Stannah

MIDILIFT PICCOLO

ELECTRICAL WIRING MANUAL

ISSUE:

11

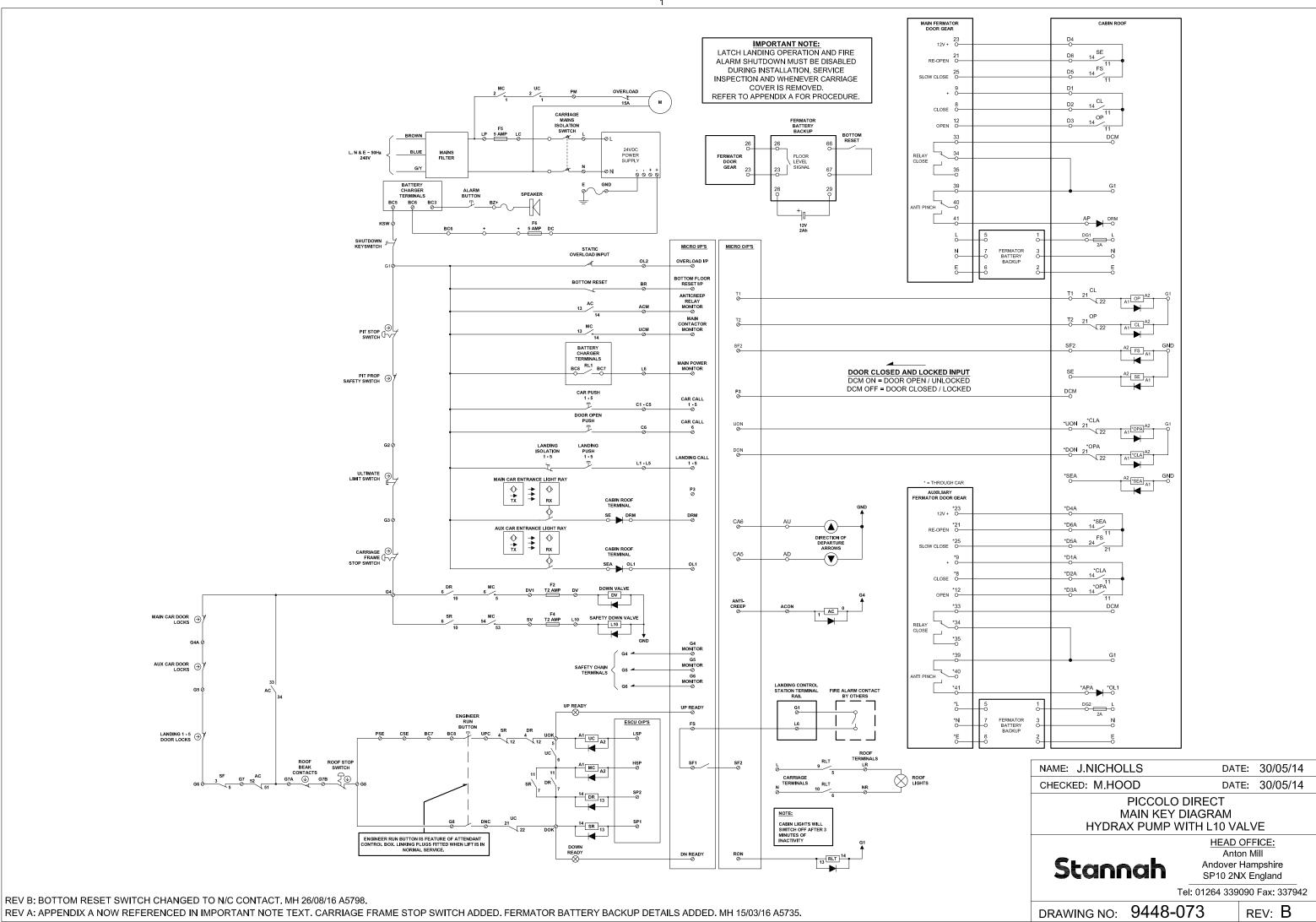
THIS MANUAL IS TO BE LEFT WITH THE FOLLOWING CONTRACT:

STANNAH PART NO: 916144

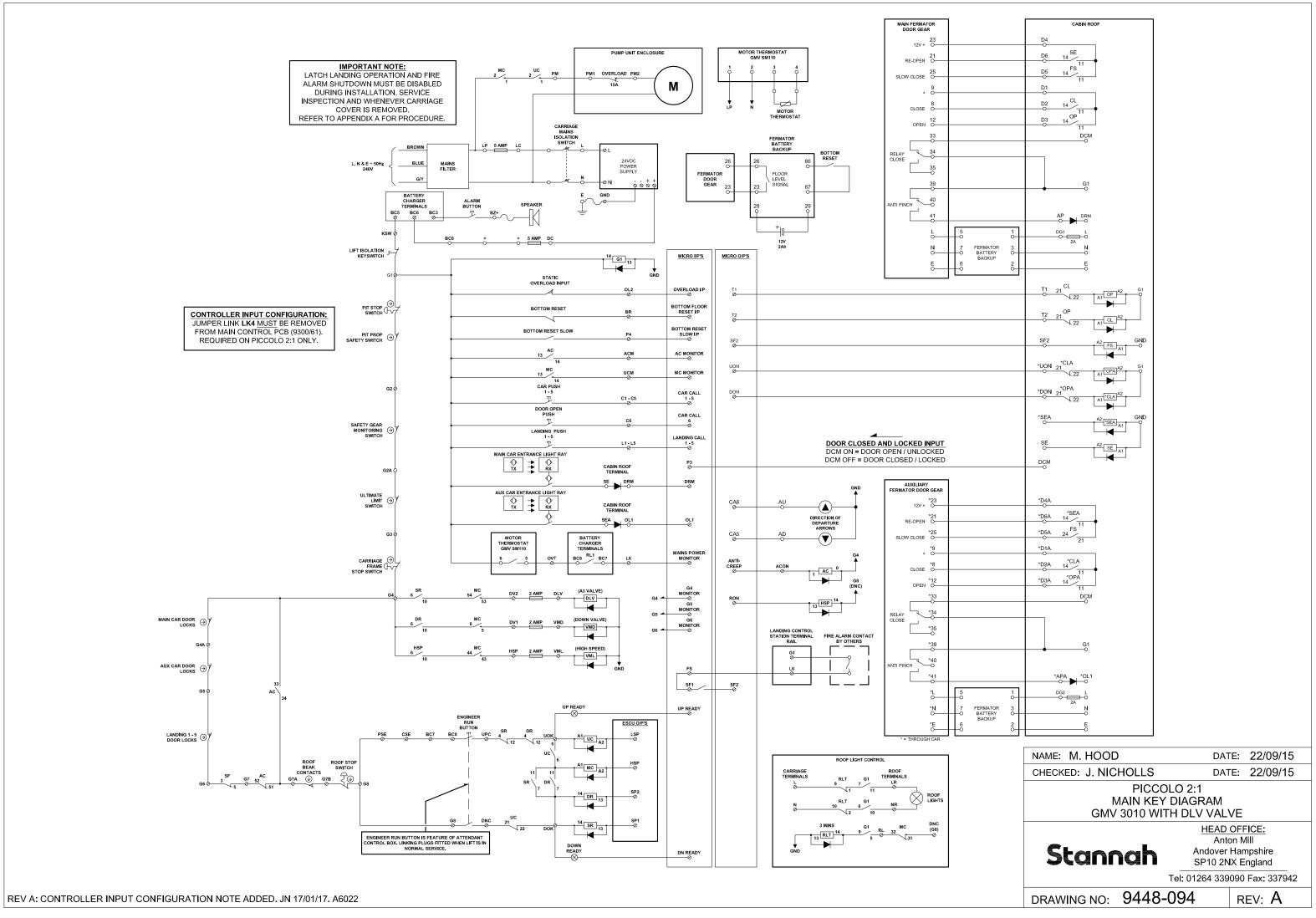
Stannah

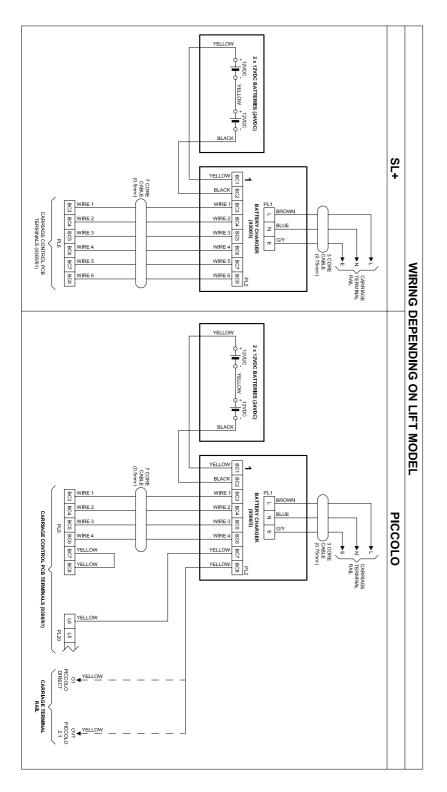
INDEX

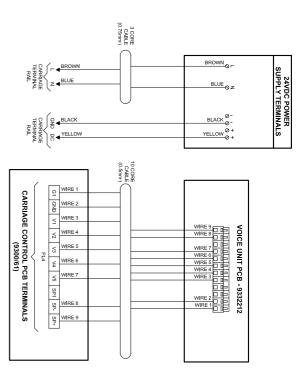
UPDATED DRAWINGS	DRAWING NUMBER	REV	DRAWING DESCRIPTION	PAGE NUMBER
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	9448-094	Α	PICCOLO (2:1) main key wiring diagram	2
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NAME: J.NICHOLLS DATE: 08/01/2013 CHECKED: M.HOOD DATE: 08/01/2013

MIDILIFT MULTI-FLOOR BOARD CARRIAGE CONTROL TRAY WITH POWER SUPPLY **CONNECTION DETAILS**

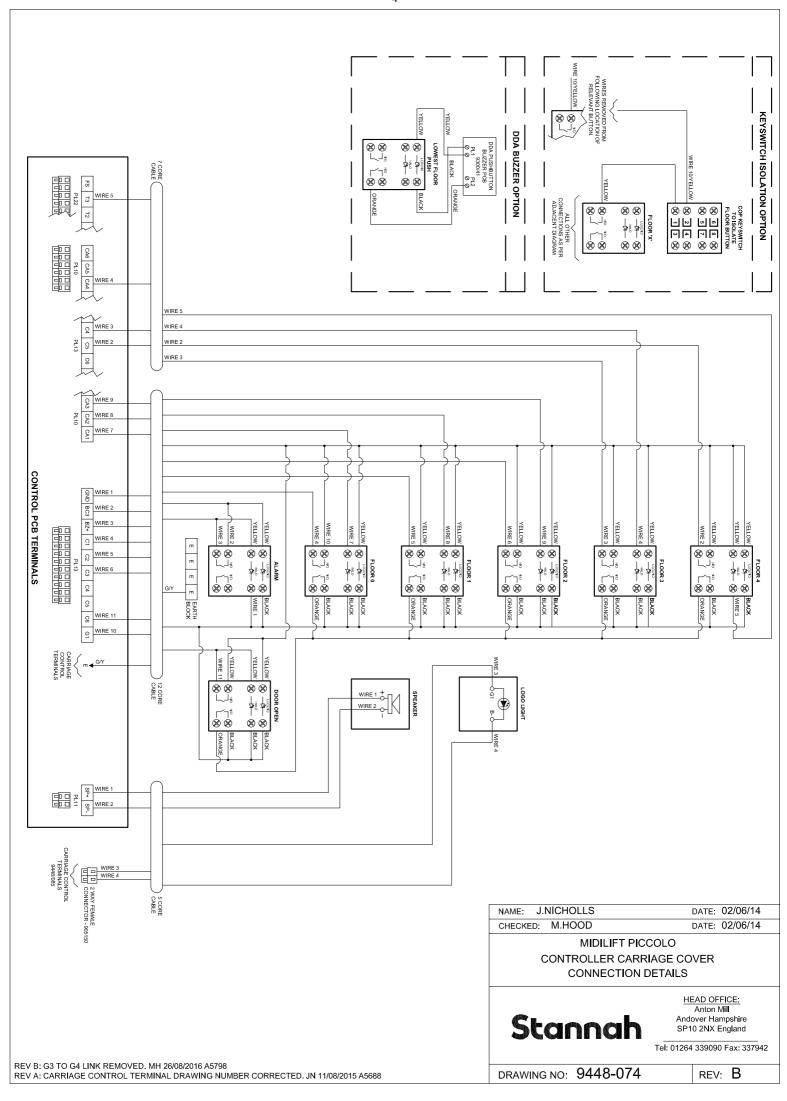


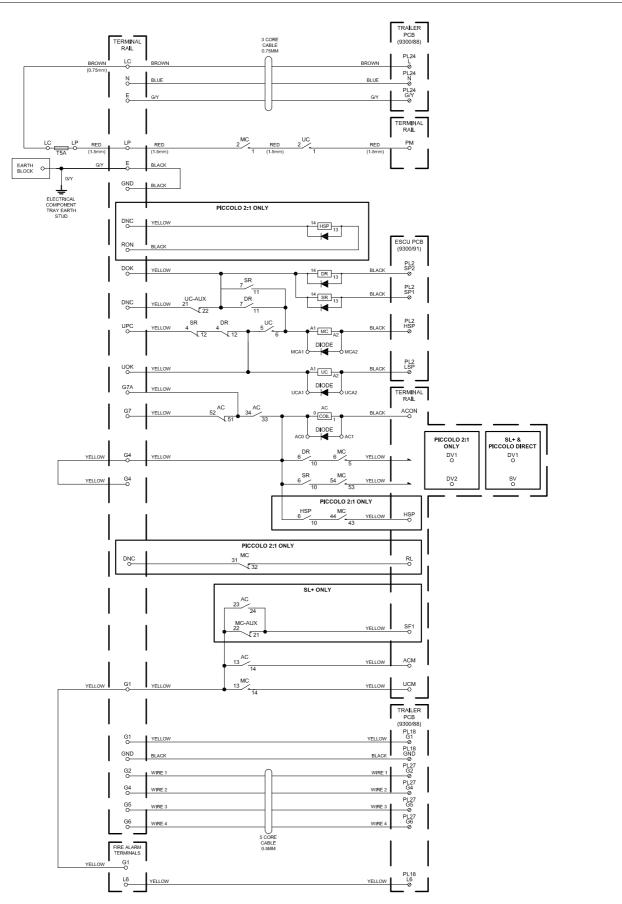
HEAD OFFICE:
Anton Mill
Andover Hampshire
SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-059

REV: B





 NAME:
 J. NICHOLLS
 DATE:
 01/12/11

 CHECKED:
 M. HOOD
 DATE:
 01/12/11

TRAILER CONNECTION BOX WIRING DETAILS

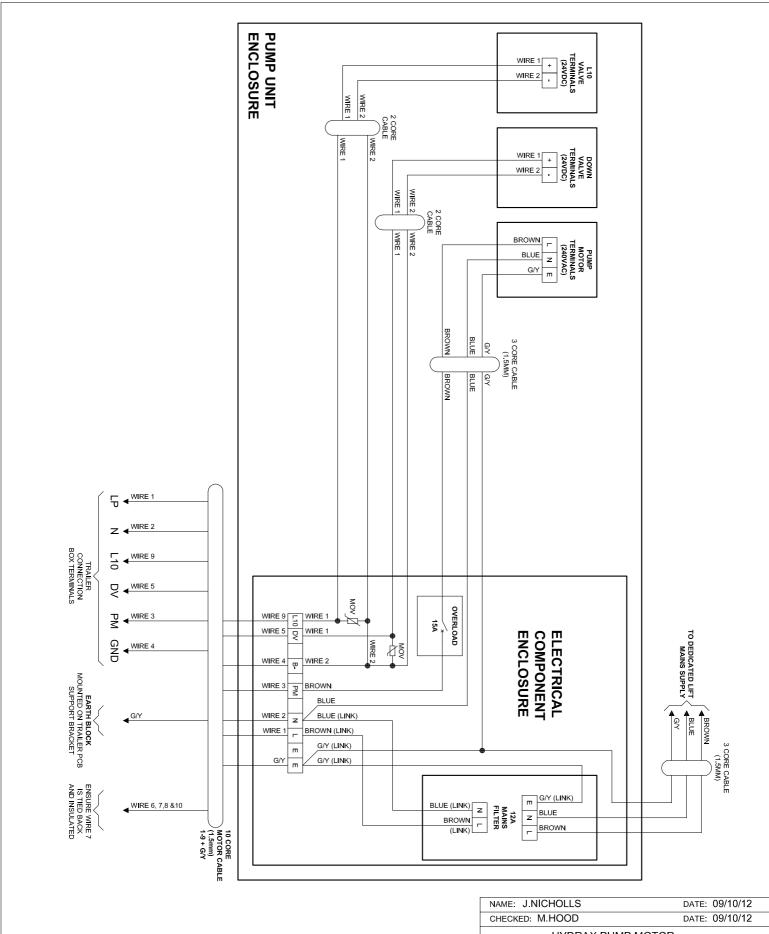


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DRAWING NO: 9448-056

REV: B



HYDRAX PUMP MOTOR
WITH L10 VALVE
(PICCOLO DIRECT AND SL+)

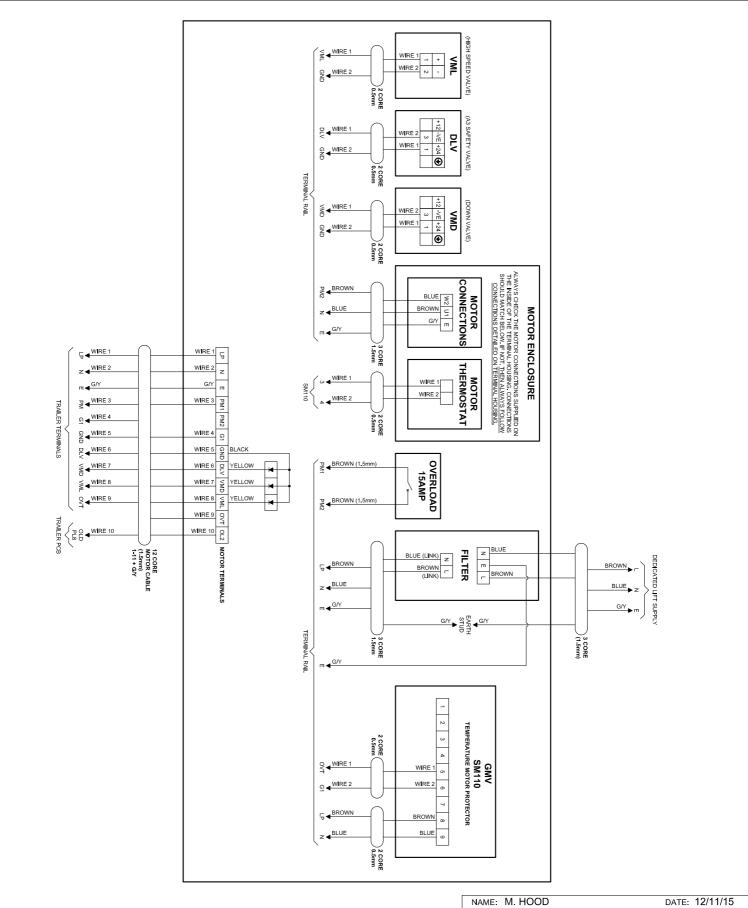


HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-062

REV: D



 NAME:
 M. HOOD
 DATE:
 12/11/15

 CHECKED:
 J. NICHOLLS
 DATE:
 12/11/15

GMV 3010 PUMP MOTOR WITH DLV VALVE (PICCOLO 2:1)

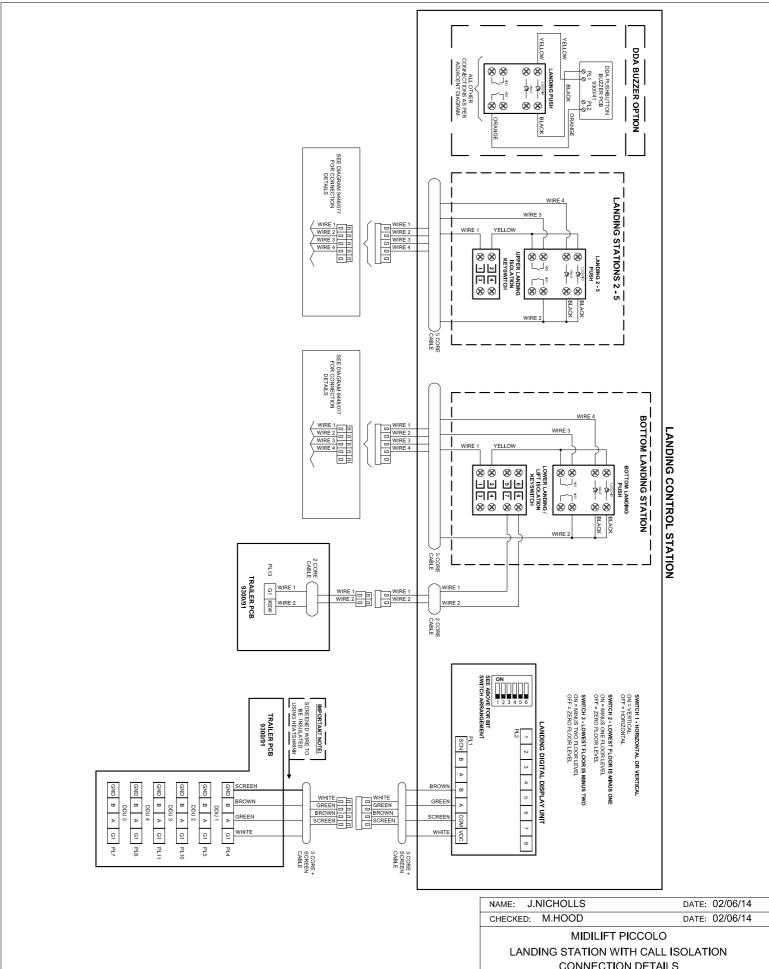


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Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-97

REV: C



CONNECTION DETAILS

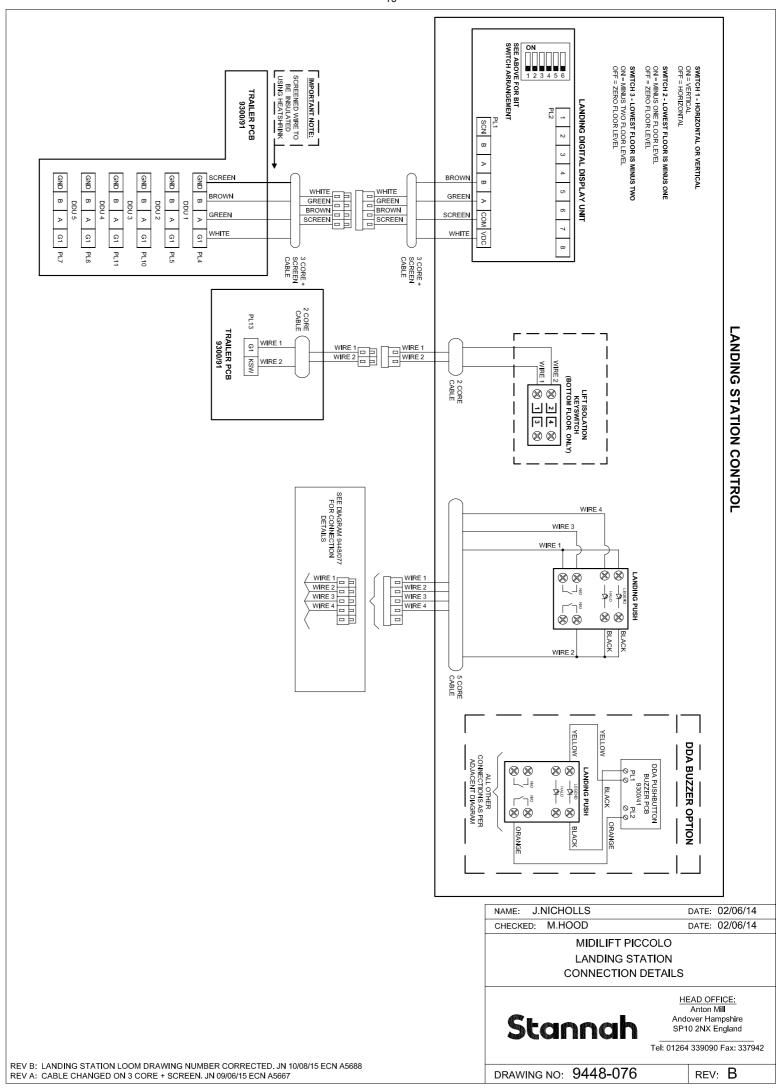


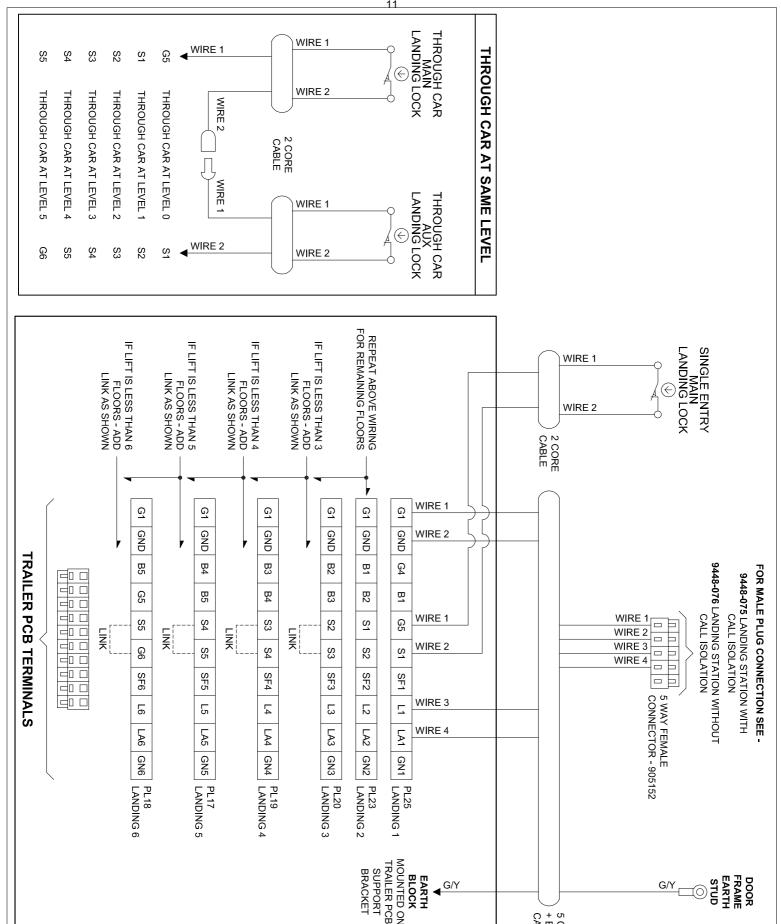
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Anton Mill
Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-075

REV: B







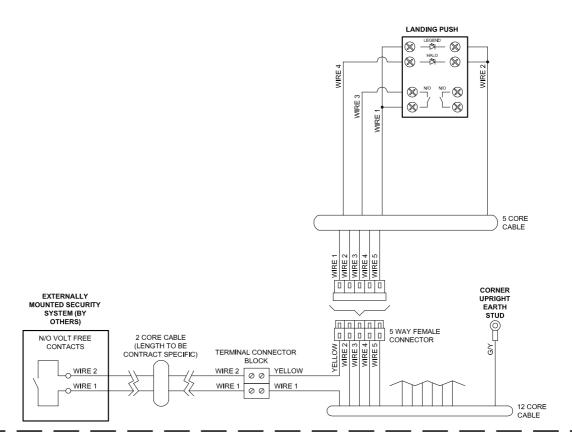
9448-077

DRAWING NO:

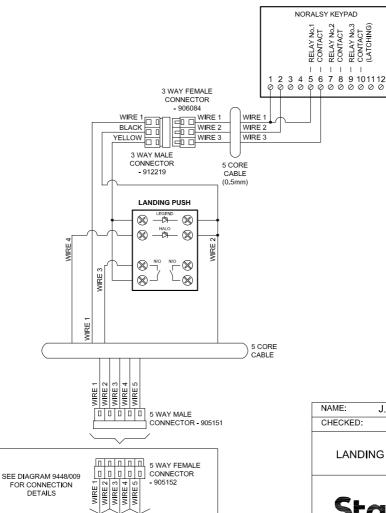
REV: A

REV A: THROUGH CAR WIRING DETAILS ADDED. MH 27/05/16 A6057

SECURITY SYSTEM BY OTHERS



NORALSY KEYPAD OPTION



 NAME:
 J.NICHOLLS
 DATE:
 15/02/16

 CHECKED:
 M.HOOD
 DATE:
 15/02/16

MIDILIFT PICCOLO LANDING STATION WITH SECURITY BY OTHERS CONNECTION DETAILS



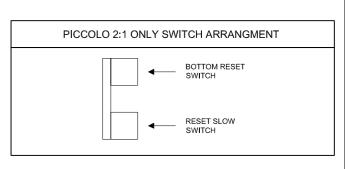
HEAD OFFICE:
Anton Mill
Andover Hampshire
SP10 2NX England

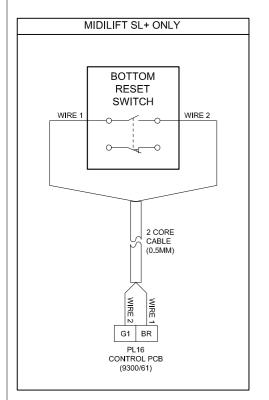
Tel: 01264 339090 Fax: 337942

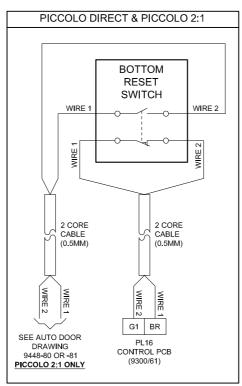
DRAWING NO: 9448-086

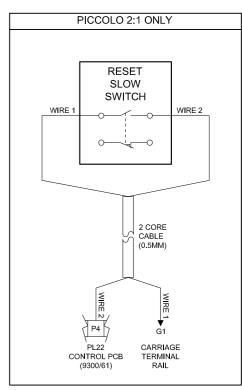
REV:

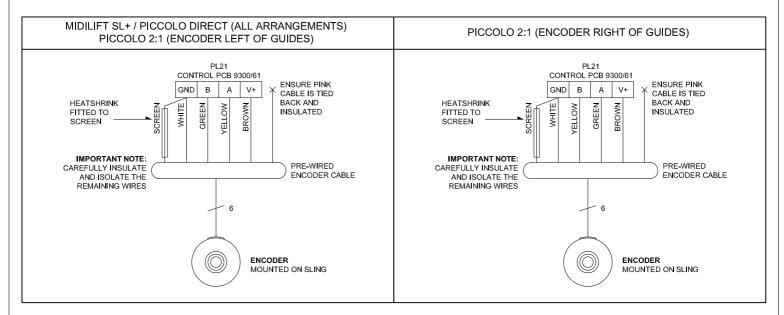
CONTROL PCB (9332221) JUMPER LINK ARRANGEMENT			
MIDILIFT SL+ AND PICCOLO DIRECT	PICCOLO 2:1 ONLY		
LK5 O—O ENSURE LK5 & LK4 ARE BOTH FITTED.	NOTE: LK5 O-O ENSURE LK5 IS FITTED AND LK4 IS LK4 O O REMOVED.		

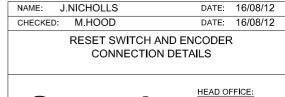














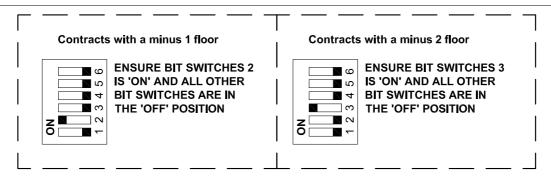
Anton Mill
Andover Hampshire
SP10 2NX England

Tel: 01264 339090 Fax: 337942

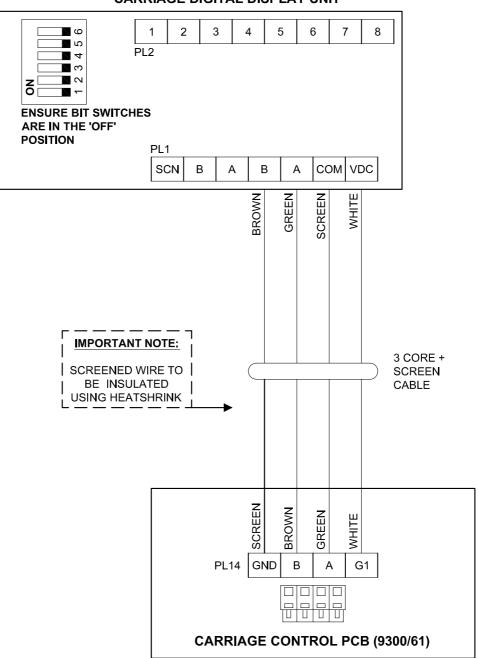
DRAWING NO: 9448-057

rev: C

REV C: LK4 & LK5 NOTE ADDED. 2 CORE DOOR GEAR CONNECTION SHOWN. JN 06/11/17 A6022 REV B: PICCOLO DIRECT BOTTOM RESET SWITCH CHANGED TO N/C. MH 25/08/16 A5798. REV A: RESET AND RESET SLOW SWITCHES CHANGED TO ROCKER SWITCH. MH 08/03/16 A5735.



CARRIAGE DIGITAL DISPLAY UNIT



DATE: 22/10/09 J.NICHOLLS NAMF. DATE: 22/10/09 CHECKED: M.HOOD

> MIDILIFT XL+ CARRIAGE DDU **CONNECTION DETAILS**

Stannah

HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

REV C: CABLE CHANGED ON 3 CORE + SCREEN. JN 09/06/15 ECN A5667 REV B: BIT SWITCH ARRANGEMENT ADDED. 27/05/14 JN. A5573 REV A: UPDATED FOR NEW LOGO AND TEXT FONT. 29/07/2010 JN.

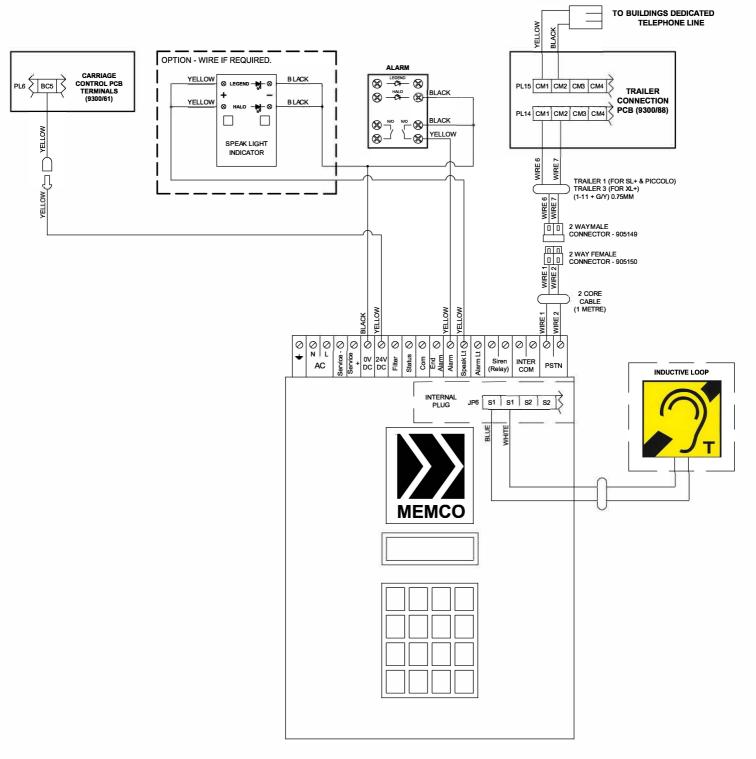
DRAWING NO: 9448-012

REV: C

IMPORTANT NOTE:

PLEASE ENSURE MENU 26 IN QUICK SET UP IS SET AS FOLLOWED:

- WITHOUT GSM SET TO 8
- WITH GSM SET TO 24



REV F: PICTOGRAM DETAIL ADDED. MH 29/05/19 A6248
REV E: PROGRAMMING DETAILS ADDED. JN 24/10/16 A5823
REV D: TRAILER NUMBER UPDATED TO SHOW SL+. 27/05/2014 JN A5573.
REV C: INDUCTIVE LOOP PICTURE ADDED. 30/07/2012 JK A5299.
REV B: WIRING COLOUR CORRECTED ON THE INDUCTIVE LOOP. 11/07/2011 JN A5007.

REV A: WIRING CORRECTED TO LINK 0VDC TO GND & UPDATED FOR NEW LOGO AND TEXT

FONT. 29/07/2010 JN.

J.NICHOLLS 17/02/10 NAMF: DATE: CHECKED: 17/02/10 M.HOOD DATE:

> MIDILIFT CONNECTION DETAILS **AUTODIAL CONNECTION DETAILS**

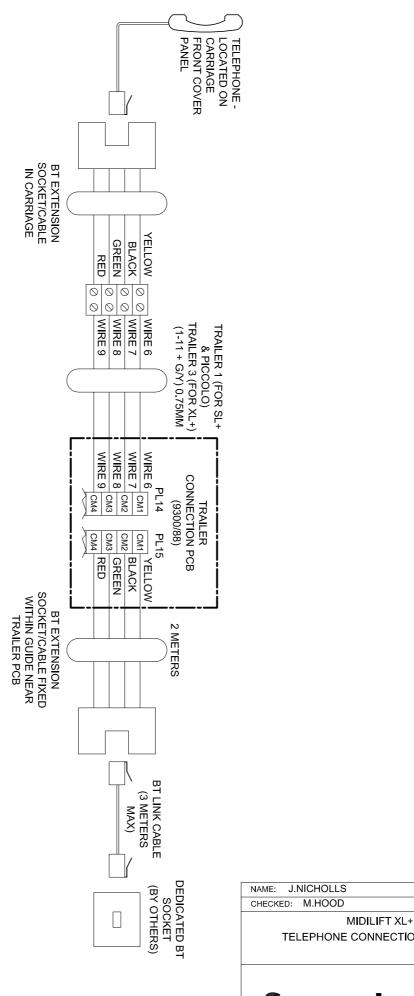


HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

9448-014 DRAWING NO:

REV: F



REV C: TRAILER NUMBER UPDATED TO SHOW SL+. 27/05/2014 JN A5573. REV B: ORDER OF BT EXTENSION SOCKET CABLE WIRES CHANGED TO REFLECT MEMCOM INSTALLATION MANUAL DRAWINGS. 05/11/12 JK. A5364 REV A: UPDATED FOR NEW LOGO AND TEXT FONT. 29/07/2010 JN.

DATE: 17/02/10

TELEPHONE CONNECTIONS DETAILS



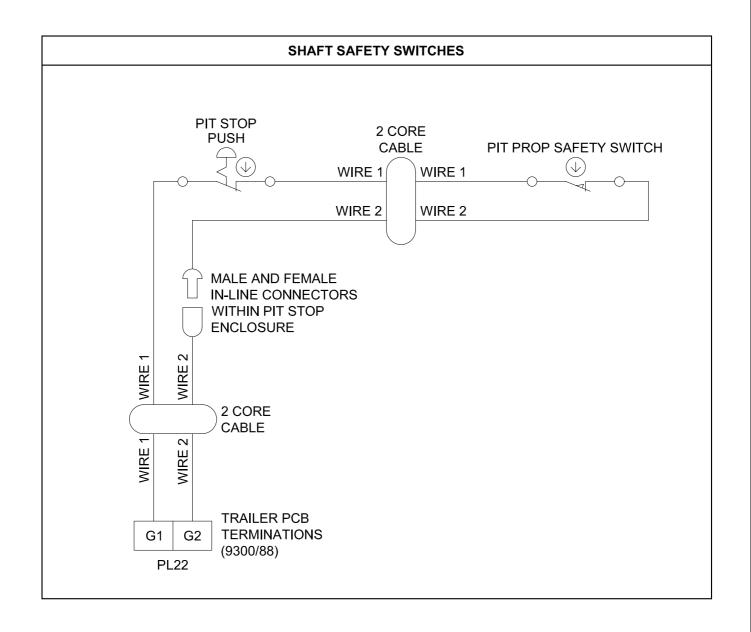
HEAD OFFICE:
Anton Mill
Andover Hampshire SP10 2NX England

DATE: 17/02/10

Tel: 01264 339090 Fax: 337942

9448-015 DRAWING NO:

С REV:



 NAME:
 M.HOOD
 DATE:
 01/10/07

 CHECKED:
 R.BAUGH
 DATE:
 01/11/07

MIDILIFT SL MULTI-FLOOR CONTROLLER PIT STOP / PROP CONNECTIION DETAILS



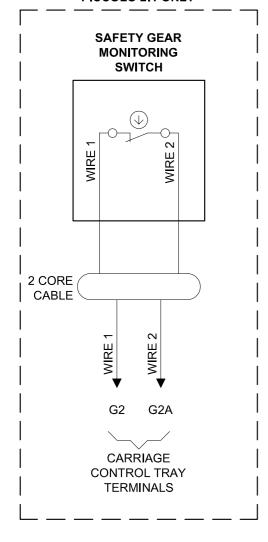
HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

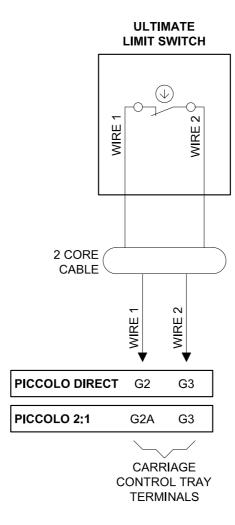
Tel: 01264 339090 Fax: 337942

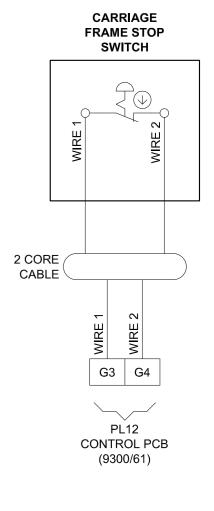
DRAWING NO: 9446-009

REV: B

PICCOLO 2:1 ONLY







 NAME:
 M.HOOD
 DATE:
 17/03/16

 CHECKED:
 J.NICHOLLS
 DATE:
 17/03/16

 MIDILIFT PICCOLO

SAFETY GEAR MONITOR / ULTIMATE LIMIT AND CARRIAGE FRAME STOP SWITCHES

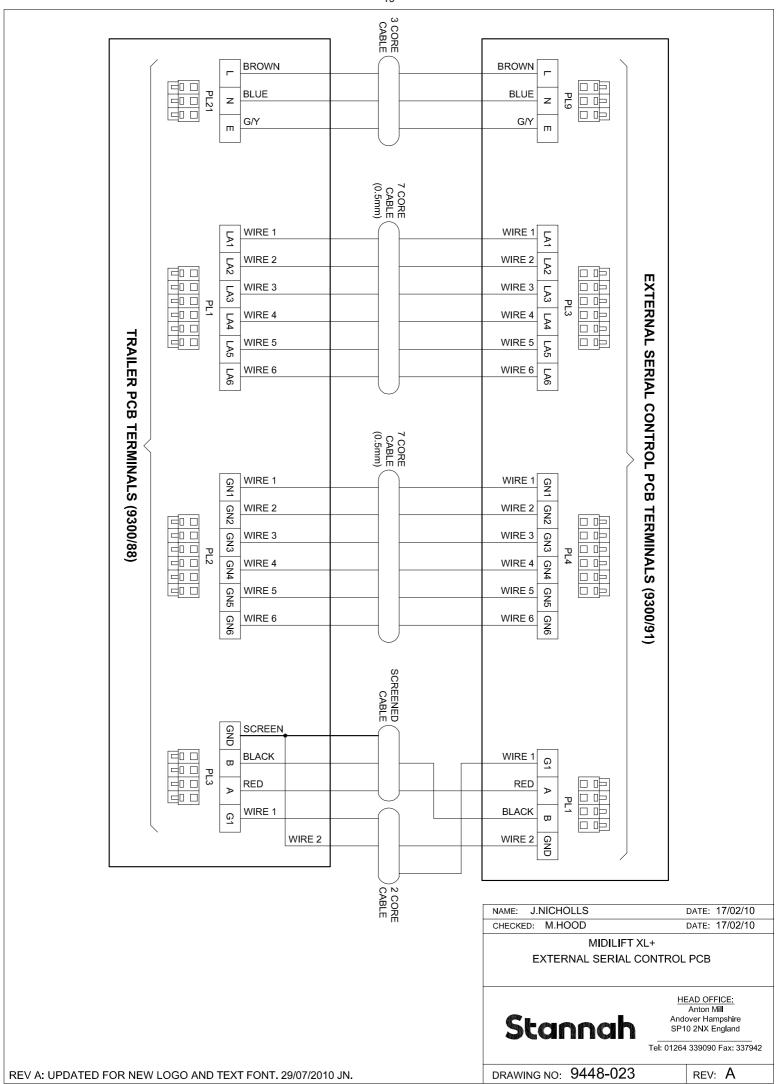
Stannah

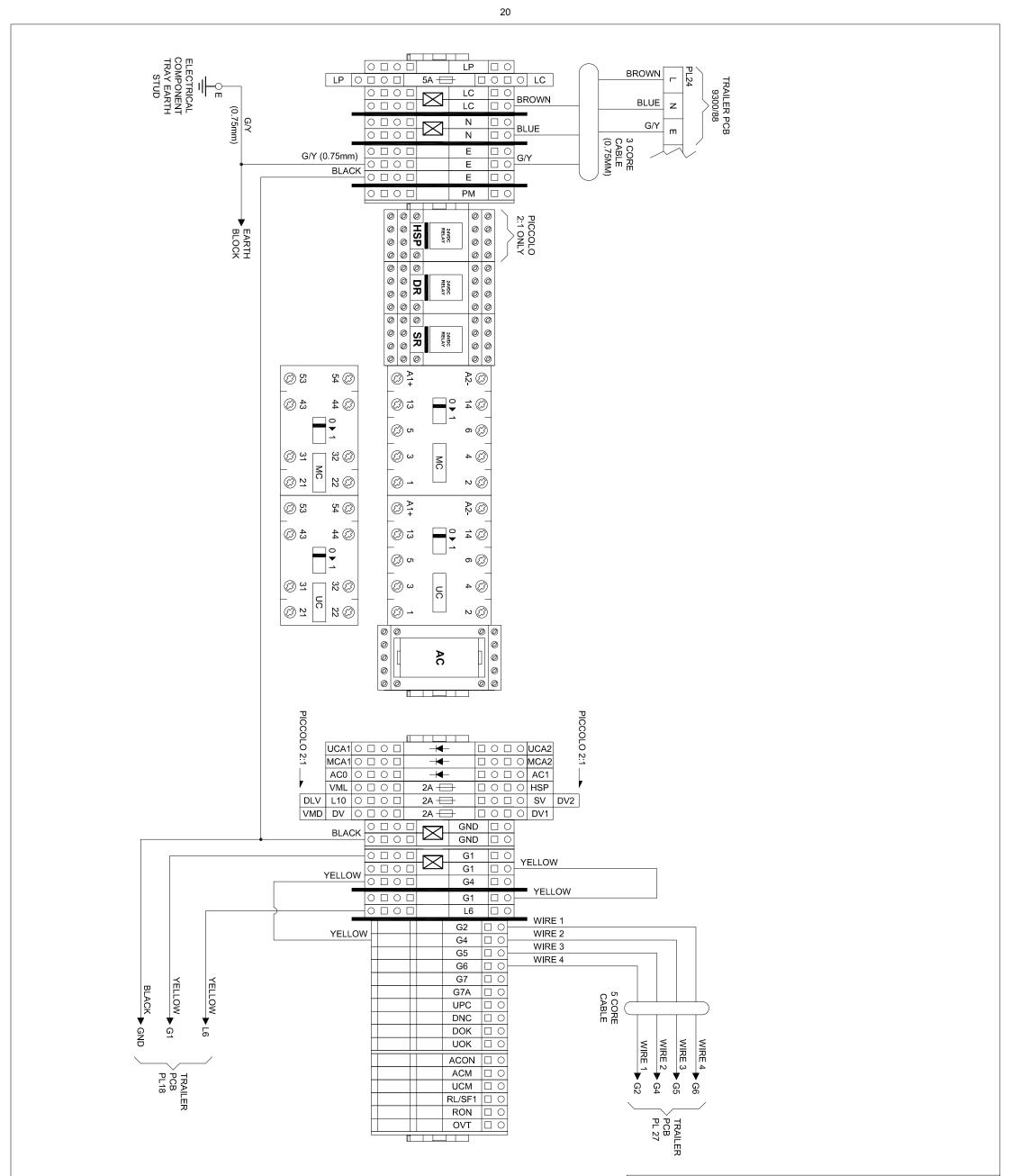
HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-099

REV:





NAME: J.NICHOLLS DATE: 16/08/2012 CHECKED: M.HOOD DATE: 16/08/2012

> TRAILER CONNECTION **BOX TERMINALS**

Stannah

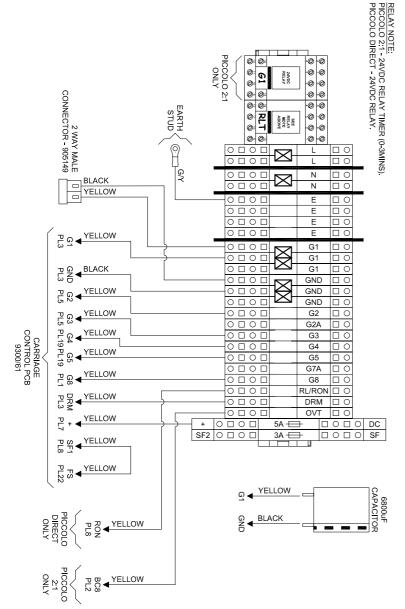
HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

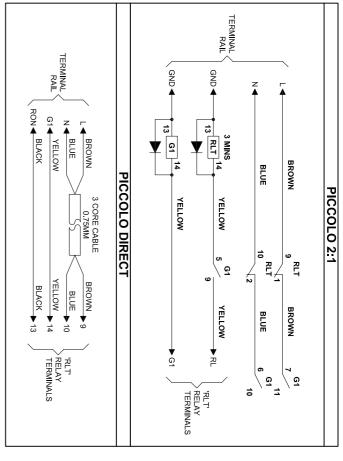
Tel: 01264 339090 Fax: 337942

REV B: PICCOLO 2:1 DETAILS ADDED. MH 08/03/16 A5735. REV A: WIRING FOR ALARM REMOVED FROM DRAWING TO REFLECT NEW INTERCOM. 12/04/13 JK.

DRAWING NO: 9448-060

REV: B





NAME: J NICHOLLS

DATE: 23/09/14

CHECKED: M.HOOD

DATE: 23/09/14

MIDILIFT PICCOLO CARRIAGE CONTROL TRAY TERMINAL CONNECTION DETAILS

Stannah

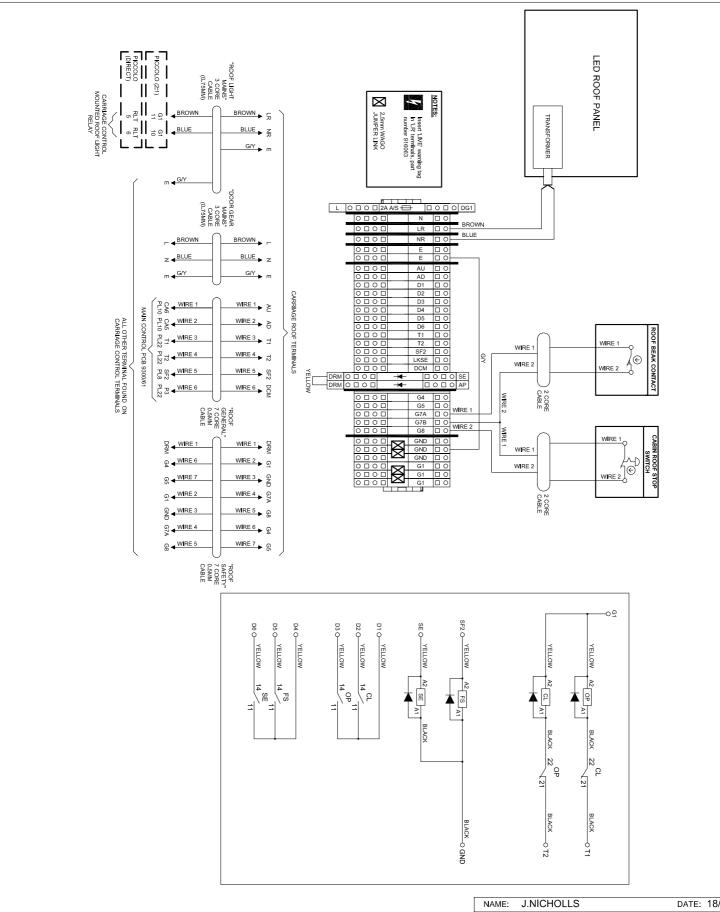
HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-085

REV: C

REV C: RELAY NOTE ADDED. JN 26/03/18. A6144 REV B: PICCOLO 2:1 RLT WIRING CORRECTED, JN 11/01/17, A6022 REV A: PICCOLO 2:1 DETAILS ADDED. MH 08/02/16. A5735



DATE: 18/07/14 CHECKED: M.HOOD DATE: 18/07/14

> MIDILIFT PICCOLO SINGLE ENTRANCE CARRIAGE ROOF CONNECTION DETAILS

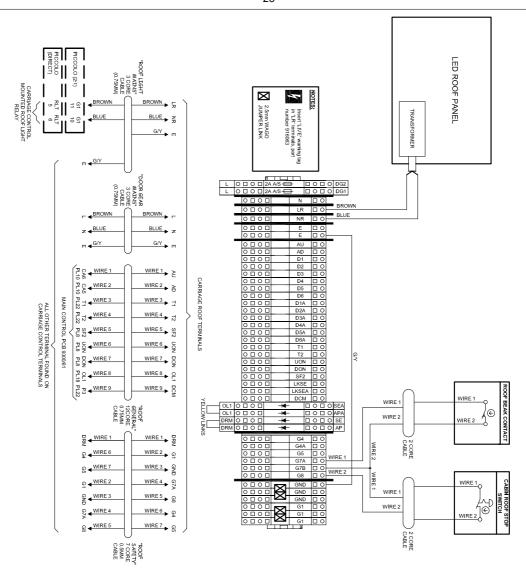


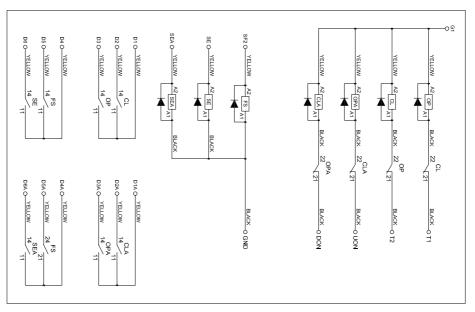
HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-078

REV: A





 NAME:
 J.NICHOLLS
 DATE:
 02/06/14

 CHECKED:
 M.HOOD
 DATE:
 02/06/14

MIDILIFT PICCOLO

DOUBLE ENTRANCE CARRIAGE ROOF

CONNECTION DETAILS



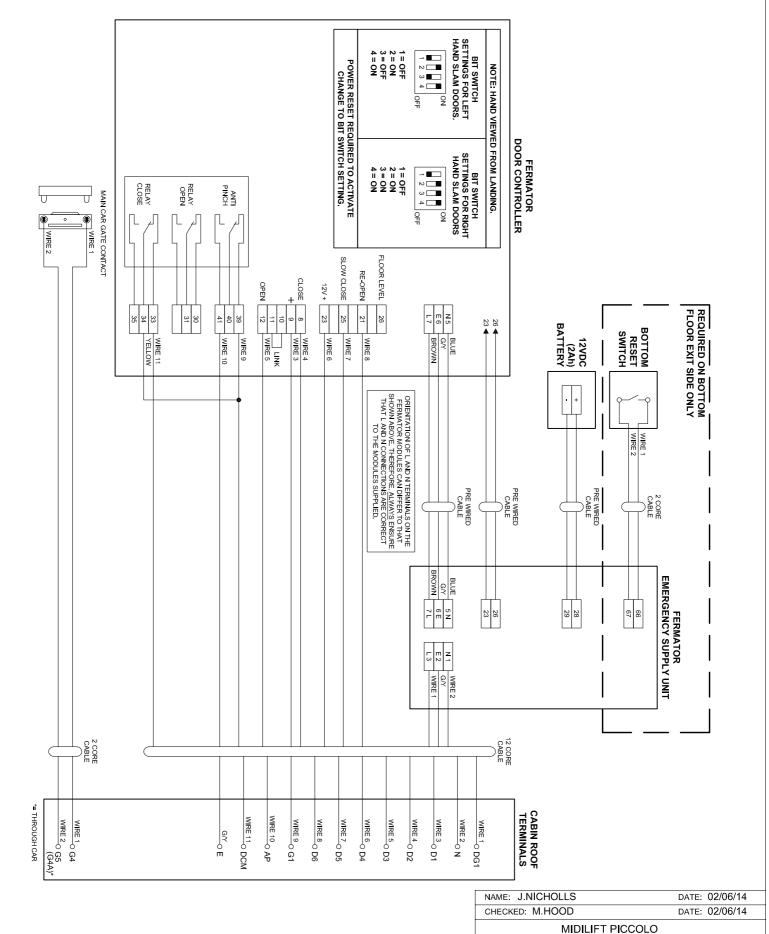
HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-079

REV: B

REV B: 3 CORE CABLE DETAILS CORRECTED. JN 26-03-18 A6144 REV A: PICCOLO 2:1 ROOF LIGHT CONNECTION DETAILS OPTIONED. 02-11-15 MH.



MAIN ENTRANCE DOOR CONTROLLER CONNECTION DETAILS



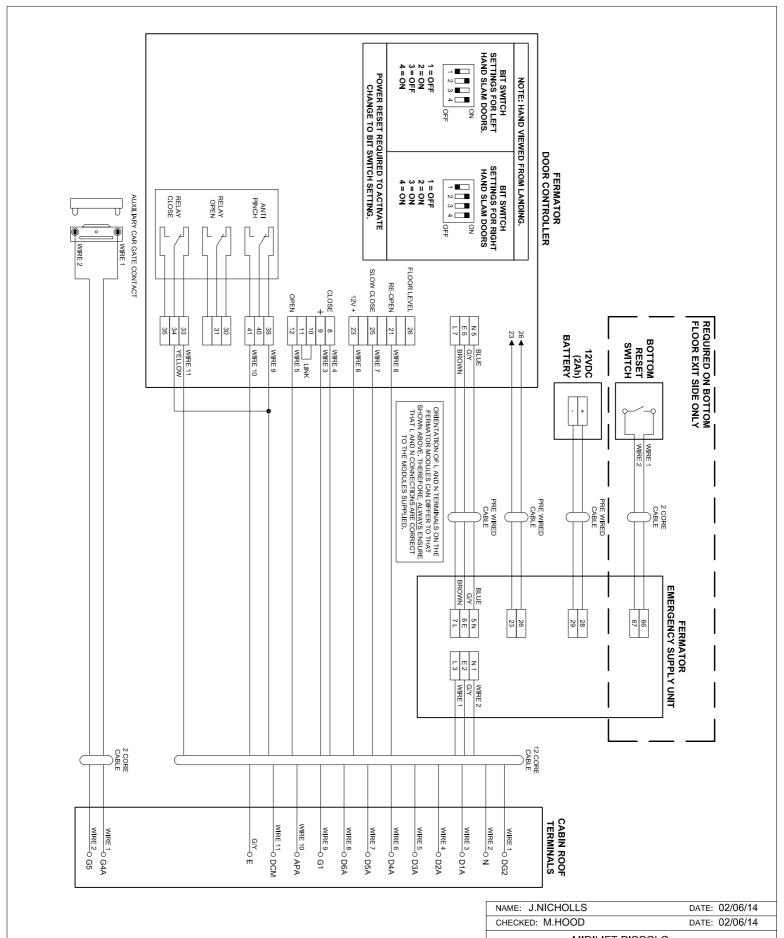
HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-080

REV: E

REV E: FERMATOR EMERGENCY SUPPLY CONNECTION DETAILS ALTERED. MH 13/02/2019 A6261. REV D: RESET SWITCH DETAILS AND MAINS WIRING DETAILS AMENDED. JN 26/03/2018 A6144. REV C: BATTERY BACKUP CONNECTION DETAILS ADDED. MH 09/03/2016 A5735. REV B: BIT SWITCH DESCRIPTION UPDATED. 07/09/2015 JN. A5688 REV A: BIT SWITCH SETTINGS UPDATED FOR L/H & R/H DOORS. 09/06/2015 JN. A5667



MIDILIFT PICCOLO AUXILIARY ENTRANCE DOOR CONTROLLER CONNECTION DETAILS



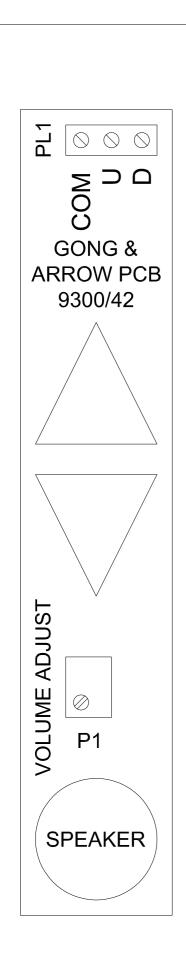
HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

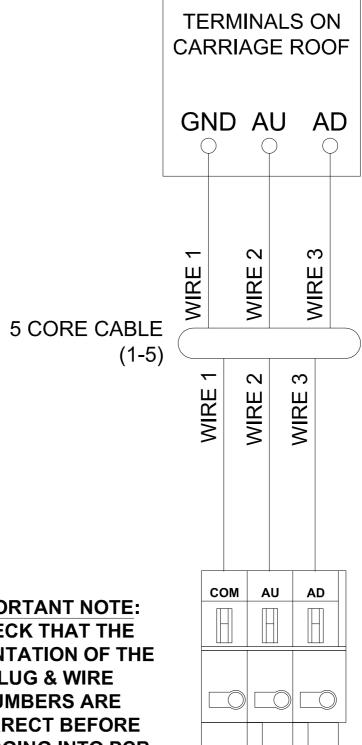
Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-081

REV: E

REV E: FERMATOR EMERGENCY SUPPLY CONNECTION DETAILS ALTERED. MH 13/02/2019 A6261. REV D: RESET SWITCH DETAILS AND MAINS WIRING DETAILS AMENDED. JN 26/03/2018 A6144. REV C: BATTERY BACKUP CONNECTION DETAILS ADDED. MH 09/03/2016 A5735. REV B: BIT SWITCH DESCRIPTION UPDATED. 07/09/2015 JN. A5688 REV A: BIT SWITCH SETTINGS UPDATED FOR L/H & R/H DOORS. 09/06/2015 JN. A5667





IMPORTANT NOTE: CHECK THAT THE **ORIENTATION OF THE PLUG & WIRE NUMBERS ARE CORRECT BEFORE PLUGGING INTO PCB**

PLUG INTO PL1 ON GONG & ARROW PCB

NAME:	J.NICHOLLS	DATE:	02/06/14
CHECKED:	M.HOOD	DATE:	02/06/14
	MIDILIFT	PICCOLO	
	DIRECTION C	F DEPARTUR	RE
	ARROWS AN	D GONGS PC	В
_	_	<u>HEAD O</u>	FFICE:

Stannah

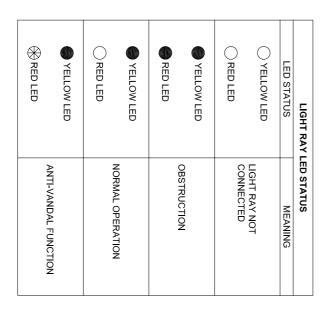
Anton Mill Andover Hampshire SP10 2NX England

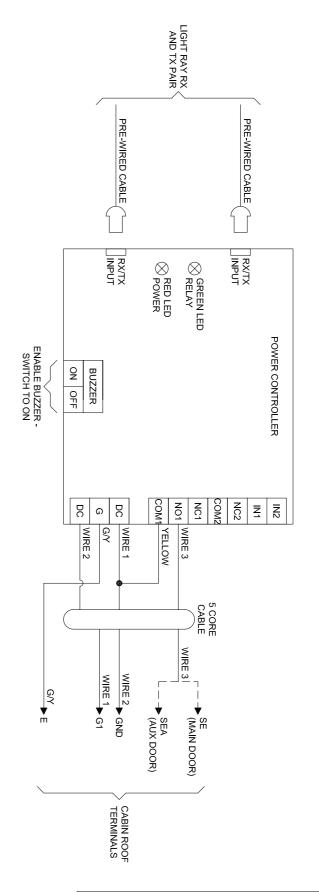
Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-082

REV:

RED LED	⊕ GREEN LED	RED LED	GREEN LED	RED LED	GREEN LED	RED LED	GREEN LED	LED STATUS	POWER CONTROLLER LED STATUS
CONNECTED / FAULTY)	ERROR (I.E. RX / TX NOT	MOLYNDE OF EXPLICIT	NOBMAI OBEBATION	CECTION	OBSTRUCTION	NO I OWEN	NO DOWED	MEANING	LER LED STATUS





NAME: J. NICHOLLS CHECKED:

DATE: 02/06/14 DATE: 02/06/14

M. HOOD

MIDILFIT PICCOLO FULL HEIGHT INFRA RED SAFETY EDGE

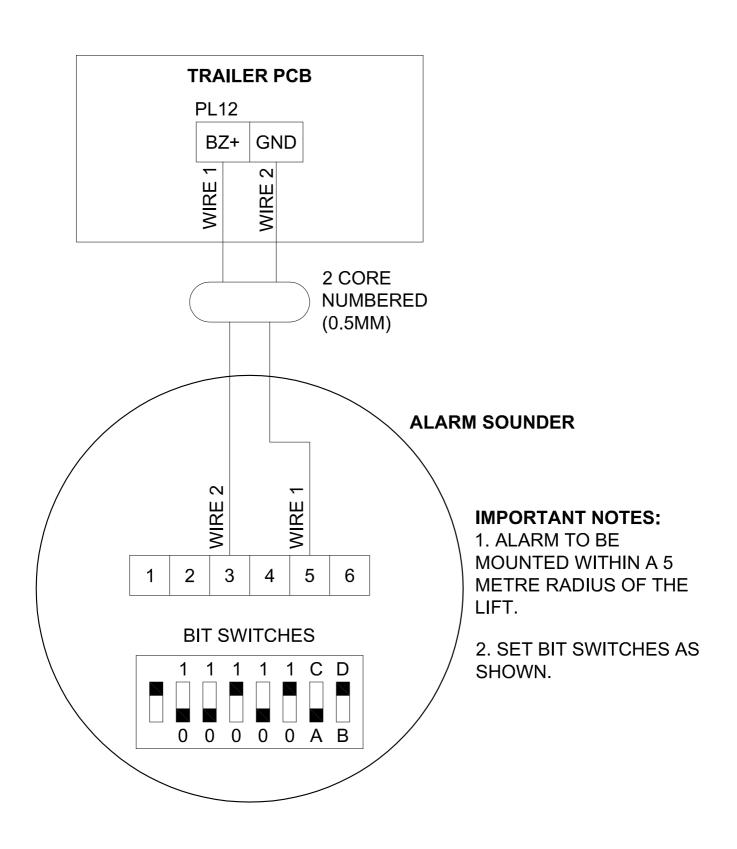


HEAD OFFICE: Anton Mill
Andover Hampshire
SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-083

REV. C



NAME: J.NICHOLLS DATE: 17/02/10

CHECKED: M.HOOD DATE: 17/02/10

MIDILIFT XL+

ALARM SOUNDER

CONNECTION DETAILS

Stannah

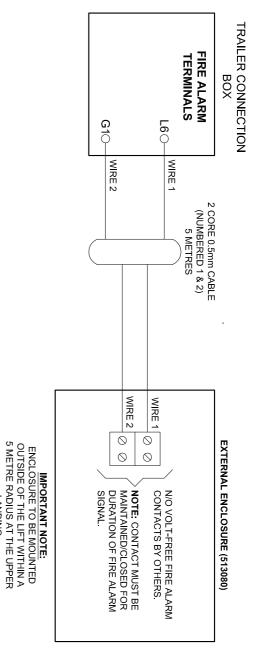
HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-032

REV: A

IRE ALARI



VOLT FREE ALARM



VOLT FREE ALARM

A8 ○

WIRE 1

TERMINALS

A12 ○

WIRE 2

ALARM RELAY

YELLOW

BLACK

GND PL12 TRAILER PCB 9300/88

IMPORTANT NOTE:
ENCLOSURE TO BE MOUNTED
OUTSIDE OF THE LIFT WITHIN A
5 METRE RADIUS AT THE UPPER

LANDING

14 O YELLOW

13 O BLACK

TRAILER CONNECTION BOX

2 CORE 0.5mm CABLE (NUMBERED 1 & 2)

EXTERNAL ENCLOSURE (513080)

LANDING

5 METRES

NAME: J.KENT
CHECKED: M.HOOD

DATE: 30/07/12 DATE: 30/07/12

MIDILIFT

VOLT FREE OPTION

ENCLOSURE CONNECTION DETAILS

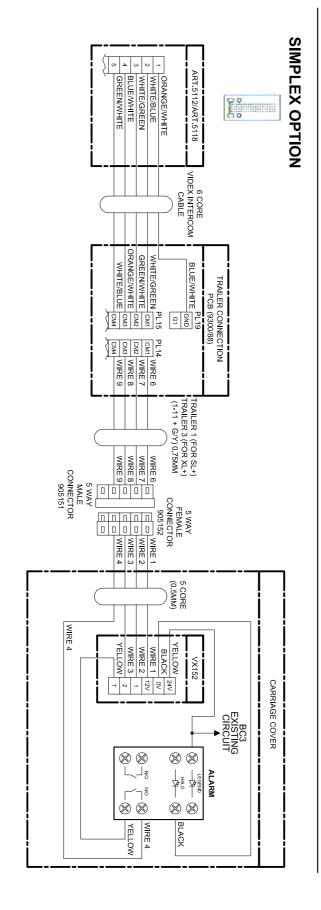
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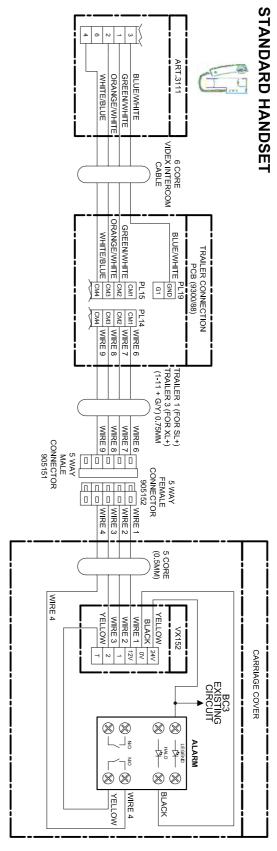
HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-054

REV: A





 NAME:
 J.KENT
 DATE:
 09/04/13

 CHECKED:
 M.HOOD
 DATE:
 09/04/13

MIDILIFT CABIN
VIDEX INTERCOM
CONNECTION DETAILS



HEAD OFFICE:
Anton Mill
Andover Hampshire
SP10 2NX England

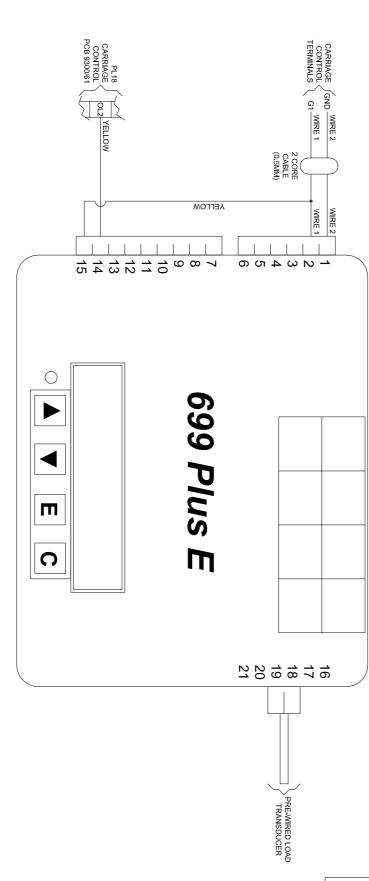
Tel: 01264 339090 Fax: 337942

DRAWING NO: 9448-070

REV: B

REV C: TRAILER NUMBER UPDATED TO SHOW SL+ & ART.5112/ART.5118 WIRING UPDATED. 27/05/2014 JN A5573.

REV A: TERMINAL BLOCK REMOVED. JK. 02/07/13. A5511.



NAME: M.HOOD DATE: 17/02/10 CHECKED: J.NICHOLLS DATE: 17/02/10

> OVERLOAD DEVICE **CONNECTION DETAILS**

Stannah

DRAWING NO: 9448-029

HEAD OFFICE: Anton Mill
Andover Hampshire
SP10 2NX England

REV: D

Tel: 01264 339090 Fax: 337942

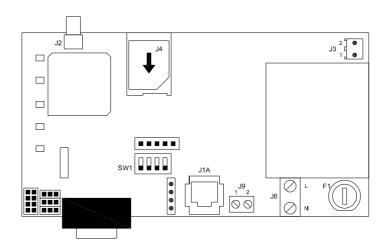
A5195 REV A: UPDATED FOR NEW LOGO AND TEXT FONT. 29/07/2010 JN.

REV C: WIRE NUMBERS OF 2 CORE CABLE ADDED. MH 12/04/12 A5277

04/12/17

REV D: WIRE NUMBERS OF 2 CORE CABLE AMENDED TO SUIT UPDATED OVERLOAD. JN

REV B: DRAWING CHANGED TO REFLECT NEW LOAD WEIGHING DEVICE. 03/02/2012 JK.



MEMCO GSM - Quick setup guide

For full details refer to the '**DPC Installation Guide**' which can be accessed on the Avire website (www.avire-global.com)

IMPORTANT NOTE: MAINS SUPPLY SHOULD BE DISCONNECTED BEFORE BEGINNING THIS PROCEDURE.

1. SETTING UP THE DEVICE

- A. Insert SIM card into plug J4, pressing it in until it clicks.
- B. Ensure that the antenna is securely connected to plug J2.
- C.Connect the pre-wired battery lead to plug J3.

2. CHECKING THE NETWORK COVERAGE

- A.Ensure all previous steps have been completed.
- B. Turn the first dip switch SW1 to On.
- C. The five LEDs on the front will show the network signal level.
- D.Once a suitable location has been found, switch SW1 to OFF and fix in position.

3. WIRING THE GSM

- A. Connect the mains power supply to plug J6.
- B. Phone line connection between plug J9 (GSM unit) and CM1/CM2 (lift trailer PCB) as per below:
 - J9 terminal 1 to CM2.
 - J9 terminal 2 to CM1.

4. CONFIGURING THE GSM (via local telephone mode)

- A. Connect an analogue telephone handset into J1A.
- B. Pick up the handset and after hearing the dial tone, enter the access command *#*1234*#*.
- C.Change parameter value P020 to value 00, by entering the following combination on the handset keypad *020#00#.
- D. Hang up the phone to complete configuration.

 NAME:
 J.NICHOLLS
 DATE:
 02/08/18

 CHECKED:
 M.HOOD
 DATE:
 02/08/18

MIDILIFT MEMCO GSM (DCP UNIT) WIRING / SETUP GUIDE



HEAD OFFICE:
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SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: 9452044

rev: A

PREPARATION

ENSURE THE FOLLOWING BEFORE BEGINNING PROCEDURE -

- THAT THE STEPS DETAILED IN THE INSTALLATION GUIDE UP TO AND INCLUDING "MOUNTING THE PUMP UNIT" HAVE BEEN COMPLETED
- IT IS RECOMMENDED THAT INSTALLATION MODE IS ENABLED WHENEVER COP IS REMOVED FOR INSPECTION PURPOSES. ENSURE RELEVANT STEPS ARE FOLLOWED.
- LIFT POWER SUPPLY IS TURNED OFF.

STEP 1

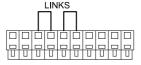
CONNECT INSTALLATION PENDANT CONTROL AND DDU BOX.

INSTALLATION OF MIDILIFT PICCOLO SHOULD NOT BE **ATTEMPTED** WITHOUT THE USE OF THESE TOOLS

STEP 2

LINK OUT ALL UNINSTALLED CAR AND LANDING DOOR

CONNECT SHORTING PLUGS INTO LANDING SOCKETS 1-6 ON THE TRAILER PCB (9300/88)



THESE LINKS ARE REQUIRED TO MAINTAIN A CIRCUIT BETWEEN POINTS 'G4' TO 'G5' AND 'G5' TO 'G6' WITHIN THE SAFETY

ENSURE THE BOTTOM RESET SWITCH IS FITTED BETWEEN POINTS 'G1' TO 'BR' TO ENABLE THE LIFT TO RUN DOWN.

STEP 3

INSTALLATION SHORTING LINK TO BE FITTED BETWEEN TERMINALS G7A AND G8 ON THE CARRIAGE CONTROL **TERMINAL RAIL**

THIS LINK IS REQUIRED TO CREATE A TEMPORARY SHORT FOR THE UNINSTALLED ROOF SAFETY SWITCHES.

STEP 4

LINK OUT UNINSTALLED LIFT ISOLATION KEYSWITCH.

THIS LINK IS REQUIRED TO CREATE A TEMPORARY SHORT BETWEEN 'KSW' AND 'G1' ON THE TRAILER PCB (9300/88).

STEP 5

ENABLE 'INSTALLATION' MODE VIA BIT SWITCHES ON CONTROL PCB (9300/61).



ALL SWITCHES ON = INSTALLATION MODE

INSTALLATION MODE

STEP 6

TURN ON LIFT POWER SUPPLY TO ENABLE INSTALLATION

THE CABIN DDU WILL DISPLAY II' TO CONFIRM MODE SELECTION.

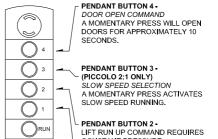
STEP 7

RUN THE LIFT VIA THE CABIN PENDANT CONTROLS (SEE 'INSTALLATION RUN' SECTION BELOW).

SHORTING LINKS MUST BE REMOVED AS RELEVANT SAFETY COMPONENTS ARE INSTALLED AND BECOME OPERATIONAL.

FOR INSPECTION PURPOSES THE COP PUSH BUTTONS CAN BE USED TO RUN LIFT. SEE 'COP CONTROL' SECTION BELOW.

INSTALLATION RUN CONTROLS



CONSTANT PRESSURE.

PENDANT BUTTON 1 -LIFT RUN DOWN COMMAND REQUIRES CONSTANT PRESSURE.

COP CONTROL

COP BUTTON 1 LIFT RUN UP COMMAND (CONSTANT PRESSURE).

COP BUTTON 0

LIFT RUN DOWN COMMAND (CONSTANT PRESSURE).

CARRIAGE FRAME STOP SWITCH EMERGENCY STOP SWITCH (BEHIND COP)

ENSURE THAT THE RELEVANT APPENDIX IS REFERRED TO UPON COMPLETION OF INSTALLATION PHASE...

CALIBRATE MOTOR = APPENDIX I LEARN FLOOR LEVELS = APPENDIX C

PICCOLO 2:1

LEARN FLOOR LEVELS = APPENDIX C

IMPORTANT NOTE: MOTOR CALIBRATION IS ONLY REQUIRED ON PICCOLO DIRECT AND SHOULD BE COMPLETED PRIOR TO LEARNING FLOOR LEVELS.

IF INSTALLATION MODE WAS USED FOR INSPECTION PURPOSES THE LIFT CAN BE RETURNED TO NORMAL MODE BY:

(B) RETURN BIT SWITCHES TO ORIGINAL POSITION (I.E. ALL OFF)

(C) TURN ON LIFT TO ALLOW RESET TO LOWEST FLOOR

SEE APPENDIX C FOR BIT SWITCH FUNCTION IN NORMAL MODE

NAME: M. HOOD

DATE: 14/11/14 DATE: 14/11/14

CHECKED: J. NICHOLLS

APPENDIX A MIDILIFT PICCOLO **INSTALLATION GUIDE**

Stannah

HEAD OFFICE: Anton Mill Andover Hampshire SP10 2NX England

Tel: 01264 339090 Fax: 337942

DRAWING NO: APPENDIX A

REV: C

MOTOR CALIBRATION PROCEDURE
IT IS ACCEPTED THAT PERSONS CARRYING OUT THIS INSTALLATION HAVE
ALREADY RECEIVED FORMAL TRAINING.
THIS PROCEDURE IS FOR GUIDANCE ONLY.

IMPORTANT NOTE: MOTOR CALIBRATION IS NOT REQUIRED ON PICCOLO 2:1 MODEL

ENSURE ALL SAFETY DEVICES ARE INSTALLED AND ARE FUNCTIONING CORRECTLY. IT IS RECOMMENDED THAT BOTH THE PENDANT CONTROLLER AND DDU/SPEAKER BOX ARE USED DURING THIS PROCEDURE.

BEFORE STARTING ENSURE THE VALVE BLOCK IS CORRECTLY SETUP AND THE LIFT IS RUNNING AT RATED SPEED.

IMPORTANT NOTE: MOTOR CALIBRATION MUST BE COMPLETED BEFORE FLOOR LEVELS ARE PROGRAMMED (LEARN MODE).

PROGRAMMED (LEARN MODE). LEARN MODE BIT SWITCHES PENDANT CONTROLS LEARN 6 LEARN 5 LEARN 4 PENDANT BUTTON 4 ☐ LEARN 3 A MOMENTARY PRESS WILL ☐ LEARN 2 START THE CALABRATION ROUTINE. ☐ LEARN 1 RUN BUTTON RECORD PRESS CONTINUOUSLY TO ALLOW PLATFORM TO MOVE. LEARN MODE INTERFACE

FOR BEST RESULTS THE FOLLOWING PROCEDURE SHOULD BE CARRIED OUT WITH APPROXIMATELY 80KG ON THE CARRIAGE.

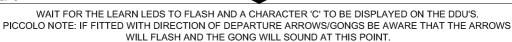
STEP 1

POSITION LIFT AT BOTTOM FLOOR LEVEL AND ENSURE RESET FLAG IS INSTALLED.

STEP 2

TURN ON SWITCH 1 TO SELECT CALIBRATION MODE AND RESET LIFT CONTROLLER. EITHER BY POWER CYCLE
OR USE OF 'RESET'BUTTON ON CARRIAGE.

STEP 3



STEP 4



PRESS AND HOLD RUN BUTTON; MOMENTARILY PRESS PENDANT BUTTON 4 TO INITIATE CALIBRATION. (NOTE: RUN BUTTON WILL NEED TO BE MAINTAINED)

THE LIFT WILL AUTOMATICALLY RUN UP APPROXIMATELY 1 METER, STOP AND RUN DOWN APPROXIMATELY HALF A METER.

STEP 5



THE LEARN LEDS WILL FLASH CONTINUOUSLY, THIS CONFIRMS THE PUMP UNIT HAS BEEN SUCCESSFULLY CALIBRATED.

STEP 6



RELEASE RUN BUTTON AND TURN OFF **SWITCH 1**.
THE LIFT CONTROLLER WILL NEED TO BE RESET TO RETURN TO NORMAL OPERATION (EITHER BY POWER CYCLE OR USE OF 'RESET'BUTTON ON CARRIAGE).

STEP 7



REFER TO LEARN MODE PROCEDURE IF FLOOR LEVELS REQUIRE PROGRAMMING.

APPENDIX I
MIDILIFT MOTOR CALIBRATION
PROCEDURE

REV C: STEP 5 TEXT ALTERED. MH 25/08/16 A5798 REV B: PICCOLO 2:1 SPECIFIC NOTES ADDED. MH 15/03/16 A5735 REV A: PICCOLO SPECIFIC NOTES ADDED. MH 28/05/15 A5667

IMPORTANT NOTE BEFORE BEGINNING LEARN MODE PROCEDURE -

- CHECK THAT ALL SAFETY DEVICES ARE INSTALLED AND FUNCTIONING CORRECTLY.
- ENSURE MOTOR CALIBRATION HAS BEEN COMPLETED APPENDIX I (PICCOLO DIRECT ONLY).
- PENDANT CONTROL AND DDU SPEAKER BOX TOOLS ARE INSTALLED TO ENABLE SAFE OPERATION OF LIFTS WITH PANELS REMOVED.
- TO ENABLE SERVICE ENGINEERS TO RE-REPGRAMME FLOOR LEVELS, COP PUSH BUTTONS CAN BE USED IN PLACE OF A PENDANT CONTROLLER. SEE 'COP CONTROL' SECTION.

SET A MINUS FLOOR PRESS PENDANT 1 LA WILL APPEAR ON THE DDU

SET BIT SWITCH 1 = MINUS 1 FLOOR SET BIT SWITCH 2 = MINUS 2 FLOOR

ONCE SETTINGS HAVE BEEN MADE, PRESS THE RECORD BUTTON TO RETURN.

SET A FIRE FLOOR PRESS PENDANT 2 LB WILL APPEAR ON THE DDU

SET BIT SWITCH 1 = 0 FLOOR SET BIT SWITCH 2 = 1 FLOOR SET BIT SWITCH 3 = 2 FLOOR SET BIT SWITCH 1 & 2 = 3 FLOOR SET BIT SWITCH 1 & 3 = 4 FLOOR

ONCE SETTINGS HAVE BEEN MADE, PRESS THE RECORD BUTTON TO RETURN.

DISABLE HOMING (DEFAULT = ACTIVE TO FLOOR 1) PRESS PENDANT 3 LC WILL APPEAR ON THE DDU

BIT SWITCH 1 OFF = HOMING ON (15 MINS) BIT SWITCH 1 ON = HOMING DISABLED

ONCE SETTINGS HAVE BEEN MADE, PRESS THE RECORD BUTTON TO RETURN.

IMPORTANT NOTE:

IT IS ACCEPTED THAT PERSONS CARRYING OUT THIS INSTALLATION HAVE ALREADY RECEIVED FORMAL TRAINING.
THIS PROCEDURE IS FOR GUIDANCE ONLY.

STEP 1

TURN ON SWITCH 4 TO ACTIVATE LEARN MODE (LIFT WILL NOW RESET TO GROUND FLOOR).

STEP 2



LEARN 1 LED WILL APPEAR.

IF A MINUS FLOOR, FIRE SHUTDOWN OR HOMING FLOOR IS REQUIRED PRESS THE CORRESPONDING CAR CALL BUTTON.

SET ENTRANCE ARRANGEMENT FOR FLOOR 1 NO BIT SWITCHES = MAIN ENTRANCE SET BIT SWITCH 1 = AUX ENTRANCE SET BIT SWITCH 2 = THROUGH CAR

ONCE THE CORRECT BIT SWITCH IS SET,
PRESS THE 'RECORD' BUTTON UNTIL LEARN 2
IS ILLUMINATED.

STEP 3



DRIVE LIFT TO NEXT FLOOR.

STEP 4



NO BIT SWITCHES = MAIN ENTRANCES SET BIT SWITCH 1 = AUX ENTRANCES SET BIT SWITCH 2 = THROUGH CAR

STORE THE FLOOR LEVEL BY PRESSING THE 'RECORD' BUTTON.

FLOOR LEVEL IS RECORDED ONCE THE NEXT 'LEARN' LED IS ILLUMINATED.

STEP 5



REPEAT STEPS 3 AND 4 TO PROGRAMME REMAINING FLOORS.

STEP 6



ONCE YOU HAVE PROGRAMMED THE FINAL FLOOR LEVEL, TURN OFF **SWITCH 4 TO EXIT LEARN MODE AND RETURN TO NORMAL OPERATION**.

BIT SWITCH FUNCTION IN NORMAL MODE

SWITCH 1

NO OPERATION

SWITCH 2 - JOURNEY TIME SELECTION

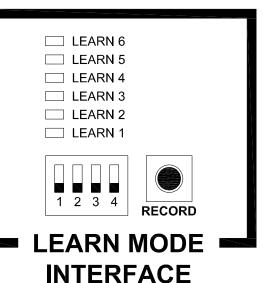
	DIRECT	2:1
ON	30 SECONDS	70 SECONDS
OFF	60 SECONDS	120 SECONDS

SWITCH 3 - ADJUSTABLE DOOR DWELL TIME

	ALL
ON	10 SECONDS
OFF	15 SECONDS

SWITCH 4 - LEARN MODE ACTIVATION

WILL PUT LIFT INTO LEARN MODE.



PENDANT CONTROLS

	A M FOF
4	
3	PEN (PIC
2	SLC A M
1	SLC
RUN	\
	DEN

PENDANT BUTTON 4 DOOR OPEN COMMAND
A MOMENTARY PRESS OPEN DOORS
FOR APPROXIMATELY 10 SECONDS.

PENDANT BUTTON 3 - (PICCOLO 2:1 ONLY)

SLOW SPEED SELECTION A MOMENTARY PRESS ACTIVATES SLOW SPEED RUNNING.

- **PENDANT BUTTON 2 -**LIFT RUN UP COMMAND REQUIRES

CONSTANT PRESSURE.

PENDANT BUTTON 1 -

LIFT RUN DOWN COMMAND REQUIRES CONSTANT PRESSURE.

COP CONTROLS (FOR SERVCE ENGINEERS)

OP BUTTON 1

LIFT RUN UP COMMAND (CONSTANT PRESSURE).

COP BUTTON 0

LIFT RUN DOWN COMMAND (CONSTANT PRESSURE).

CARRIAGE FRAME STOP SWITCH

EMERGENCY STOP SWITCH (BEHIND COP)

APPENDIX C
MIDILIFT PICCOLO
LEARN MODE
PROCEDURE

REV B: PICCOLO 2:1 DETAILS ADDED AND HOMING DEFAULTED TO ON. MH 11/03/16 A5735. REV A: VARIOUS CORRECTIONS MADE. MH 28/05/15 A5667.

APPENDIX B - FAULT CODE LIST

Certain fault conditions will cause the controller to latch the lift out of service. When this happens, the relevant fault code will be displayed on all lift digital display units (DDU's) and the lift will be latched out of service.

The lift supply will need to be cycled in order to clear the latch fault and return the lift to normal service (NOTE: After supply has been re-instated the lift will 'RESET' to the bottom floor).

FAULT CODES:

DDU DISPLAY	DESCRIPTION
	ENCODER MOVEMENT FAULT
	No encoder movement was detected during last run attempt.
Α	If lift moved (i.e. is away from floor level) then check encoder
	assembly for fault.
	If lift did not move (i.e. is at floor level) then check run circuit for
	fault.
	JOURNEY TIME FAULT
	Maximum journey time exceeded. Check inverter/drive system for errors.
В	Confirm journey time selection using SWITCH 2.
	ON = 30 sec (SL+ / PICCOLO DIRECT) 70 sec (PICCOLO 2:1)
	OFF = 60 sec (SL+ / PICCOLO DIRECT) 120 sec (PICCOLO 2:1)
	LIGHT RAY FAULT
	Lift controller failed to detect a light ray input during the last 10 consecutive
С	door open commands.
	Check for misuse of lift.
	 Possible faulty light ray – monitor 'DRM' input with light ray
	activated.
	RUN CONTACT FAULT
	Run contact monitor input received whilst lift is stationary. Check the
D/J	following –
	Wiring of 'MC' contactor.
	Faulty 'MC' contactor (i.e. permanently energised).
	ANTI-SURF FAULT (landing door beaks)
	Landing door has been manually released whilst lift in normal service. Fault
E	can also occur if door beak contacts have gone out of alignment. Check the
	following –
	Misuse of lift. I and the place has been a lightness and the second secon
	Landing door beak alignment. ANTI-CREEP RELAY FAULT
	Controller has detected an input to terminal 'ACM' (Anti-Creep Monitor)
	when <u>not</u> in anti-creep mode.
F	Check the following –
	Wiring to Anti-creep Relay.
	Faulty Anti-Creep Relay (i.e. permanently energised).
	ANTI-SURF FAULT (car door beaks)
	Car door has been manually released whilst lift in normal service. Fault can
_	also occur if door beak contacts have gone out of alignment. Check the
G	following –
	Misuse of lift.
	Car door beak alignment.
	PRE RUN FAULT
	Fault K - is detected if lift is ready to run (UOK or DOK are ON) but safety
I/K	chain has been lost at either G4, G5 or G6 without anticreep output set.
	Fault I - is detected if lift is running in one direction but has 'ready to run'
	input in opposite direction (i.e. up/down interlock has failed).
	RESET MODE
R	Lift attempting to reset to bottom floor. If no lift movement or directional
	arrow shown please check for break in the safety chain.

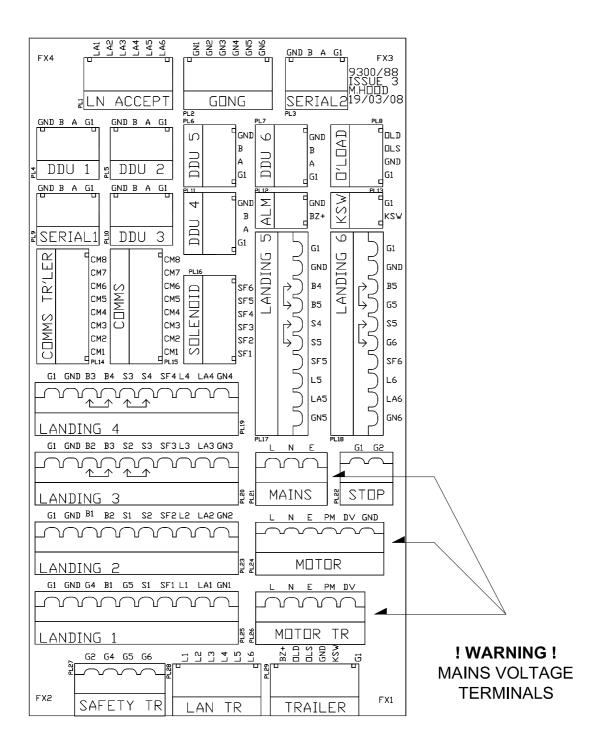
Rev E: Faults I/K updated - 26/03/2018 - JN - A6144

Rev D: Piccolo 2:1 reference added - 15/03/16 - MH - A5735

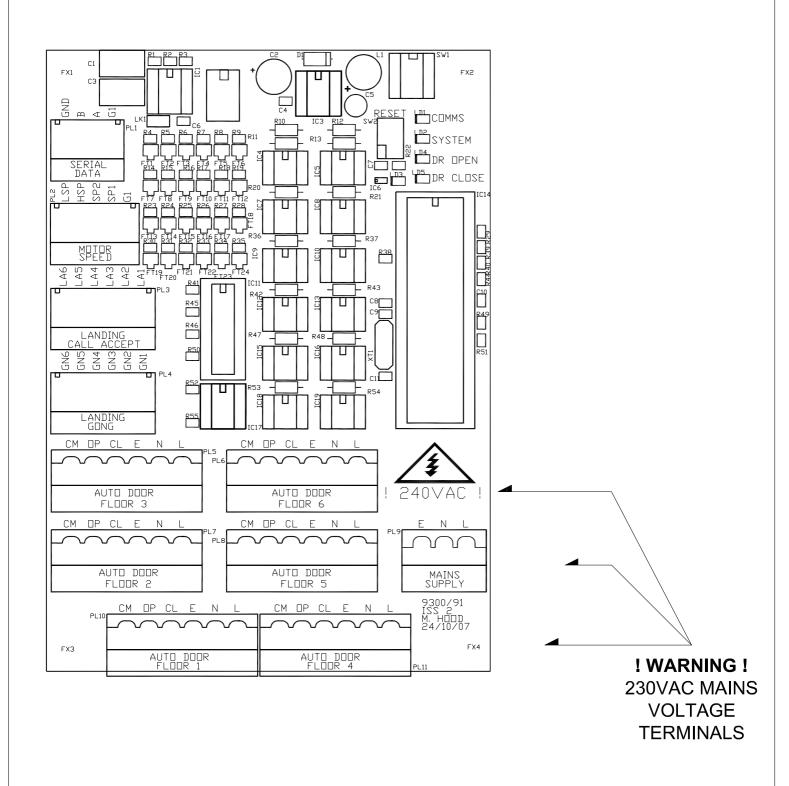
Rev C: Fault I added – 11/08/15 – JN – A5688

Rev B: Piccolo fault codes added - 04/08/14 - MH - A5594

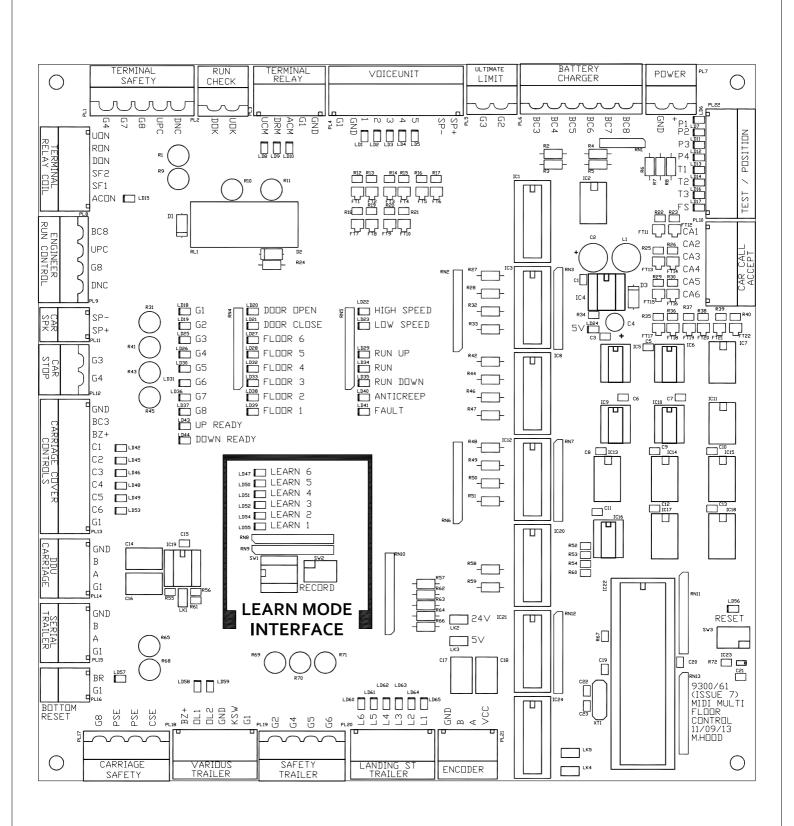
Rev A: Fault A description changed - 13/08/13 - JK - A5511



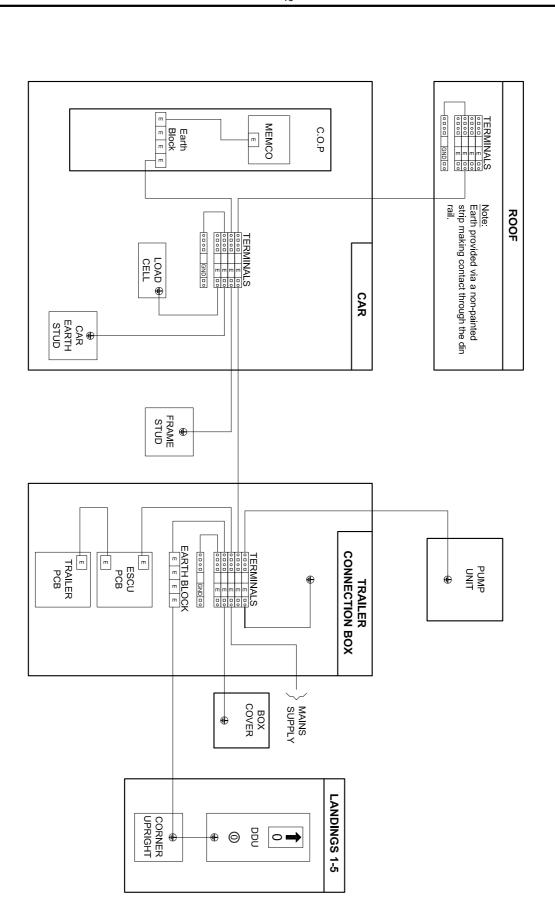
APPENDIX D -TRAILER PCB LAYOUT



APPENDIX E -ESCU PCB TERMINATIONS



APPENDIX F - CONTROL PCB LAYOUT



APPENDIX G
MIDILIFT PICCOLO
EARTH BONDING
GUIDE

Introduction:

Prior to setup, the lift must be run at least 5 times with full rated load and ensure the lift is not tight in the guides. It is also advisable to jump up and down a few times in the lift. Finally, ensure the lift is not resetting on the ground.

CALIBRATION ROUTINE (START HERE).

<u>Important note</u>: If ER.01 appears when the load weighing device is first turned ON, ignore and continue with the below calibration.

1 Enter Setup Mode:

1.1 Press and hold the RESET button, then press and hold the ▼ and C buttons and release the reset button, keep ▼ and C pressed until MANU is displayed briefly before showing LEV.

2 Set the Controller with the weight of the empty car:

- 2.1 Press ▼ to move to the TARE function (the TARE value is the car's own weight set to 0)
- 2.2 Empty lift car
- 2.3 Press E and display will show 0.
- 2.4 Press **E** again to start 60 second countdown (T-60 to T-0) to allow time for the installer to exit the car (Ensure there is no extra load in the car during this time)
- 2.5 Measurement is complete when MEM□ is briefly displayed and then TARE is shown again

3 Calibration of Load Sensor Controller:

- 3.1 Press ▼ until the HI function is shown (the HI value is used to calibrate the load sensor with a known load)
- 3.2 Press **E** to select mode
- 3.3 Press ▲ or ▼ buttons to move value to 400kg
- 3.4 Add 400*kg* of test weight to the cabin. Load must be distributed such that 100*kg* is placed in each of the 4 corners / quadrants of the cabin.
- 3.5 Press **E** to start 60 second countdown (T-60 to T-0) to allow time for the installer to exit the car (Ensure there is no extra load in the car during this time).
 - **IMPORTANT NOTE:** For Piccolo models only, allow the Fermator cabin and landing doors to close for duration of this 60 second countdown. This will allow the Load Sensor Controller to evaluate maximum load condition.
- 3.6 Measurement is complete when MEM□ is briefly displayed and then HI is shown again.
- 3.7 Remove test weights.

Continued on page 2 of 2...

APPENDIX H
1 OF 2
LOAD WEIGHING
DEVICE SETUP

REV C: NOTE 3.4 AND 3.5 AMENDED. MH 11/02/19 A6261 REV B: ENTER SETUP MODE UPDATED. JN 16/03/18 A6145 REV A: LOAD WEIGHING DEVICE SETUP PROCEDURE UPDATED for 699 PLUS E.

4 Set Maximum Rated Load:

- 4.1 Press ▼ until the FSCA function is shown (the FSCA value is the maximum rated load)
- 4.2 Press **E** to select mode
- 4.3 Press ▲ or ▼ buttons to move value to 400kg
- 4.4 Press **E** to confirm, **FSCA** is shown again.

5 Set Overload Alarm:

- 5.1 Press ▼ to activate the LEV1 mode (the LEV1 value is a percentage of the maximum rated load that will activate the overload alarm)
- 5.2 Press **E** to select mode
- 5.3 Press ▲ or ▼ buttons to move value to 120%
- 5.4 Press E to confirm input. Display will return to LEV1.
- 5.5 LEV2 and LEV3 are not used.

6 Exit Setup Mode

6.1 Press **C** to end calibration and return to normal running. Display will show SAVE briefly.

7 Check Readout

- 7.1 Step into car and check the load value has increased by the installers approximate weight.
- **8** Exit the lift car and check display shows 0. If not, the unit can be zeroed by leaning into the empty lift car and pressing **'C'** briefly.

Note: Pressing the C button will save the setup at any time. To return to the setup menu follow step 1.1 above and use the ▲ or ▼ buttons to move to the required setting.

Fault Codes

Code	Meaning
ER.01	Negative Load: ER01 indication is displayed alternatively to the measured load (the minus is displayed only up to three numbers, i.e999). Check connections and recalibrate.
ER.22	Conversion slope not correct: too high signal from 942 Strain Link (fix 942 to a more rigid part of the lift frame or substitute it). Verify that HI value is entered with the right resolution (use weight at least 80% FSCA).
ER.23	HI value is too low (in engineering units). HI-Tare must be > 10
ER.24	Calibration Load is too low. Increase load.
ER.26	TARE and HI values identical, in engineering units
ER.28	Overrange / Underrange: ER.28 is displayed alternatively to measured load. Verify that sensor mechanical installation is OK and corresponding to Factory indications. In case perform again Sensor Installation. Calibrate again the 699Plus after the modifications.
ER.30	C pushbutton is detected pressed for more than 3 seconds, when controller is in programming.

APPENDIX H
2 OF 2
LOAD WEIGHING
DEVICE SETUP