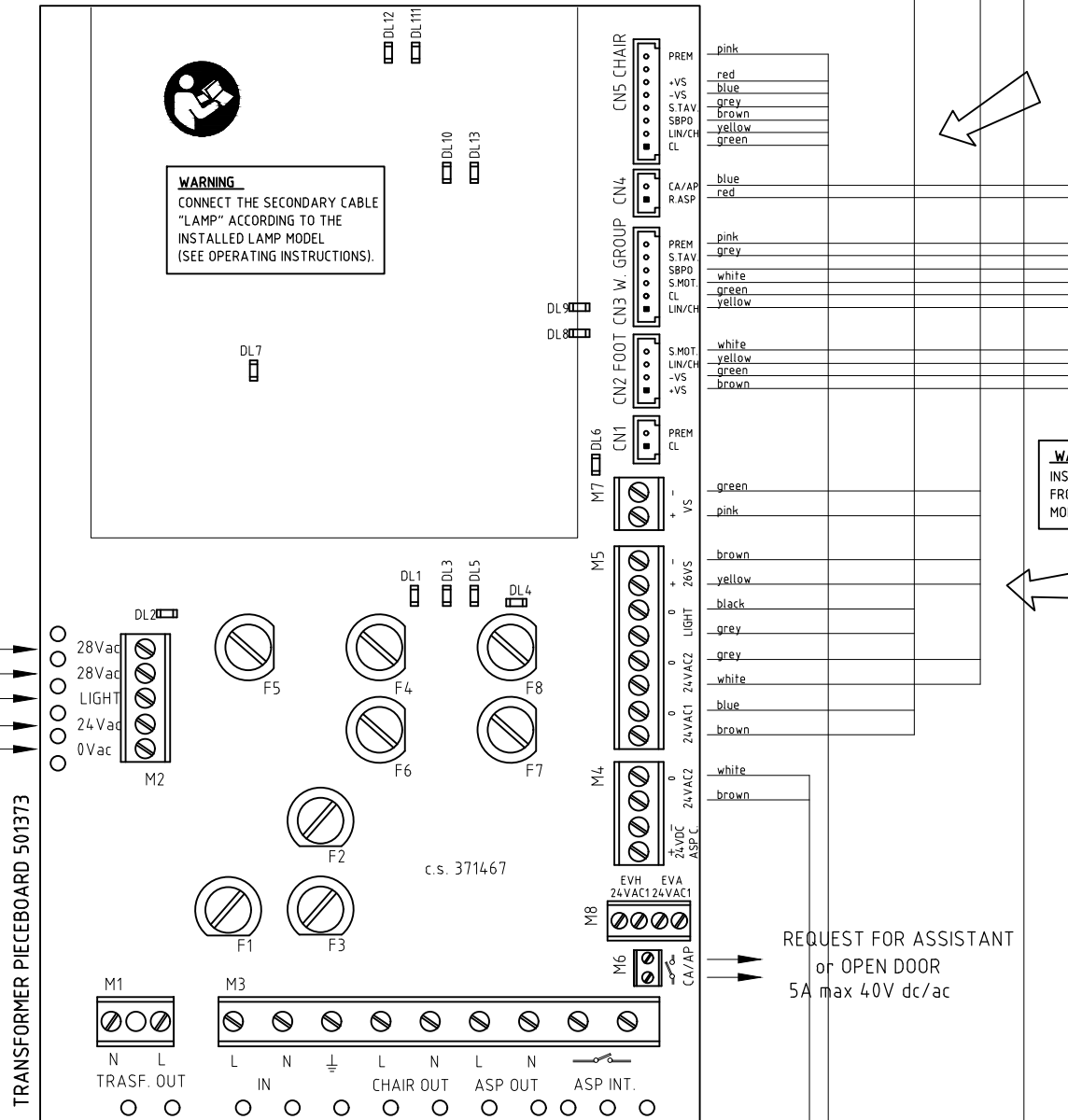


ELECTRICAL SYSTEM 501405

REV.8 UPDATED ON 17/12/2018

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	MATERIAL			
	DATE	14/06/2010	UPPER SECT.	
	DRAWN BY		MAT. CODE	
	SCALE		PRJ. CODE	
		DWG. NO.	520531	

TOROID TRANSFORMER 500VA, 433024



WARNING
INSERT A FERRITE ON THE CABLES OUTGOING FROM CN3 AND CN5 (NEAR THE PIECEBOARD) MOD. "FAIR RITE 0431164181" cod. 430609

WARNING
INSERT A FERRITE ON THE CABLES OUTGOING FROM M5 AND M7 (NEAR THE PIECEBOARD) MOD. "FAIR RITE 0431164181" cod. 430609

REQUEST FOR ASSISTANT or OPEN DOOR
5A max 40V dc/ac

FUSES

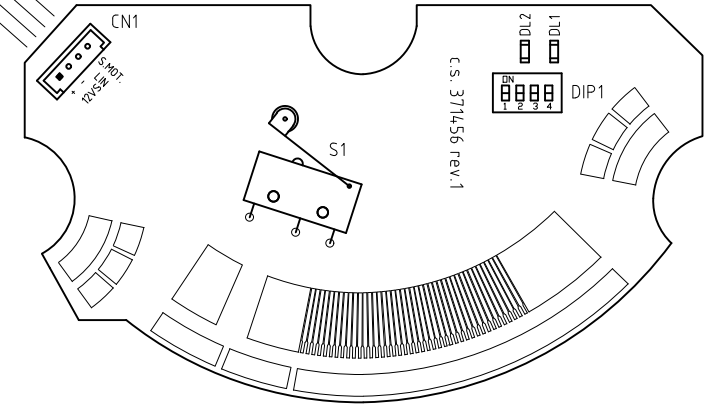
F	8AT, general (230 Vac)
Transformer pieceboard 501373	
F1	4AT, primary transformer fuse (230 Vac)
F2	5AT, ASP OUT output (230 Vac)
F3	5AT, dental chair motors (230 Vac)
F4	6.3AT, operating lamp (16 or 22.8 Vac)
F5	8AT, pcboard and bus power supply 24VS (28 Vac)
F6	6.3AT, syringes, 24 Vac motors, polym. lamp (24 Vac)
F7	6.3AT, boiler, separator, ca S.V. (24 Vac)
F8	6.3AT MM, prog. turbine, tooth scaler, cc S.V. (Vdc)
Power supply pieceboard 501414	
F1	1,6AT out (24 Vdc)

WARNING SIGNS

Transformer pieceboard 501373	
DL1	LED - failure fuse F4 Lamp
DL2	LED - failure fuse F5 28VAC
DL3	LED - failure fuse F6 24VAC2
DL4	LED - failure fuse F8 28VS
DL5	LED - failure fuse F7 24VAC1
DL6	LED - failure fuse F9 VS
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 - inputs active
DL2	LED - BUS active

FOOT CONTROL CABLE 501246

FOOT CONTROL PIECEBOARD 501343



DIP-SWITCH SETPOINTS: FOOT CONTROL FUNCTIONS

DSW1 in foot control pieceboard 501343	1	2	3	4
Lever-controlled dental chair movements	on	off	off	off
Lever-controlled dental chair movements; lever-controlled cups and operating lamp	on	on	off	off

REV.8 UPDATED ON 17/12/2018

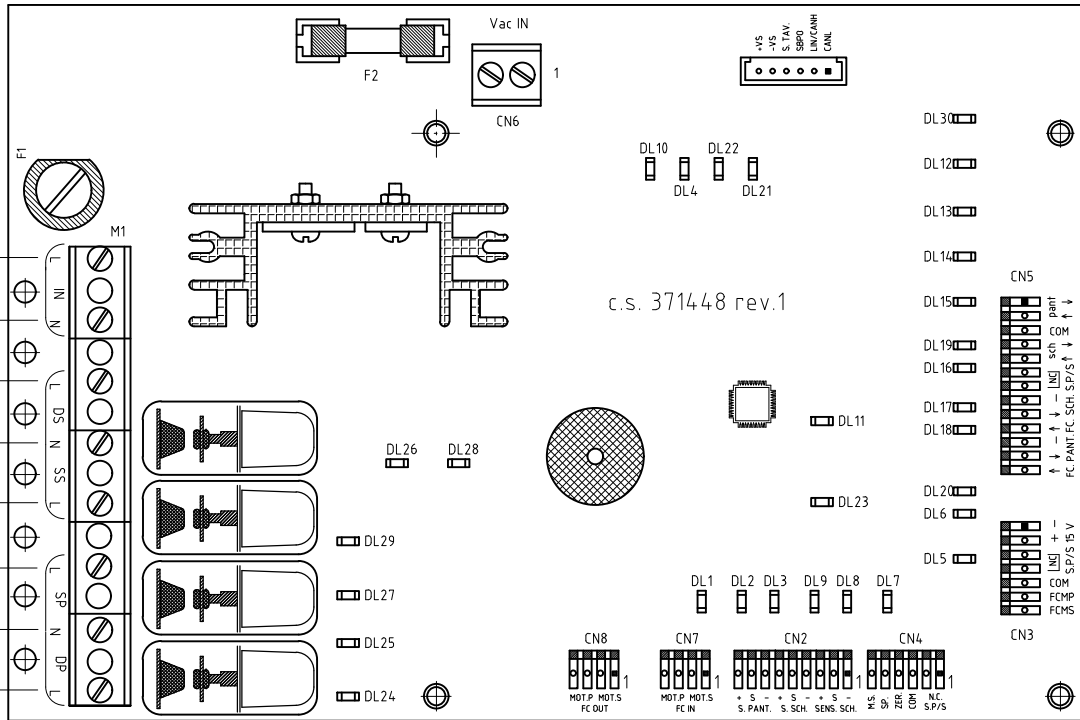
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	MATERIAL			
	DATE	14/06/2010	UPPER SECT.	
	DRAWN BY		MAT. CODE	
SCALE		PRJ. CODE		
		DWG. NO.	520531	

ELECTRIC SYSTEM 501383

ELECTRIC SYSTEM 501384

WARNING SIGNS

Dental chair pieceboard 501329	
DL1	LED - pantographic arm motor rev. sensor
DL2	LED - chair back motor rev. sensor
DL3	LED - chair back anticrushing sensor
DL4	LED - press programming
DL5	LED - chair back photocell
DL6	LED - pantographic arm photocell
DL7	LED - home position
DL8	LED - rinsing position
DL9	LED - selected memory
DL10	LED - reset programming
DL11	LED - bus communication
DL12	LED - pantographic arm down control (Arcadia only)
DL13	LED - pantographic arm up control (Arcadia only)
DL14	LED - chair back down control (Arcadia only)
DL15	LED - chair back up control (Arcadia only)
DL16	LED - chair back up limit switch
DL17	LED - chair back down limit switch
DL18	LED - pantographic arm up limit switch
DL19	LED - pantographic arm and back safety device
DL20	LED - pantographic arm down limit switch
DL21	LED - dental chair blocked
DL22	LED - table safety device
DL23	LED - bus communication
DL24	LED - pantographic arm down
DL25	LED - pantographic arm up
DL26	LED - pantographic arm motor on
DL27	LED - chair back up
DL28	LED - chair back motor on
DL29	LED - chair back down
DL30	LED - 230Vac main present



CONDENSER 433225
C=16uF 400V

PANTOGRAPH MOTOR 433225

PANTOGRAPH MOTOR SENSOR

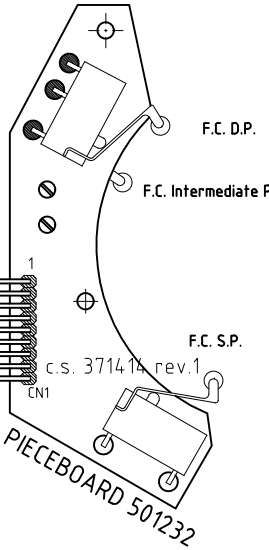
ELECTRIC SYSTEM 501252

ELECTRIC SYSTEM 501256

ELECTRIC SYSTEM 501366

SENSOR ADJUSTMENTS

Pieceboard 501233	
TR1	Sensor sensitivity setup trimmer
DL1	LED - chair back sensor enabled



ELECTRIC SYSTEM 501258

ELECTRIC SYSTEM 501258

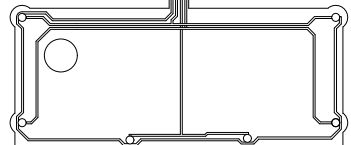
REV.8 UPDATED ON 17/12/2018



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DESCRIPTION	CARVING GENERAL DIAGRAM (TABLE 4/4)		
MATERIAL			
DATE	14/06/2010	UPPER SECT.	
DRAWN BY		MAT. CODE	
		PRJ. CODE	
SCALE		DWG. NO.	520531

MEMBRANE 372230



PCB 501234
c.s. 371416

PCB 501236
c.s. 371418

PCB 501235
c.s. 371417

PIECEBOARD 501231
c.s. 371413

PIECEBOARD 501233
c.s. 371415 rev.2

CHAIR BACK MOTOR 433218

CONDENSER 433218
C=10uF 400V

F.C. D.S.

F.C. S.S. F.C. S.S. max