



# ALPHA

*PGA*

## TROUBLESHOOTING

for  Looms

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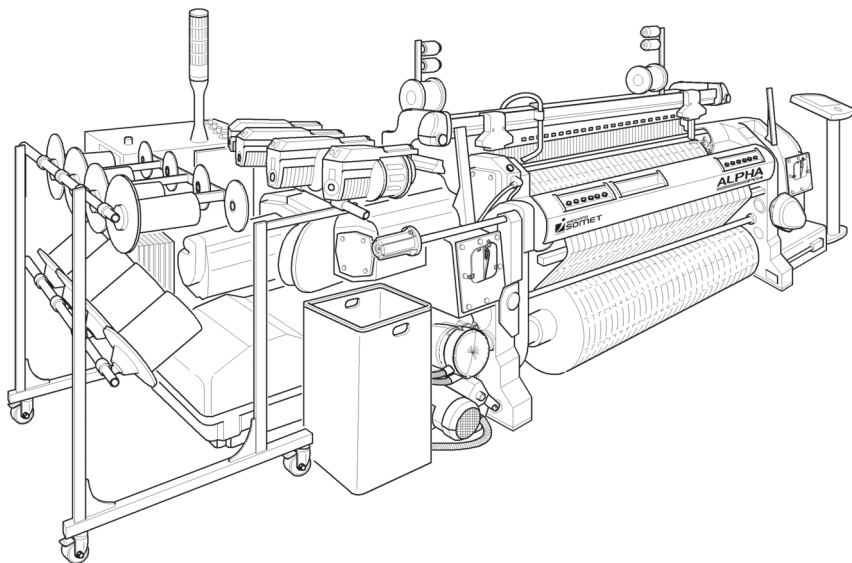
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# ALPHA

*PGA*

## TROUBLESHOOTING

for  Looms  
DRIVE



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## INDEX

Insertion.....	3
Led and fuses.....	5
Console alarms.....	13
MLC alarm and warning.....	25
ETD EWC1 EWC2 EWC3 drive alarms.....	85
Weft selector alarms.....	113
Shedding machine alarms.....	123
IES alarms.....	140
Hi-Drive alarms.....	146
Prefeeder and weft brake alarms.....	168
Positiv weft cutter alarms.....	175
SFC alarms.....	181
Component substitution.....	202
Tables.....	211



## Insertion

This manual want to be an help for the comprehension and solution of the alarms that are displayed on the console, against stated problems that loom diagnostics points out and some events that generate automatically messages on the console.

**All this manual refers to ALPHA loom with HI-DRIVE transmission and 2005 wiring with firmware pack 1.00**

### Methodology of intervention and manual use

During the resolution of the problems on the loom it is better to follow some rules that will help us to use a logic and methodical procedure.

- Note the serial number of the loom on which we are doing the intervention
- Note the date and the time when the alarm happened
- Verify the alarm code and follow the instructions found in this manual
- At any operations, note the behaviour of the loom and eventually other alarms

In case of contact phone with After Sales Dept., this will help the operator to better introduce himself in the heart of the problem, and let him understand by degrees the operations already made. In this case you will have a more specific and rapid service.

Please do not forget that if you are working since some hours to a complicated problem, the person who will answer you the phone could not know all the implications of your actions and remember that this person is not in front of the loom!

Near the initials of cards and components you will find words like the following:

(tav. C-4)

It means that the referred component is localizable at number 4 of the plate C, extractable in the end of this manual in A3 size. In this example is the SFC card.

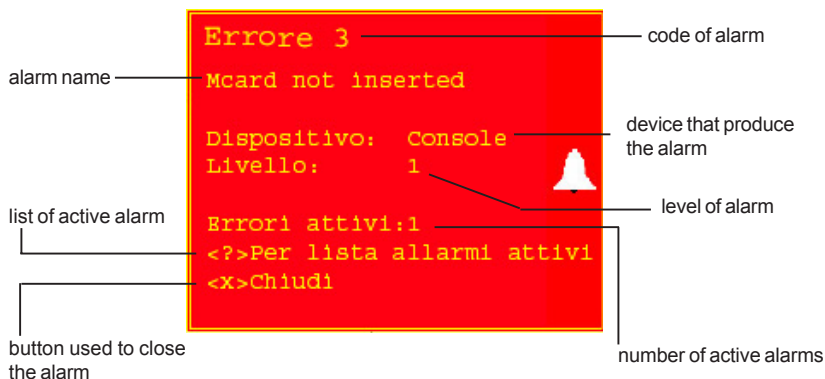
Often this manual will indicate us to replace a card or a component. On this point, in the appendix in the end of the manual will be explained how to replace the various elements, which are the procedures to follow with memory card and the hardware settings to effect before placing a new card. If not specified, it means that the component could be replaced. It will be simply linked again like the other one.

On the various cards assembled on the loom there are led needed to indicate the starting up or not of the devices, or as indication that a stated circuit is OK. We can use these led in order to diagnose a problem. Always on these cards there are assembled fuses used to protect certain circuits.

In the first part of the manual are written all the information regarding the card's led, whereas for the virtual led meanings you can refer to the diagnostics menu on the console.

### How to read and interpret the alarm

Every alarm showing on the console has an identifying number and a short description, with the following format:



At this point you can search on this manual the same identifying number, read the meaning and execute the operations of first intervention described in the remedies.

Example:

<b>3</b>	<b>MCard not inserted</b>
----------	---------------------------

Meaning:

We have pushed the access button to the memory menu without having inserted the MC in the console space.

Remedies:

Insert properly the memory card

In the red alarm window, the alarm level describe its importance.

The logic of the levels is the following: lower is the level, major is the importance of the alarm.

Es.

Level 0 high priority

Level 1 medium/high priority



Level 2 medium/low priority


Level 3 low priority

In case of alarm simultaneousness with different level, the priority is given to the higher one.


There are other messages displayed by the console and they are placed into grey panel, here under an example:

```
Request for reset of
current statistics.

Press <  > to confirm
Press <  > to exit
```



These are not considered as alarms but information on what the loom is doing or confirmations to operations required by the user.

As a rule it is enough to press the button  on the console.



## 1 LED AND FUSES

### Eutron drives - tav E-1 / E-2

-  led1: Not used
-  led2: Not used
-  led3: Not used
-  run: this shows you the microprocessor operating mode (normally flashing).

### HI DRIVE drive - tav C-8

When a breakdown occurs in correspondance of a console alarm, on the converter display you can read a code which signals the reason of this malfunction







#### Signalling

- p Drive in stand-by Stand by
- STOP
- RUN, FORWARDS (SEGMENT ON DYSPLAY IS WORKING CLOCKWISE)
- RUN, BACKWARDS (SEGMENT ON DYSPLAY IS WORKING ANTICLOCKWISE)

#### Alarm

- A0 MOTOR TEMPERATURE TOO HIGH (MOTOR THERMAL PROBE)
- A1 DRIVE DISSIPATOR TEMPERATURE TOO HIGH
- b0 RESOLVER ALARM IN THE MAIN MOTOR
- c0 CURRENT SENSOR OFF-SET IN THE DRIVE
- c1 MOTOR SHORT-CIRCUITED
- c2 MOTOR OVERCURRENT
- d1 INPUT POWER SUPPLY TO THE HI-DRIVE DEVICE TOO LOW
- d2 INPUT POWER SUPPLY TO THE HI-DRIVE DEVICE TOO HIGH
- d3 RECOVERY ALARM
- F2 EEPROM ERROR, INTERNAL SOFTWARE PROBLEM

-  allarm: indicates that the circuits have detected a problem, normally off
-  pwr: this tells you the presence of supply voltage, normally on
-  run: this tells you that the drive power supply section is enabled, normally on
-  stop: this tells you that the motor is powered up but stopped in torque, only on during braking

**positiv weft cutter drive - tav B-5**

When a breakdown occurs in correspondance of a console alarm, on the converter display you can read a code which signals the reason of this malfunction

- P: power ON, drive OK
- F: braking in process.
- L: The loom is at a standstill and there's a request for more than maximum torque.
- =: There's a request for more than maximum torque lasting more than 2 seconds.
- y: Alarm on CAN-BUS.
- H: Error on CAN-BUS.
- 1: CAN-BUS message lost (remains for a few seconds and then disappears).
- : The drive has received an order via CAN-BUS to switch off and is saving the data.
- E1: The automatic calibration of the current sensor has failed: replace the drive.
- E2: The automatic calibration of the current sensor is out of range: replace the drive.
- E3: The temperature of the dissipator has exceeded 65°: check the correct dissipation.
- E4: The direct current used to feed the motor is too high: check the drive input..
- E5: The direct current used to feed the motor is too low: check the drive input.
- E6: The reading sequence of the Hall sensors in the motor is incorrect.
- E7: The short-circuit protection device on the motor piloting has tripped.
- E8: There's been an internal firmware alarm.
- E9: The motor thermal protection has tripped (calculated by the drive).
- E10: The thermal probe inside the motor has tripped.
- E12: The slave drive has not received the space reference from the master drive.
- E13: Too many errors on the CAN-BUS: the drive cannot work.
- E14: The motor encoder is not working.
- E15: The motor has more than a 10° delay with respect to the required movement.



- >IMAX: On: this tells you that the drive is supplying the motor with too much current.
- BRAKE: this tells you that fuse F1 is OK (normally on).

- F1 Protects the motor braking resistance circuit in the module (green led)
- F2 Protects the internal microprocessor service circuits: if the fuse blows, the display goes blank.

**FA01 - tav C-18**

FUSES

- Function: Power supply protection for neon light transformer T03.
- Type: Fuse 10X38 delayed.
- Size: 1A
- Quantity: 2

**FA02 - tav C-15**

FUSES

Function: Power supply protection for external wind-up.  
Type: Fuse 10X38 delayed.  
Size: 10A  
Quantity: 3

**FU01 - tav B-26**

FUSES

Function: Power supply protection of weft feeder motor box.  
Type: Fuse 10X38 delayed.  
Size: 4A  
Quantity: 3

**FU03 - tav B-24**

FUSES

Function: Power supply protection for main transformer T01.  
Type: Fuse 10X38 delayed.  
Size: 4A  
Quantity: 3

**FU05 - tav B-23**

FUSES

Function: Power supply protection for positive cutter drive T05.  
Type: Fuse 10X38 delayed.  
Size: 1A  
Quantity: 3

**FU06 - tav B-22**

FUSES

Function: Power supply protection for oil pump M30.  
Type: Fuse 10X38 delayed.  
size: 1A  
Quantity: 3

**FU07 - tav B-21**

FUSES

Function: Power supply protection for drive control box.  
Type: Fuse 10X38 delayed.  
Size: 10A  
Quantity: 3

**FU08 - tav B-20**

FUSES





Function: Power supply protection of electronic converter main motor.  
 Type: Fuse 10X38 CH10GG.  
 Size: 25A  
 Quantity: 3

**FU09 - tav B-19**




MAGNETOTHERMAL SWITCH

Function: Power supply protection for drive Suction device.  
 Type: GV2- LE08 + GV AE1  
 Size: 4A  
 Quantity: 1

**DPS card tav B-8**








-  led1 colr: red Status: always on  
This tells you that there's 48V DC power supply at the MHD board output (weft colour selector and tuck-in device)
-  led2 color: red Status: always on  
This tells you that there's 24V DC power supply at the output for all the devices
-  led3 color : rosso Status: always on  
This tells you that there's 55V DC power supply at the FIM board output
-  led4 color : rosso Status: always on  
This tells you that there's 160V DC power supply at the output for the brake and coupling coils

**DSR card tav B-10**







-  led1 colr: red Status: normal off  
"Error" LED (normally OFF): comes on when there's a board error
-  led2 color - - Status: - -  
Non used
-  led3 color: green Status: flashing  
"run" LED. Flashes once a second when the board is initialised and working properly.









- F1 size fuse 500mA  
24V DC protection for the magnet power stages.
- F2 size fuse 200mA  
24V DC protection for the magnet power stages.

**MLC card tav B-11**

-  led1    color: red                      Status: on or off  
 On: this tells you that there's +5V logic power supply
-  led2    color: red                      Status: on or off  
 On: this tells you that there's +12V power supply for controlling the weft detector sensitivity and the weft and conditioning the NTC reading.
-  led3    color: green                      Status: on or off  
 On: this tells you that there's +15V power supply for the Hi-Drive speed reference (ref+).
-  led4    color: green                      Status: on or off  
 On: this tells you that there's -15V power supply for the Hi-Drive speed reference (ref-).
-  led5    color: red                      Status: - -  
 LED not controlled by SW.
-  led6    color: green                      Status:- -  
 LED not controlled by SW.
-  led7    color: red                      Status: on or off  
 On: tells you that there's +3.3V.
- F1    size fuse(500mA)  
 µP power supply protection.
- F2    size fuse (500mA)  
 24V DC power supply protection for the weft feeler.






**MHD card tav C-1**

-  led1    color: green                      Status: on or off  
 On: tells you that there's 24V coming from the connectors J24 and J25.
-  led2    color: green                      Status: on or off  
 On: tells you that there's 12V generated on the board.
-  led3    color: green                      Status: on or off  
 On: tells you that there's 3.3V generated on the board.
-  led4    color: green                      Status: on or off  
 On: tells you that there's 2.5V generated on the board.
-  led5    color: green                      Status: on or off  
 On: tells you that there's 5V generated on the board.
-  led6    color: orange                      Status: off, on or fast flashing  
 Fast flashing: this tells you that the board is waiting to connect for the SW download.  
 If on at the same time as DL7, it tells you that loading has been interrupted due to an error.  
 If on at the same time as DL8, it tells you that there's a problem with the SW.

-  led7 color: orange Status: off, on or fast flashing  
 Flashing: this tells you that SW loading is in progress (via serial line or CAN-BUS).  
 If on at the same time as DL6, it tells you that loading has been interrupted due to an error.
-  led8 ccolor: orange Status: off or on  
 On: this tells you that SW loading is successful.  
 If on at the same time as DL6 it tells you that there's a problem with the SW.
-  led9 ccolor: orange Status: off, or on  
 On: this tells you that SW loading is in progress.
-  led11 ccolor: orange Status: off or on  
 On: this tells you that SW loading has failed for one or more MHP modules.
-  led12 color: orange Status: off or fast flashing  
 flashing: this tells you that the board's working normally.
-  led13 color - - Status: - -  
 not fitted on the board.
-  led14 color: green Status: off or on  
 On: this tells you that the MHD board Reset is in progress.
-  led15 ccolor: green Status: off or on  
 On: tells you that the MHP modules Reset is in progress.

F2 fuse size (T3,15A)  
 This protected the 24V line from short-circuiting (connectors J24 and J25)

**RIO card tav E-4**




-  led1 color: red Status: off or on  
 On: tells you that there's +5V (logic power supply).
-  led2 color: red Status: off or on  
 On: this tells you that there's 24V for the power
-  led3 color: red Status: off or on  
 On: tells you that there's 24V for the logic.
-  led4 color: red Status: off or on  
 On: this tells you that there's 24V for the sensors.
-  led5 color:green Status: off or flashing or steady  
 Flashing once a second when the board setup is correct  
 Flashing once every 100ms when the board is being initialised  
 On: steady tells you that there's a board error.

F1 fuse size (T 2,5A)  
 Protects the 24V power supply.




F2 fuse size (T1A)  
 Protects the 24V sensor supply.

F3 fuse size (T1A)  
 Protects the 24V sensor supply.

**SFC card    tavC-4**

-     led1    color: red    Status: always on  
This tells you that there's 3.3V DC power supply for the logic circuits inside the SFC board.
-     led4    color: green    Status: flashing  
'run" LED  
Flashes once a second when the board is initialised and working properly.  
Flashes ten times a second during board initialising (this lasts a few seconds each time you switch the loom on and tells the board that the loom is on and that the MLC is timing all the devices).  
Steady if there's a problem with the board.
-     led5    color: red    Status: flashing  
"run" LED.  
Flashes once a second when the board is initialised and works properly. Flashes ten times a second during board initialising (this lasts a few seconds each time you switch the loom on and tells the board that the loom is on and that the MLC is timing all the devices).  
Steady if there's a problem with the board.
- F1    fuse size (T2A)  
24V DC protection for the logic circuits in the SFC, MLC, MHD and RIO boards.
- F3    fuse size (T10A)  
24V DC protection (24VP\_POT) for the warp stop motion, warning lamps and loom stop line from external devices.
- F4    fuse size (T6.3A)  
24V DC protection (24VP\_REL) for power supply to remote switch coils and relays; it also protects the 24V DC (24VP\_SEN) for various sensors on the RH and LH sides of the loom (pressure switches, proximity, etc ...).
- F6    fuse size (T4A)  
Protects the DSR board 24V DC power supply (STÄUBLI dobby).
- F7    fuse size (T4A)  
24V DC protection (24VP\_TM) for the power supply to the EMC2.1 and EMC2.2 boards (motorised false selvedge cutters).
- F8    fuse size (T4A)  
24V DC power supply protection for cooling fan of the Hi-Drive motor.
- F12    fuse size (T2A)  
24V DC protection for power supply batteries G01 and G02.

**SPH card tavC-3**

-  led1 color: green Status: on or off  
On: tells you that there's 24V DC.
-  led2 color: orange Status: on or off  
On: indicates presence of test signal from controller.
-  led3 color: red Status: on or off  
On: the photocell beam is unbroken.

F1 fuse size (T500mA)  
24V DC protection..

**T01 transformer tavD-11**

- out 30Vac - 250 VA power  
DPS board power supply providing 42V DC for the MHD board.  
fuse size 6,3A
- out 38Vac - 380VA power  
DPS board power supply providing 50V DC for the FIMTEXTILE board  
fuse size 6,3A
- out 19Vac - 300VA power  
DPS board power supply providing 24V DC for the boards.  
fuse size 10A
- out 24Vac - 50VA power  
SFC board power supply used to measure the line rating and for the extra utilities.  
fuse size 2A
- out 120Vac - 1670VA power  
DPS board power supply for brake/clutch/slow motion/pick-finder coils.  
fuse size 10A

**T05 transformer tavD-10**

Uscita 220 Vac potenza 300VA  
Alimentazione per azionamento U01 del motore taglio positivo.  
fuse size 1A

**T11 transformer**

out 400vac - 1800VA power (with 2 motors) or 3000VA power (with 3-4 motors)  
ETD/EWC1/EWC2/EWC3 drives and motors if the line rating is other than 380V / 400V  
fuse size 6,3A-500V

## CONSOLE alarms

1	<b>Memory Card battery flat</b>
---	---------------------------------

*Description:*

This means that the Memory Card battery in the Console is flat and so needs to be replaced.

*Remedies:*

Replace the battery: using a lithium CR2025 3V battery.

2	<b>Memory Card write protected</b>
---	------------------------------------

*Description:*

This means that the Memory Card in the Console is protected.

*Remedies:*

Move the small selector near the battery compartment on the Memory Card towards the words "Lock Release".

3	<b>Memory Card not inserted</b>
---	---------------------------------

*Description:*

You've pressed the Memory Card menu access key without actually inserting the Memory Card in its slot on the Console.

*Remedies:*

Insert the Memory Card correctly.

4	<b>Memory Card not formatted or corrupted</b>
---	---

*Description:*

You need to format the Memory Card (see procedure in the Console user manual) or it has been damaged, in which case replace it.

*Remedies:*

Format the Memory Card as explained in the Alpha Console user manual.

Make sure that the Memory Card has a fully charged battery.

Replace the Memory Card.

5	<b>Memory Card formatting failed</b>
---	--------------------------------------

*Description:*

The Console has not managed to format the Memory Card.

*Remedies:*

Repeat the formatting procedure.

Replace the Memory Card.

Replace the UIB board on the Console.

<b>6</b>	<b>Not enough memory</b>
----------	--------------------------

*Description:*

You've tried to save a pattern to the loom memory, but there isn't enough free storage space.

*Remedies:*

Delete a few old patterns from the archive and save the new pattern again.

<b>7</b>	<b>Not enough memory on Memory Card</b>
----------	---

*Description:*

You've tried to save a file to the Memory Card that's too big for the free storage space on the Memory Card.

*Remedies:*

The Memory Card's storage capacity can be read on the Memory Card itself, while the size of the files it contains can be seen in the Memory Card menu on the Console.

Delete a few old files on the Memory Card and save the new file again.

<b>8</b>	<b>Syntax error</b>
----------	---------------------

*Description:*

You've made an error when creating a new pattern.

This is most likely to happen when you create a complex pattern or one with many picks.

For example, make sure that all the do-next cycles are closed (see Console programming manual).

*Remedies:*

Check the pattern you've tried to save.

<b>9</b>	<b>List empty</b>
----------	-------------------

*Description:*

You've tried to carry out an operation on a file on the Memory Card using the Memory Card menu, but there are no patterns saved on this.

*Remedies:*

Insert a Memory Card with patterns.

<b>10</b>	<b>Illegal operation for default pattern</b>
-----------	--

*Description:*

You've tried to delete or change one of the default patterns.

The default patterns have been saved by Promatech and cannot be changed.

*Remedies:*

You cannot delete or change one of the default patterns: you must create a new one.

11	Pattern name exists
----	---------------------

*Description:*

You've tried to save a new pattern with a file name that already exists.

*Remedies:*

Use a different name for the new pattern.

12	No name specified
----	-------------------

*Description:*

You've tried to create a pattern without specifying its name.

*Remedies:*

Assign a name to the pattern you want to create.

13	Corrupted pattern list
----	------------------------

*Description:*

The system checks the state of the data (files) on the UIB board on the Console; this alarm appears if a file is damaged.

*Remedies:*

Switch the loom off and then back on again to do the checksum.

Make sure that the charge level of the buffer battery on the UIB board is not below 3V DC; in which case, replace it.

Replace the UIB board on the Console.

14	Corrupted pattern
----	-------------------

*Description:*

The pattern you are trying to assign cannot be sent into production as the file's corrupted.

*Remedies:*

Create the pattern again.

Make sure that the charge level of the buffer battery on the UIB board is not below 3V DC. In which case, replace it.

Replace the UIB board on the Console.

15	The pattern in this format cannot be viewed
----	---

*Description:*

You've tried to open a pattern that the Console cannot display.

*Remedies:*

The file format is indicated by the file extension: three letters after the final dot (.) after the file name. For example: the extension of a file called (COLOR\_1.PID) is .PID

The formats compatible with the Alpha are:

.PID i.e. a weft pattern file.

.PIW i.e. a warp pattern file.

.BKA i.e. a back-up file, containing all the loom data.  
 .ARA i.e. a file containing the style data.  
 .STA i.e. a file containing the statistics data.  
 .TST i.e. a file containing an automatic shift change data.  
 .DB1 i.e. a file imported from the Pocket Stäubli.  
 Select a compatible file to display (see formats above).

<b>16</b>	<b>Incompatible Memory Card</b>
-----------	---------------------------------

*Description:*

The Memory Card inserted in the Console is not compatible with the PROMATECH system.

*Remedies:*

Use another Memory Card.

<b>17</b>	<b>Transfer error</b>
-----------	-----------------------

*Description:*

There's been an error while transferring the patterns from the Pocket Stäubli.

*Remedies:*

Check the connection between the device and the loom.

Replace the Pocket Stäubli.

Replace the UIB board on the Console.

<b>18</b>	<b>Incorrect RAM checksum</b>
-----------	-------------------------------

*Description:*

The Console has lost some data after switching the control box off/on.

This has created a checksum difference between the parameters saved when switching the box off and those loaded when switching the loom back on again.

*Remedies:*

Switch the loom off and then back on again to do the checksum.

Make sure that there is 24V AC between terminals 1 and 2 on connection M1\_4 (VX032 board) when switching the loom off; if not, replace the buffer batteries (table B-1 and table B-2).

Replace the RTC board.

<b>19</b>	<b>Illegal operation for diagnostics file</b>
-----------	---

Alarm not active.

<b>20</b>	<b>Incorrect programming</b>
-----------	------------------------------

*Description:*

This alarm is generated when you make a mistake during the filling in of a Strap table or when the lamps are not programmed correctly (e.g. two different stops with the same lamp combination).

*Remedies:*

Check the STRAP table; check the lamp assignment.

<b>dal 21 al 26</b>	<b>specific error in the Stäubli VDI protocol.</b>
---------------------	--

*Description:*

This means that there are problems on the Pocket Stäubli.

*Remedies:*

Replace the Pocket Stäubli.  
Contact Stäubli Customer Service.

<b>27</b>	<b>Pocket Stäubli serial connection problems</b>
-----------	--

*Description:*

The serial connection between the Pocket Stäubli and the Promatech control box is faulty.

*Remedies:*

Carefully check the connection cable and the connectors; check the individual wires in the connector, if possible.  
Replace the UIB board on the Console.  
Replace the Pocket Stäubli.

<b>28</b>	<b>Impossible to write on Memory Card</b>
-----------	---

*Description:*

You cannot write on the Memory Card.

*Remedies:*

Check that the Memory Card and the connector inside the Console are not damaged.  
Replace the UIB board in the Console.  
Replace the Memory Card.

<b>29</b>	<b>Impossible to read from Memory Card</b>
-----------	--

*Description:*

You cannot read on the Memory Card.

*Remedies:*

Check that the Memory Card and the connector inside the Console are not damaged.  
Replace the UIB board on the Console.  
Replace the Memory Card.

<b>30</b>	<b>Corrupted pattern on Memory Card</b>
-----------	---

*Description:*

The pattern on the Memory Card is no longer available. Some sectors on the Memory Card have probably been damaged, making it impossible to read the pattern.

*Remedies:*

Create the lost pattern again.  
If the problem persists, replace the Memory Card.

<b>31</b>	<b>Shift change not possible as an automatic shift change is programmed</b>
-----------	---

*Description:*

You've tried to change the shift manually, but the Console is working in automatic shift change mode.

*Remedies:*

If you want to work in manual shift change mode, set this mode on the Console (see Console user manual).

<b>32</b>	<b>Password entry error</b>
-----------	-----------------------------

*Description:*

Certain Console pages require a password before you can program them.  
This message appears when the wrong code has been entered.

*Remedies:*

Enter the password again, checking that it is the correct one indicated in the Console user manual.

<b>33</b>	<b>Error in programming the finger/pre-feeder association</b>
-----------	---

*Description:*

Incorrect finger/pre-feeder association.  
You've probably associated a pre-feeder number to a finger that's not found in the pattern..

*Remedies:*

Check the associations and the relevant programming: weft pattern, finger/pre-feeder association, ASC programming.

<b>34</b>	<b>Operation not possible for pattern</b>
-----------	---

*Description:*

You've tried to change a pattern currently in execution.

*Remedies:*

Deassign the pattern before making any changes to it.

<b>35</b>	<b>Pattern assignation not allowed: not a Jacquard loom</b>
-----------	---

*Description:*

You've tried to assign the default "External jacquard" pattern to a dobby loom: this pattern is only valid for jacquard looms.

*Remedies:*

Assign a different pattern, i.e. not the "External jacquard" pattern.

<b>36</b>	<b>Invalid name</b>
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*Description:*

On generating a new pattern, the name you enter is checked (this must not contain illegal characters, dots or commas, special characters or blank spaces).

This also happens when you rename a file using an unacceptable name or when you save a file containing illegal characters to MC.

*Remedies:*

Change the name you have just used.

<b>37</b>	<b>Operation not possible with this type of file</b>
-----------	--

*Description:*

You are trying to load a file that cannot be managed by the console.

*Remedies:*

Check the extension of the file you are trying to load.

The formats compatible with the Alpha are:

.PID i.e. a weft pattern file

.PIW i.e. a warp pattern file

.BKA i.e. a back-up file, containing all the machine data

.ARA i.e. a file containing the style data

.STA i.e. a file containing the statistics data

.TST i.e. a file containing an automatic shift change data

.DB1 i.e. a file imported from the Pocket Stäubli

<b>38</b>	<b>File name contains illegal characters</b>
-----------	--

*Description:*

The name you have given for this file contained illegal characters.

*Remedies:*

Enter a different name for the file, especially if it contains special characters, dots, commas or dashes.

<b>39</b>	<b>Problems with circular queue</b>
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*Description:*

There are problems with the Can-bus communication line.

*Remedies:*

Use a tester to check for approx. 60 Ohms resistance between Can-H and Can-L when the control box is switched off: follow the procedure shown in Table I at the end of this manual.

With the control box still switched off, check that all the connectors in the circuit are connected properly, especially those for the Encoder - Can-bus line.

<b>40</b>	<b>File name exists</b>
-----------	-------------------------

*Description:*

You have used a name that already exists for another file in the system memory.

*Remedies:*

Change the name you have just used.

<b>41</b>	<b>Incompatible file on Memory Card</b>
-----------	---

*Description:*

There is a file on the memory card that is not compatible with the Promatech system.

*Remedies:*

Use another Memory Card or reformat the Memory Card following the procedure described in the console user manual. NB: when you reformat a memory card all data on this will be permanently lost.

<b>42</b>	<b>Incompatible STRAP/ASC table with current pre-feeder/ finger association</b>
-----------	---

*Description:*

The STRAP (ASC) table is not compatible with the set finger/prefeeder association.

*Remedies:*

Check programming and associations.

<b>43</b>	<b>Impossible to write on MLC: no receiver software on MLC</b>
-----------	--

*Description:*

You have tried to upgrade the software using the memory card, but the MLC board does not contain the software that lets you do this (called the BOOT function).

*Remedies:*

Check the software menu by pressing key "?" on the console: the BOOT software should be present when you use the MLC option. Contact Customer Service to request the installation of the upgraded "boot".

44	<b>Too many shifts to be included in the sequence</b>
----	---

*Description:*

You have exceeded the MAX number of programmable shifts when programming the automatic shift sequence.

*Remedies:*

Check your programming and set a sequence with fewer shifts.

45	<b>Firmware upgrade: generic error</b>
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*Description:*

There's been an error during upgrading that has compromised the current operation.

*Remedies:*

If the problem persists, replace the board you're upgrading.

46	<b>Firmware upgrade: Incompatible hardware</b>
----	--

*Description:*

You've tried to load Firmware that's not compatible with the board you're upgrading.

*Remedies:*

Check that the Firmware used for upgrading is compatible with the board: contact the PROMATECH Customer Service to find out.

If the problem persists, replace the board you're upgrading.

47	<b>Firmware upgrade: Invalid file</b>
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*Description:*

The file you're trying to load is damaged.

*Remedies:*

You need to recover the file, as the one available won't let you complete the upgrade procedure.

48	<b>Firmware upgrade: Flash memory error</b>
----	---

*Description:*

You can't write on the Flash memory on the board you're upgrading.

*Remedies:*

Try repeating the procedure that's failed.

If the problem persists, replace the board you're upgrading.

<b>49</b>	<b>Firmware upgrade: CAN protocol error</b>
-----------	---

*Description:*

The communication protocol has not been followed properly and so the upgrade procedure has been interrupted.  
(Error in the SW or communication problems).

*Remedies:*

Check the connection on the board and repeat the upgrade procedure.  
If the problem persists, try loading another SW.  
If the problem persists, replace the board you're upgrading.

<b>50</b>	<b>Firmware upgrade: Can protocol error</b>
-----------	---

*Description:*

The communication protocol has not been followed properly and so the upgrade procedure has been interrupted.  
(Error in the SW or communication problems).

*Remedies:*

Check the connection on the board and repeat the upgrade procedure.  
If the problem persists, try loading another SW.  
If the problem persists, replace the board you're upgrading.

<b>51</b>	<b>The Console is enabled to transfer the video maps</b>
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*Description:*

You've tried to use the video map transfer function: this is a function that lets you transfer the images of the Console to a PC. This function is mainly used by Promatech technicians. This function is enabled on all Consoles if you press the RH finger/LH finger buttons on the Console when you switch on the control box. A special SW and a serial connection cable are needed.

*Remedies:*

Switch the loom off and then back on again once you've finished the transfer.

<b>70</b>	<b>Cloth panel out of tolerances. Use weft density at XX.XX% to correct the cloth panel?</b>
-----------	--

*Description:*

This warning means that the last panel (pattern length) falls outside the set tolerance and so the system proposes a correction percentage needed to create a panel of the requested size.

*Remedies:*

Press "enter" to accept the proposed percentage; otherwise press "X".

107	<b>The calculated panel correction percentage exceeds the limits: check the pattern or the requested panel length.</b>
-----	--

*Description:*

This warning appears when a panel (pattern) that falls outside the tolerance is completed; the percentage proposed by the system falls outside the accepted range (50% - 200%).

*Remedies:*

Check that the pattern or the requested panel length is exact.



## MLC card alarms

<b>1024</b>	<b>Generic MLC error level 0</b>
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*Description:*

There's a level 0 internal error on the MLC board (table B-N°11).

*Remedies:*

Replace the MLC board (table B-N°11).  
Contact PROMATECH Customer Service.

<b>1026</b>	<b>Photocell circuit open</b>
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*Description:*

For some reason the receiving photocell is sending a "no beam" signal. This means that there's no 24V DC at pin 5 on connection J50 on the SFC board (table C-N°4).

*Remedies:*

Check that there's nothing breaking the beam in front of the photocells.  
Check that the photocells are properly aligned.  
Check that the red led on the transmitting photocell (RH) and the green led on the receiving one (LH) are both on. If not:  
Check that there's 24V DC between pins 1 and 2 on connection J02 on the SPH board (table C-N°3).  
Check that there's 24V DC between pins 1 and 2 on connection J03 on the SPH board (table C-N°3).  
Check connections J01 - J02 - J03 on the SPH board, check connection J50 on the SFC board (table C-N°4).  
Replace the transmitting and receiving photocells.  
Replace the SPH board (table C-N°3).

<b>1027</b>	<b>LH minimum pressure switch in alarm or oil pump off</b>
-------------	--

*Description:*

This means the min LH pressure switch has intervened. In other words, no 24V DC reaches the MLC board (table B-N°11) via pin 2 in connection J36 even though the oil pump motor is activated. This means that the oil pump motor fails to turn for some reason or that the oil pressure is too low even though the motor is running.

*Remedies:*

Make sure the oil pump motor is running; if not, check that contactor KM30 (table B-N°15) is active; if not active, check for 24V DC between terminal A1 on contactor KM30 (table B-N°15) and the earth. If none, replace the SFC board.  
With the motor running, use a pressure gauge to make sure that the oil pressure is above 0.4 bar; otherwise check for any mechanical problems causing the pressure to drop: not enough oil, dirty oil filter, clogged or throttled pipes, etc..  
Check that there is 24V DC (input from SFC board) between pins 8-9 in connection J01 on MLC board. If there is 24V DC (input):  
check that there is 24V DC (output from MLC board towards pressure switch) between pin 1 in connection J36 on MLC board and earth. If there is no 24V DC (output):  
replace the MLC board.  
Check that there is 24V DC on pin 9 in connection J27 on the SFC board (table C-N°4); if present, check cable WCS314 used to connect connection J27 on the SFC board to

connection J01 on the MLC board: if absent, replace fuse F4 on the SFC board and replace the SFC board if necessary (table C-N°04).  
 If the problem persists, check cable WLS360 used to connect connection J36 on the MLC board to the min LH pressure switch under the LH rapier drive unit.  
 Replace the pressure switch if the problem persists.

<b>1028</b>	<b>RH minimum pressure switch in alarm or oil pump off</b>
-------------	--

*Description:*

This means the min RH pressure switch has intervened. In other words, no 24V DC reaches the RIO board (table E-N°4) via pin 2 in connection J11 even though the oil pump motor is activated. This means that the oil pump motor fails to turn for some reason or that the oil pressure is too low even though the motor is running.

*Remedies:*

Make sure the oil pump motor is running; if not, check that contactor KM30 (table B-N°15) is active; if not active, check for 24V DC between terminal A1 on contactor KM30 (table B-N°15) and the earth. If present, replace the contactor KM30.

With the motor running, use a pressure gauge to make sure that the oil pressure is above 0.4 bar; otherwise check for any mechanical problems causing the pressure to drop: not enough oil, dirty oil filter, clogged or throttled pipes, etc...

Check the state of fuse F3 on the RIO board (table E-N°04).

Make sure there's 24V DC between pin 1 in connection J11 on the RIO board and the earth; if this isn't so, make sure there's 24V DC between pin 18 in connection J03 on RIO board (table E-N°04) and the earth.

Check for 24V DC at pin 18 in connection J26 on the SFC board (table C-N°4). Check cable WLP360 used to connect connection J26 on the SFC board to connection J03 on the RIO board. Check the state of fuse F4 on the SFC board (table C-N°4) and replace the SFC board if necessary.

If the problem persists, check cable WLS400 used to connect connection J11 on the RIO board to the min RH pressure switch under the RH rapier drive unit on the oil distributor.

Replace the pressure switch if the problem persists.

Replace the RIO board (table E-N°04).

<b>1029</b>	<b>Press slow motion button to carry out cutter zero</b>
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*Description:*

After adjusting the cutter zero point and every time you switch on the loom, the system requires a movement of the positive cutter to check the position of the cutter cams using a proximity signal, which reads a flag on the cutter cams.

*Remedies:*

Press the slow motion key: the motorised positive cutter makes a full turn. The system records the ON position of the cutter proximity at this stage. This position tells the system the exact position of the cutter cams.

On completing this operation you can move the loom as required.

<b>1032</b>	<b>Maximum pressure switch in alarm mode</b>
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*Description:*

The max oil pressure switch has intervened. In other words, no 24V DC reaches the RIO board (table E-N°4) via pin 4 on connection J11. This means that the oil pressure is too high for some reason and that the oil may therefore leak from the fittings.

*Remedies:*

Make sure that the oil pressure isn't higher than 4.5 bar.

Replace the oil delivery filter if necessary.

If the problem persists, check for 24V DC at pin 3 on connection J11 on the RIO board; if none, go to the next step; otherwise check for 24V DC at pin 4 on connection J11 on the RIO board: if present, replace the RIO board; if none, check cable WLS401 used to connect connection J11 to the max pressure switch and replace this switch if necessary.

Check that there's 24V DC between pin 18 on connection J03 on the RIO board and the earth; if this is so, check the state of fuse F3 on RIO board.

Replace the RIO board.

Check for 24V DC at pin 18 on connection J26 on the SFC board (table C-N°4). If present, check cable WLP360 used to connect connection J26 on the SFC board to connection J03 on the RIO board. If there's no 24V DC, check the state of fuse F4 on the SFC board and replace the SFC board if necessary.

If the problem persists, check cable WLS401 used to connect connection J11 to the max pressure switch and replace this switch if necessary.

Replace the max pressure switch if the problem persists.

<b>1033</b>	<b>RH minimum pressure switch in alarm mode</b>
-------------	---

*Description:*

This means that the system has found 24V DC at pin 4 on connection J11 on the RIO board when the loom is switched on with the oil pump motor off. It means that the min RH pressure switch is jammed and no longer reliable.

*Remedies:*

Make sure cable WLS401 used to connect connection J11 on the RIO board to the max pressure switch isn't short-circuited.

Replace the max pressure switch.

Replace the RIO board.

<b>1036</b>	<b>Communication problems with RIO board.</b>
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*Description:*

This means that there are CAN-BUS line communication problems affecting the RIO system distribution board (table E-N°4) on the LH frame of the loom.

*Remedies:*

First make sure the 24V DC from JO3 (between pin 11 and the earth) reaches the RIO board (table E-N°4).

If not, go to the next step; otherwise check the state of fuse F2 on the RIO board and replace board RIO if necessary.

The power comes directly from pin 11 on connection J26 on the SFC board (table C-N°4). If there's no power, check the state of fuse F1 on the SFC board.

Check the cabling WLS385 connecting the connection J26 on the SFC board with the connection J03 on the RIO board.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1037</b>	<b>:Communication problems with take-up board.</b>
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*Description:*

This means that there are take-up motor (table E-N°2) drive communication problems on the can-bus line.

*Remedies:*

First check that the drive ETD/EWC1 (table E-N°2) is fed.

Check for 400V AC between the three black wires, cabling WDP301, in connection J27 in the drive connection ETD/EWC1 (table E-N°2) using a multimeter (mains rating).

The power comes from terminal board XD01 (table E-N°5), which in turn is fed through cable WLP311 via fuse holder FU07 (table B-N°21).

Check the state of the fuses and replace if required with others of the same kind.

Check that terminals on fuse holder FU07 are properly tightened.

Replace the ETD-EWC1 drive (table E-N°2).

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1038</b>	<b>Communication problems with let-off 1.</b>
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*Description:*

This means that there are let-off 1 motor (table E-N°2) drive communication problems on the can-bus line.

*Remedies:*

First check that the drive ETD/EWC1 (table E-N°2) is fed.

Check for 400V AC between the three black wires, cabling WDP301, in connection J27 in the drive connection ETD/EWC1 (table E-N°2) using a multimeter (mains rating).

The power comes from terminal board XD01 (table E-N°5), which in turn is fed through cable WLP311 via fuse holder FU07 (table B-N°21).

Check the state of the fuses and replace if required with others of the same kind.

Check that terminals on fuse holder FU07 are properly tightened.  
 Replace the ETD-EWC1 drive (table E-N°2).  
 If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1039</b>	<b>Communication problems with let-off 2.</b>
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*Description:*  
 This means that there are let-off 2 motor (table E-N°1) drive communication problems on the can-bus line.

*Remedies:*  
 First check that the drive EWC2/EWC3 (table E-N°1) is fed.  
 Check for 400V AC between the three black wires, cabling WDP302, in connection J27 in the drive connection EWC2/EWC3 (table E-N°1) using a multimeter (mains rating).  
 The power comes from terminal board XD01 (table E-N°5), which in turn is fed through cable WLP311 via fuse holder FU07 (table B-N°21).  
 Check the state of the fuses and replace if required with others of the same kind.  
 Check that terminals on fuse holder FU07 are properly tightened.  
 Replace the EWC2/EWC3 drive (table E-N°1).  
 If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1040</b>	<b>Communication problems with let-off 3.</b>
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*Description:*  
 This means that there are let-off 3 motor (table E-N°1) drive communication problems on the can-bus line.

*Remedies:*  
 First check that the drive EWC2/EWC3 (table E-N°1) is fed.  
 Check for 400V AC between the three black wires, cabling WDP302, in connection J27 in the drive connection EWC2/EWC3 (table E-N°1) using a multimeter (mains rating).  
 The power comes from terminal board XD01 (table E-N°5), which in turn is fed through cable WLP311 via fuse holder FU07 (table B-N°21).  
 Check the state of the fuses and replace if required with others of the same kind.  
 Check that terminals on fuse holder FU07 are properly tightened.  
 Replace the EWC2/EWC3 drive (table E-N°1).

<b>1041</b>	<b>Communication problems with dobbie board.</b>
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*Description:*

This means that there are CAN-BUS line communication problems concerning the dobbie. If a Fimtextile dobbie, the board is fitted directly in the dobbie; if a Stäubli dobbie, the board is found inside the main control box (table B-N°10).

*Remedies:*

If a Fimtextile dobbie:

Check there's 50V DC for the dobbie coming from pins 1 and 2 on connection J31 on the SFC board. If none, check for 50V DC between pins 3 and 6 on connection J04 on the SFC board (table C-N°4). If none, check for 50V DC between pins 3 and 4 in connection J04 on the DPS board (table B-N°8).

Check the cabling WCP352 connecting the connection J04 on the DPS board with the connection J04 on the SFC board.

Check cable WLP335 used to connect connection J31 on the SFC board to movable connection XLS10 on the LH frame of the loom.

Check cable WLP336 used to connect movable connection XLS10 to the Fimtextile dobbie. Replace the DPS and SFC boards.

Replace the dobbie board and contact Fimtextile customer service.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

If a STÄUBLI dobbie:

Check there's 24V DC for the dobbie coming from pins 3 and 4 on connection J31 on the SFC board. If absent, check the state of fuse F6 on the SFC board.

If the fuse is OK, check for 24V DC between pins 1 and 2 on connection J04 on the SFC board. If none, check for 24V DC between pins 1 and 2 in connection J04 on the DPS board.

Check the cabling WCP352 connecting the connection J04 on the DPS board with the connection J04 on the SFC board.

Check the cabling WCP370 connecting the connection J31 on the SFC board with the connection J06 on the DSR board (table B-N°10).

Replace the DPS and SFC boards if necessary.

Replace the DSR board.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1042</b>	<b>Communication problems with Jacquard controller.</b>
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*Description:*

If the loom is fitted with a Jacquard, you can control various weaving parameters from the Jacquard (such as weft density, loom speed, colours, regulator stop, etc...). These parameters reach the MLC board via a serial line and are then transmitted pick by pick. This alarm appears when the MLC board fails to receive the data from the Jacquard during continuous running.

*Remedies:*

Check cable WCS319 used to connect the Jacquard serial line between connection J46 on the MLC board (table B-N°11) and connection XCS10 on the side of the control box.

Check the cable running from connection XCS10 on the side of the control box to the Jacquard.

Replace the MLC board.

Contact the Jacquard manufacturer's Customer Service.

<b>1043</b>	<b>Communication problems with MHD board.</b>
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*Description:*

This means that there are weft colour selector and MHD tuck-in device boards (table C-N°1) communication problems on the CAN-BUS line.

*Remedies:*

Check the board power supply.

Check the state of fuse F2 on the MHD board (table C-N°1).

Check that there is 24V DC between pins 9 and 10 on connection J25 on the MHDboard; if absent, check the presence of this between pins 9 and 10 on connection J24 on the SFC board (table C-N°4) and check cable WCS342 used to connect connection J25 on the MHD board to connection J24 on the SFC board.

Check the state of fuse F4 on the SFC board.

If the problem persists, replace the MHD board.

If the problem persists, replace the SFC board.

If the problem persists, replace the MLC board.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1047</b>	<b>Communication problems with the TE-400CMATIC detector.</b>
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*Description:*

This means that there are weft detector TE-400CMATIC communication problems on the CAN-BUS line.

*Remedies:*

Check the weft detector power supply:

Check that there's 24V DC between pins 8 and 9 on connection J25 on the MLC board (table B-N°11), if not present:

Check the state of fuse F2 on the MLC board (table B-N°11).

Check the state of fuse F2 on the SFC board (table C-N°4).

Check cabling WLS351 used to connect connection J43 on the MLC board with the connection on the weft detector on the loom.

Check cabling WCS314 connecting the connection J27 on the SFC board with the connection J01 on the MLC board.

If the problem persists, replace the MLC board.

If the problem persists, replace the SFC board.

Replace the weft detector TE-400CMATIC.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1048</b>	<b>Pick-finding not completed as loom in movement</b>
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*Description:*

Before pick-finding, the MLC board (table B-N°11) checks that the loom isn't already in movement; if it is, it generates this warning.

*Remedies:*

Check that the loom is at a standstill before carrying out any movements; if not, find the cause for its movement.

Replace the main encoder if the problem persists.

Replace the MLC board (table B-N°11) .

<b>1049</b>	<b>Pick-finding not completed because in zone prohibited by encoder</b>
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*Description:*

After pressing one of the pick-finding buttons the loom hasn't moved because it's in a position where this type of movement isn't allowed, between 55 and 305 degrees. The rapiers could be inside the shed.

The system has checked the encoder degrees before carrying out the movement; it has prevented pick-finding to avoid the risk of broken warp threads.

*Remedies:*

Carry out a slow motion cycle and take the rapiers out of the shed, then repeat the pick-finding.

If the problem persists, check that the encoder degree count on the Console is compatible with the mechanical position of the loom. If this isn't so, check that the cross-over of the warp takes place in the correct position when you move the loom manually. If this happens it means that the loom is mechanically synchronised with the shedding machine and therefore the problem is of an electrical nature.

Check encoder degrees.

First carry out the encoder re-synchronising procedure by following the indications that appear when you press key "W" at the side.

Check that connector J40 (main encoder) on the MLC board (table B-N°11) is properly connected and that the input pins are inserted properly.

Check that connector J41 (auxiliary encoder) on the MLC board (table B-N°11) is properly connected and that the input pins are inserted properly.

Check/replace the main encoder and repeat the encoder retiming if the problem persists.

Check/replace the auxiliary encoder and repeat the encoder retiming if the problem persists.

Replace the MLC board (table B-N°11).

<b>1050</b>	<b>No pick-finding by Jacquard/no general OK from Jacquard</b>
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*Description:*

When you press a pick-finding button, the machine doesn't move because the Jacquard blocks this movement.

One of the pick-finding buttons with an "X" will appear on the jacquard controller (STÄUBLI) display.

*Remedies:*

Press "X" on the jacquard controller and the alarm normally disappears and you can then carry out the pick-finding.

If the problem persists, check that there's 24V DC between pin 5 on connection J46 on the MLC board (table B-N°11) and the earth. If not, check the state of fuse F4 on the SFC board (table C-N°4).

Check cabling WCS314 connecting the connection J27 on the SFC board with the connection J01 on the MLC board.

Check cabling WCS319 used to connect connection J46 on the MLC board to connection XCS10 on the edge of the main control box.

Check cable used to connect connection XCS10 on the edge of the main control box with jacquard.

If the problem persists, replace the MLC board.

Contact jacquard Customer Service.

<b>1052</b>	<b>Pick-finding not done because in zone prohibited by dial</b>
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*Description:*

After pressing one of the pick-finding buttons the loom hasn't moved because it's in a position where this type of movement isn't allowed.

The rapiers could be inside the shed.

Although the system has found that the loom degrees indicate that the rapiers are out of the shed, it has detected that the loom is not mechanically in the correct position to carry out pick-finding (thanks to the sensor on the nonius dial), as the rapiers are still in the shed.

*Remedies:*

Make sure that the actual mechanical position of the loom corresponds to the degrees shown on the console; if not, carry out the encoder re-synchronising procedure.

Check the efficiency of the proximity on the nonius dial.

Take the loom (again manually) to zero degrees, in this position the sensor on the dial (nonius) should be on, if this isn't so:

Check for 24V DC between pins 4 and 6 on connection J12 on the RIO board (table E-N°4). If present, check cable WLS404 used to connect connection J12 to the sensor and replace the sensor if necessary; otherwise check fuse F3 on the RIO board.

Replace the RIO board.

Check cabling WLP 360 connecting connection J26 on the SFC board (table C-N°4) with connection J03 on the RIO board.

Check the state of fuse F4 on the SFC board.

Replace the SFC board.

Check the alignment of the nonius dial, that it turns in axis and is not off-centre; otherwise there may be gaps in the sensor readings.

Replace the main encoder if the problem persists.

Replace the MLC board (table B-N°11).

<b>1053</b>	<b>No encoder zero</b>
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*Description:*

With each turn of the loom, the main encoder sends a pulse called the "zero pulse" that should coincide with the mechanical zero of the loom. This is needed to start the loom position count again and to synchronise the count for all the boards that need to know the position of the loom.

*Remedies:*

Check the cabling of the encoder:

Cabling WLS356 connecting the connection J40 on the MLC board (table B-N°11) with free connection near the main encoder XLS14.

Check that connector J40 (main encoder) on the MLC board (table B-N°11) is properly connected and that the input pins are inserted properly, especially pins 8-3 on connector J40 on the MLC board (table B-N°11) and pins 6-7 of XLS14 near the main encoder.

Replace the main encoder and follow the encoder re-synchronising procedure on console.

Replace the MLC board (table B-N°11).

<b>1054</b>	<b>No loom degrees</b>
-------------	------------------------

*Description:*

The system constantly checks that the signals from the encoder are properly decoded. If not, this alarm appears indicating the loss of one or more signals.

*Remedies:*

Check the cabling of the encoder:

Cabling WLS356 connecting the connection J40 on the MLC board (table B-N°11) with free connection near the main encoder XLS14.

Check that connector J40 (main encoder) on the MLC board (table B-N°11) is properly connected and that the input pins are inserted properly.

Replace the main encoder and follow the encoder re-synchronising procedure on console.

Replace the MLC board (table B-N°11).

<b>1055</b>	<b>communication problems with positive cutter</b>
-------------	--

*Description:*

This means that there are positive cutter drive (table B-N°5) communication problems on the can-bus line.

*Remedies:*

First check that the drive is powered up.

Use a multimeter to check for 220V AC three-phase between the three black wires on connection "POWER IN" on the drive (table B-N°5); this power is supplied by transformer T05 (table D-N°10).

Check the state of the fuses leaving transformer T05.

Check the state of fuses FU05 (table B-N°23).

Check cabling WCP312 connecting fuses FU05 with transformer T05.

Check that terminals on fuse FU05 and transformer T05 are properly tightened.  
 Check cabling WCP312 connecting transformer T05 with the drive.  
 Check cabling WCS312A used to connect connection J02 on the MLC board (table B-N°11) to connection ENC-A on the cutter drive.  
 Check cabling WCS313A connecting connection J024 on the MHD board (table C-N°1) with connection ENC B on the cutter drive.  
 Replace the cutter drive.  
 If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1056</b>	<b>CAN-BUS error</b>
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*Description:*  
 This means that there are communication problems on the CAN-BUS line

*Remedies:*  
 If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1057</b>	<b>Pattern loading error</b>
-------------	------------------------------

*Description:*  
 This means that the MLC board (table B-N°11) hasn't any patterns in progress.

*Remedies:*  
 Send a pattern into production.  
 Replace the MLC (table B-N°11).

<b>1058</b>	<b>Start interrupted because PFM connected</b>
-------------	--

*Description:*  
 The loom can't start if the Pocket Full Mot (manual movement of the let-off and take-up roller motors) is connected to the loom (via the can-bus line).

*Remedies:*  
 Disconnect the Pocket Full Motor.

<b>1061</b>	<b>Start interrupted because other movement in progress</b>
-------------	---

*Description:*  
 This means that you have requested a loom movement, but the loom is currently making another movement.

*Remedies:*  
 Wait for the loom movement to finish before requesting the next one.  
 Replace the main encoder if the problem persists.  
 Replace the MLC board (table B-N°11).

<b>1062</b>	<b>Start interrupted due to invalid pattern</b>
-------------	---

*Description:*

The start-up procedure has been interrupted because the assigned pattern isn't valid.

*Remedies:*

Assign another pattern.

<b>1063</b>	<b>Rifasamento non concluso in posizione corretta</b>
-------------	---

*Description:*

The pick-finding carried out hasn't been completed properly.

After the movement, the system has detected a divergence of at least 3 degrees between the start and end pick-finding positions.

A grey window should appear before this alarm telling you the reset or re-synchronising has failed. Enter the code that appears to discover the meaning and what to do.

**WARNING MESSAGES-1 (Failed setup):**

*Code n° 1*

*Description:*

No coherence between motor encoder and main loom encoder - Switch off and then back on again

*Maining*

The main and auxiliary encoder values do not have the same angular position.

When you switch the loom on again one of these will be forced to the position of the other in order to start the reset procedure.

*Remedies:*

If the problem persists after switching the loom on, check the encoders and repeat the pick-finding procedure; press key "W" at the bottom of the page for details of the encoder calibration procedure.

Replace the MLC board (table B-N°11).

*Code n° 2*

*Description:*

Unaccepted motor status before starting a movement

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n° 3*

*Description:*

Internal error 03

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n° 4*

*Description:*

Movement timeout

*Meaning*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n° 5*

*Description:*

Movement stop timeout

*Meaning*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n° 6*

*Description:*

Operation aborted due to a power fail

*Meaning*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n° 7*

*Description:*

Drive not enabled - Check enabling circuit

*Meaning:*

There's no retroaction signal from KD02 (table B-N°13) at pin 2 on connector J16 on the SFC board (only active during all types of movement).

*Remedies:*

Check the connection of pin 2 of J16 on the SFC board (table C-N°04). Check for 24V DC at pin 2 on J16 on the SFC board (table C-N°04).

If there's 24V DC:

Replace the SFC board (table C-N°04).

If there's no 24V DC:

Check wire 260 on contact 14 on KD02 and wire 263 on contact 13 on KD02 (table B-N°13).

Make sure that contact 13-14 closes properly when KD02 (table B-N°13) is excited.

If contact 13-14 on KD02 fails to close when KD02 is excited, replace KD02 (table B-N°13).

*Code n° 8*

*Description:*

General emergency active (e.g. the mushroom button has been pressed) before starting a movement

*Meaning:*

The machine goes to emergency mode before you can start the reset procedure. This warning normally indicates the actual alarm code on the console.

*Remedies:*

Check that all the emergency stop buttons and their internal contacts are closed.

See Alarm 1122 for details; if necessary.

*Code n° 9*

*Description:*

Photocells in emergency mode before starting a movement

*Meaning:*

The photocell circuit has opened before the reset procedure has started. This warning normally indicates the actual alarm code on the console.

*Remedies:*

Check the alignment of the photocells and then see Alarm 1026 for details of how to check the photocell circuit.

*Code n° 10*

*Description:*

General emergency active (e.g. the mushroom button has been pressed) during a movement

*Maining*

An emergency device has tripped during the reset procedure. This warning normally indicates the actual alarm code on the console. Alarm 13318 "chasing error - press slow motion button" often appears.

*Remedies:*

Check that all the emergency stop buttons and their internal contacts are closed.  
See Alarm 1122 for details; if necessary.

*Code n° 11*

*Description:*

Photocells in emergency mode during a movement

*Maining*

The FTC circuit has opened during the reset procedure.

Under normal conditions, once the movement has started two jumpers on connector J41 on the SFC board (table C-N°04) exclude photocell control.

*Remedies:*

Check the cabling J41 on the SFC board (table C-N°04).  
The jumpers on J41 on the SFC board are normally set on pins 1-2 and 4-5.  
Check these jumpers.  
Replace the SPH board (table C-N°03).  
Replace the SFC board (table C-N°04).

*Code n° 12*

*Description:*

Internal error 12

*Maining*

This warning message is not used at present.

*Code n° 13*

*Description:*

IMovement interrupted by coherence sensors (rapiers in shed when shed closed)

*Maining*

Movement is interrupted when the system detects a faulty sensor or interrupted sensor cable.

*Remedies:*

Check the following sensors:  
The "shed" sensor on the shedding machine (SQ106).  
The "rapiers out" sensor (SQ14/2).  
The "shed" sensor on the shedding machine:  
Check connector XLS107 (on sensor): this might not be not connected.  
Check that connector J35 is properly connected on the MLC board (table B-N°11) and especially pins 10-11-12.  
Check that there's 24V DC between pin 10 on J35 on the MLC board (table B-N°11) and the earth.  
Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.  
Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.  
Check fuse F04 on the SFC board (table C-N°04).  
If the fuse F04 on the SFC board (table C-N°04) is OK, replace the board.  
Check that the sensor comes on when the flag passes.

If it comes on:

Check for 24V DC returning from the sensor (on) at pin 11 of connector J35 on the MLC board (table B-N°11).

If there's 24V DC, replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS107.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS107 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS365.

Check the air gap on the sensor.

Replace the sensor.

Repair out sensor:

Connector XLS20/2 (on sensor) may not be connected.

Check connector J12 is properly connected on the RIO board (table E-N°04) and especially pins 4-5-6.

Check that there's 24V DC between pin 4 on J12 on the RIO board (table E-N°04) and the earth.

If there's no 24V DC:

Check fuse F03 on the RIO board (table E-N°04).

If the fuse F03 on the RIO board (table E-N°04) is OK, replace the board.

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 5 of connector J12 on the RIO board (table E-N°04).

If there's 24V DC, replace the RIO board (table E-N°04).

If there's no 24V DC:

Check the cabling, especially pin 3 on the XLS20/2.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS20/2 and check for 24V DC between pin 1 (coming from box) and the earth.

Check the cabling WLS404.

Check the air gap on the sensor.

Replace the sensor.

#### *Codice 51*

#### *Description:*

Internal error 12

#### *Maining*

The movement is stopped due to a faulty sensor or interrupted sensor cable.

#### *Remedies:*

Check the following sensors:

Reed sensor 321°(SQ102)

Reed sensor 30°(SQ101)

In particular:

Reed sensor 321°

Check that connector XLS103 (on sensor) is connected.

Check that connector J34 is properly connected on the MLC board (table B-N°11) and especially pins 4-5-6.

Check that there's 24V DC between pin 4 on J34 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.

Check fuse F04 on the SFC board (table C-N°04).

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 5 of connector J34 on the MLC board (table B-N°11).

If there's 24V DC, replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS103.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS103 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS364.

Check the air gap on the sensor.

Replace the sensor.

Reed sensor 30°

Check that connector XLS102 (on sensor) is connected.

Check that connector J34 is properly connected on the MLC board (table B-N°11) and especially pins 1-2-3.

Check that there's 24V DC between pin 1 on J34 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.

Check fuse F04 on the SFC board (table C-N°04).

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 2 of connector J34 on the MLC board (table B-N°11).

If there's 24V DC:

Replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS102.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS102 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS364.

Check the air gap on the sensor.

Replace the sensor.

*Code n°52*

*Description:*

IRapiers in shed when shed closed: movement start not possible - Extract rapiers from shed (also in slow motion)

*Maining*

You have pressed the pick-finding button, but the system finds that the dobbie shed and rapiers out sensors are excited.

*Remedies:*

Extract the rapiers from the shed in order to make the movement.

*Code n°53*

*Description:*

Start reset not allowed because loom in emergency mode.

*Maining*

You have pressed the slow motion button to start the reset procedure, but the system finds an active alarm.

*Remedies:*

Restore the loom status "Ready in stand-by", by first dealing with the active emergency.

*Code n°54*

*Description:*

Timeout (max 60 seconds) for finding rapier/reed sensors with reverse movement

*Maining*

During the reset procedure, the loom checks the sensors; there's a timeout if the reverse sensor-finding movement is not completed correctly, stopping all movements after 60 sec.

*Remedies:*

Check the rapier/reed sensors as described for warning n°51.

*Code n°55*

*Description:*

Timeout (max 60 seconds) for finding rapier/reed sensors with reverse movement

*Maining*

During the reset procedure, the loom checks the sensors; there's a timeout if the reverse sensor-finding movement is not completed correctly, stopping all movements after 60 sec.

*Remedies:*

Check the rapier/reed sensors as described for warning n°51.

*Code n°56*

*Description:*

Timeout (max 5 seconds) for second attempt to find rapier/reed sensor

*Maining*

The loom starts pick-finding during the reset procedure.

The loom needs to be recoupled after pick-finding. The system looks for the sensor that was excited before the movement. If, after 5 seconds, it fails to find this, the system generates this warning message.

*Remedies:*

Check the rapier/reed sensors as described for warning n°51

*Code n°57*

*Description:*

Second attempt to find rapier/reed sensor failed due to no sensor consensus: rapiers-out sensor/shed sensor

*Maining*

During the reset, the second reed sensor search has been inhibited by one of the rapiers out/shed sensors.

Make sure that the rapier joint has not slipped.

*Remedies:*

Check rapier sensor out of the shed (SQ14/2).

Check that connector XLS20/2 (on sensor) is connected.

Check connector J12 is properly connected on the RIO board (table E-N°04) and especially pins 4-5-6.

Check that there's 24V DC between pin 4 on J12 on the RIO board (table E-N°04) and the earth.

Check that there's 24V DC between pin 18 on J03 on the RIO board (table E-N°04) and the earth.

Check that there's 24V DC between pin 18 on J26 on the SFC board (table C-N°04) and the earth.

Check fuse F03 on the RIO board (table E-N°04).

Check fuse F04 on the SFC board (table C-N°04).

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 5 of connector J12 on the RIO board (table E-N°04).

If there's 24V DC, replace the RIO board (table E-N°04).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS20/2.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS20/2 and check for 24V DC between pin 1 (coming from box) and the earth.

Check the cabling WLS404.

Check the air gap on the sensor.

Replace the sensor.

Shed sensor (SQ106)

Check that connector XLS107 (on sensor) is connected.

Check that connector J35 is properly connected on the MLC board (table B-N°11) and especially pins 9-10-11.

Check that there's 24V DC between pin 10 on J35 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.

Check fuse F04 on the SFC board (table C-N°04).

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 11 of connector J35 on the MLC board (table B-N°11).

If there's 24V DC, replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 3 on the XLS107.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS107 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS365.

Check the air gap on the sensor.

Replace the sensor.

*Code n°58*

*Description:*

Release to find main encoder zero has failed

*Maining*

The release procedure has failed because the system has not detected the main encoder zero.

*Remedies:*

Check the cabling of the main encoder, especially:

Check that connector XLS14 is properly connected.  
Switch the control box off and make sure that pins Z (6) and Z denied (7) are inserted in connector XLS14 properly.  
Check that connector J40 is properly inserted on the MLC board (table B-N°11) and especially pins pins Z (3) and Z denied (8).  
Replace the main encoder.  
Replace the MLC board (table B-N°11).  
Replace the SFC board (table C-N°4).

*Code n°59*

*Description:*

Internal error 59

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n°60*

*Description:*

Coupling after main encoder zero search has failed

*Maining*

The coupling procedure after pick-finding has failed because the system has not detected the main encoder zero.

*Remedies:*

Check the cabling of the main encoder, especially:

Check that connector XLS14 (near to the main encoder) is properly connected.

Switch the control box off and make sure that pins Z (6) and Z denied (7) are inserted in connector XLS14 properly.

Check that connector J40 is properly inserted on the MLC board (table B-N°11) and especially pins pins Z (3) and Z denied (8).

Replace the main encoder.

Replace the MLC board (table B-N°11).

*Code n°61*

*Description:*

Internal error 61

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

### **WARNING MESSAGES-1 (Failed disengage):**

*Code n°11*

*Description:*

No coherence between motor encoder and main loom encoder - Switch off and then back on again

*Maining*

The main and auxiliary encoder values do not have the same angular position.

When you switch the loom on again one of these will be forced to the position of the other in order to start the reset procedure.

*Remedies:*

Check the encoders and repeat the calibration procedure if necessary.

Replace the MLC board (table B-N°11).

*Code n°12*

*Description:*

Unaccepted motor status before starting a movement.

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n°13*

*Description:*

Internal error 03

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n°14*

*Description:*

Movement timeout

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n°15*

*Description:*

Movement stop timeout

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n°16*

*Description:*

Operation aborted due to a power fail

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n°17*

*Description:*

Drive not enabled - Check enabling circuit

*Maining*

There's no retroaction signal from KD02 (table B-N°13) at pin 2 on connector J16 on the SFC board (only active during all types of movement).

*Remedies:*

Check the connection of pin 2 of J16 on the SFC board (table C-N°04).

Check for 24V DC at pin 2 on J16 on the SFC board (table C-N°04).

If there's 24V DC:

Replace the SFC board (table C-N°04).

If there's no 24V DC:

Check wire 260 on contact 14 on KD02 and wire 263 on contact 13 on KD02 (table B-N°13).

Also:

Make sure that there's 24V DC at coil A1-A2 in contactor KD02 when a movement is enabled.

If there's 24V DC:

Replace KD02 (table B-N°13).

If there's no 24V DC:

Make sure that there's 24V DC at pins 3 and 4 in J17 on the SFC board when a movement is enabled.

Make sure that wires 216 and 217 are fixed properly (running from pins 3 and 4 on the SFC board to contact 5 on KD02 and contact A1 on the KD02 coil respectively).

Make sure that contact 13-14 on KD02 (table B-N°13) closes properly when KD02 is excited.

If the contact 13-14 on KD02 doesn't close, replace KD02 (table B-N°13).

Replace the SFC board (table C-N°04).

*Code n°18*

*Description:*

General emergency active (e.g. the mushroom button has been pressed) before starting a movement.

*Maining*

The machine has gone into emergency mode before starting the release procedure.

This warning normally indicates the actual alarm code on the console.

*Remedies:*

Check alarm code and follow the procedures indicated in this manual to deal with the problem.

*Code n°19*

*Description:*

Photocells in emergency mode before starting a movement.

*Maining*

The photocell circuit has opened during release.

*Remedies:*

Check the alignment of the photocells.

Check alarm code 1026 and follow the procedure described in this manual.

*Code n°20*

*Description:*

General emergency active (e.g. the mushroom button has been pressed) before starting a movement.

*Maining*

The machine has gone into emergency mode during the release procedure.

This warning normally indicates the actual alarm code on the console.

*Remedies:*

Check alarm code and follow the procedures indicated in this manual to deal with the problem.

*Code n°21*

*Description:*

Photocells in emergency mode during a movement.

*Maining*

The FTC circuit has opened during the release procedure.

Under normal conditions, once the movement has started two jumpers on connector J41 on the SFC board (table C-N°04) exclude photocell control.

*Remedies:*

Check the cabling J41 on the SFC board (table C-N°04).

The jumpers on J41 on the SFC board are normally set on pins 1-2 and 4-5.

Check these jumpers.

Replace the SPH board (table C-N°03).

Replace the SFC board (table C-N°04).

*Code n°22*

*Description:*

Internal error 12

*Maining*

This warning message is not used at present.

*Code n°23*

*Description:*

Movement interrupted by coherence sensors (rapiers in shed when shed closed).

*Maining*

The release is interrupted when the system finds a faulty or interrupted sensor cable.

*Remedies:*

Check the following sensors:

The "shed" sensor on the shedding machine (SQ106).

The "rapiers out" sensor (SQ14/2).

The "shed" sensor on the shedding machine:

Check connector XLS107 (on sensor); this might not be not connected.

Check that connector J35 is properly connected on the MLC board (table B-N°11) and especially pins 10-11-12.

Check that there's 24V DC between pin 10 on J35 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.

Check fuse F04 on the SFC board (table C-N°04).

If the fuse F04 on the SFC board (table C-N°04) is OK, replace the board.

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 11 of connector J35 on the MLC board (table B-N°11).

If there's 24V DC, replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS107.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS107 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS365.

Check the air gap on the sensor.

Replace the sensor.

Rapier out sensor:

Connector XLS20/2 (on sensor) may not be connected.

Check connector J12 is properly connected on the RIO board (table E-N°04) and especially pins 4-5-6.

Check that there's 24V DC between pin 4 on J12 on the RIO board (table E-N°04) and the earth.

If there's no 24V DC:

Check fuse F03 on the RIO board (table C-N°04).

If the fuse F03 on the RIO board (table E-N°04) is OK, replace the board.

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 5 of connector J12 on the RIO board (table B-N°04).

If there's 24V DC, replace the RIO board (table E-N°04).

If there's no 24V DC:

Check the cabling, especially pin 3 on the XLS20/2.

Replace the sensor.  
If the sensor doesn't come on:  
Disconnect connector XLS20/2 and make sure there's 24V DC between pin 1 (coming from box) and the earth.  
Check the cabling WLS404.  
Check the air gap on the sensor.  
Replace the sensor.

**Code n°31****Description:**

Coupling not engaged before releasing.

**Maining**

The previous coupling procedure has failed.

Every time you carry out the engage/release procedure you change the status of the coupling. If the system fails to recognise the current status it generates this warning.

**Remedies:**

Check the coupling piloting

In particular:

Check that there's 120V AC on the output of transformer T01 (table D-N°11).

If there's no 24V AC:

Check the power supply for transformer T01 (table D-N°11): this should be 400V AC or selected to suit the line rating.

Check the fuse 10A on the 120V AC output of T01 (table D-N°11).

If the input at T01 and the fuses are OK, replace transformer T01 (table D-N°11).

If there's 120V AC on the output of T01 (table D-N°11):

Check the cable running from transformer T01 (table D-N°11) to the DPS board (table B-N°08) and tighten the terminals on T01.

Check that there's 120V AC between pins 10 and 11 on connector J01 on the DPS board (table B-N°08).

Check that there's 160V DC between pins 5 and 6 on output connector J04 on the DPS board (table B-N°08).

If there's not 160V DC, replace the DPS board (table B-N°08).

Check the pins 4-7 of connector J04 on the SFC board (table C-N°04).

Check the pins 1-2-3 of connector J03 on the SFC board (table C-N°04).

Check the pins on connector XLP100 (coupling connection).

Check the impedance of the coupling (this should be approx. 22 Ohms).

Check the fuse F10 on the SFC board (table C-N°04).

Replace the SFC board (table C-N°04).

**Code n°32****Description:**

Impossibility to establish staggering

**Maining**

The system cannot find the correct timing using the corrections and max accepted errors.

These corrections and max accepted errors are calculated during the encoder timing procedure max.

**Remedies:**

Check the coupling piloting

In particular:

Check that there's 120V AC on the output of transformer T01 (table D-N°11).

If there's no 24V AC:

Check the power supply for transformer T01 (table D-N°11): this should be 400V AC or selected to suit the line rating.

Check the fuse 10A on the 120V AC output of T01 (table D-N°11).

If the input at T01 and the fuses are OK, replace transformer T01 (table D-N°11).

If there's 120V AC on the output of T01 (table D-N°11):

Check the cable running from transformer T01 (table D-N°11) to the DPS board (table B-N°08) and tighten the terminals on T01.

Check that there's 120V AC between pins 10 and 11 on connector J01 on the DPS board (table B-N°08).

Check that there's 160V DC between pins 5 and 6 on output connector J04 on the DPS board (table B-N°08).

If there's not 160V DC, replace the DPS board (table B-N°08).

Check the pins 4-7 of connector J04 on the SFC board (table C-N°04).

Check the pins 1-2-3 of connector J03 on the SFC board (table C-N°04).

Check the pins on connector XLP100 (coupling connection).

Check the impedance of the coupling (this should be approx. 22 Ohms).

Check the fuse F10 on the SFC board (table C-N°04).

Replace the SFC board (table C-N°04).

#### *Code n°33*

##### *Description:*

Encoders possibly not adjusted or excessive play; alternatively, encoder play compensation not done.

##### *Maining*

This alarm can occur at the first reset or first re-synchronising after the encoders have been adjusted or the software upgraded; if the reset and re-synchronising are successful and the alarm does not appear again at the next reset/re-synchronising, it can be ignored.

##### *Remedies:*

Repeat the encoder/sensor timing procedure.

If the problem persists:

Enter the Hi-Drive page.

Jog the loom in slow motion, stopping it every 50 loom degrees.

Check that the 2 encoders keep increasing by the same degrees or if you find staggering above or below the loom position.

If one of the 2 encoders is staggered with respect to the degrees shown on the nonius dial it means it is not in axis.

Remove the encoder and check that the joint is not faulty or worn.

Repeat the encoder/sensor timing procedure.

Check loom efficiency, if the problem persists:

Check encoder connector XLS100 (aux encoder) on the LH frame of the loom.

Check encoder connector XLS14 (main encoder).

Check that all the pins are inserted properly in connector J41 on the MLC board (table B-N°11).

Check that all the pins are inserted properly in connector J40 on the MLC board (table B-N°11).

Replace the MLC board (table B-N°11).

#### *Code n°34*

##### *Description:*

More than 4.28° covered without release not done.

##### *Maining*

More than 4.28° covered without release: the coupling coil is not powered up.

##### *Remedies:*

Check the coupling piloting

In particular:

Check that there's 120V AC on the output of transformer T01 (table D-N°11).

If there's no 24V AC:

Check the power supply for transformer T01 (table D-N°11): this should be 400V AC or selected to suit the line rating.

Check the fuse 10A on the 120V AC output of T01 (table D-N°11).

If the input at T01 and the fuses are OK, replace transformer T01 (table D-N°11).  
If there's 120V AC on the output of T01 (table D-N°11):  
Check the cable running from transformer T01 (table D-N°11) to the DPS board (table B-N°08) and tighten the terminals on T01.  
Check that there's 120V AC between pins 10 and 11 on connector J01 on the DPS board (table B-N°08).  
Check that there's 160V DC between pins 5 and 6 on output connector J04 on the DPS board (table B-N°08).  
If there's not 160V DC, replace the DPS board (table B-N°08).  
Check the pins 4-7 of connector J04 on the SFC board (table C-N°04).  
Check the pins 1-2-3 of connector J03 on the SFC board (table C-N°04).  
Check the pin on connector XLP100 (coupling connection).  
Check the impedance of the coupling (this should be approx. 22 Ohms).  
Check the fuse F10 on the SFC board (table C-N°04).  
Replace the SFC board (table C-N°04).

*Code n°35**Description:*

Release overpulse timeout (3.5 sec)

*Maining*

More than 3.5 seconds have passed since the start of the overpulse sent to the coil without any release.

The coupling coil is not powered up.

*Remedies:*

Check the coupling piloting.

In particular: Check that there's 120V AC on the output of transformer T01 (table D-N°11).

If there's no 24V AC:

Check the power supply for transformer T01 (table D-N°11): this should be 400V AC or selected to suit the line rating.

Check the 10A fuse on the 120V AC output of T01 (table D-N°11).

If the input at T01 and the fuses are OK, replace transformer T01 (table D-N°11).

If there's 120V AC on the output of T01 (table D-N°11).

Check the cable running from transformer T01 (table D-N°11) to the DPS board (table B-N°08) and tighten the terminals on T01.

Check that there's 120V AC between pins 10 and 11 on connector J01 on the DPS board (table B-N°08).

Check that there's 160V DC between pins 5 and 6 on connector J04 on the DPS board (table B-N°08).

If there's 160V DC, replace the DPS board (table B-N°08).

Check the pins 4-7 of connector J04 on the SFC board (table C-N°04).

Check the pins 1-2-3 of connector J03 on the SFC board (table C-N°04).

Check the pin on connector XLP100 (coupling connection).

Check the impedance of the coupling (this should be approx. 22 Ohms).

Check the fuse F10 on the SFC board (table C-N°04).

Replace the SFC board (table C-N°04).

*Code n°36**Description:*

Release in wrong position

*Maining*

Release in wrong position:

Likely causes:

The rapier/reed shaft sensor for the start position (321°, 30°) is faulty or incorrectly set.

Auxiliary encoder faulty or not adjusted properly.

*Remedies:*

Repeat the encoder/sensor timing procedure:  
Check loom efficiency, if the problem persists:  
Check:  
Reed sensor 321°(SQ102)  
Reed sensor 30°(SQ101)  
In particular:

Reed sensor 321°  
Check that connector XLS103 (on sensor) is connected.  
Check that connector J34 is properly connected on the MLC board (table B-N°11) and especially pins 4-5-6.  
Check that there's 24V DC between pin 4 on J34 on the MLC board (table B-N°11) and the earth.  
Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.  
Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.  
Check fuse F04 on the SFC board (table C-N°04).  
Make sure the sensor comes on when the flag passes.  
If the sensor comes on:  
Check for 24V DC returning from the sensor (on) at pin 5 of connector J34 on the MLC board (table B-N°11).  
If there's 24V DC, replace the MLC board (table B-N°11).  
If there's no 24V DC:  
check the cabling, especially pin 1 on the XLS103.  
Replace the sensor.  
If the sensor doesn't come on:  
Disconnect connector XLS103 and check for 24V DC between pin 3 (coming from box) and the earth.  
Check the cabling WLS364.  
Check the air gap on the sensor.  
Replace the sensor.

Reed sensor 30°  
Check that connector XLS102 (on sensor) is connected.  
Check that connector J34 is properly connected on the MLC board (table B-N°11) and especially pins 1-2-3.  
Check that there's 24V DC between pin 1 on J34 on the MLC board (table B-N°11) and the earth.  
Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.  
Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.  
Check fuse F04 on the SFC board (table C-N°04).  
Make sure the sensor comes on when the flag passes.  
If the sensor comes on:  
Check for 24V DC returning from the sensor (on) at pin 2 of connector J34 on the MLC board (table B-N°11).  
If there's 24V DC:  
Replace the MLC board (table B-N°11).  
If there's no 24V DC:  
check the cabling, especially pin 1 on the XLS102.  
Replace the sensor.

If the sensor doesn't come on:  
Disconnect connector XLS102 and check for 24V DC between pin 3 (coming from box) and the

earth.

Check the cabling WLS364.

Check the air gap on the sensor.

Replace the sensor.

If the problem persists:

Enter the Hi-Drive page. Jog the loom in slow motion, stopping it every 50 loom degrees.

Check that the 2 encoders keep increasing by the same degrees or if you find staggering above or below the loom position.

If one of the 2 encoders is staggered with respect to the degrees shown on the nonius dial it means it is not in axis.

Remedies:

Remove the encoder and check that the joint is not faulty or worn.

Repeat the encoder/sensor timing procedure:

Enter the relevant console page and carefully follow all the steps indicated.

Check loom efficiency, if the problem persists:

Check encoder connector XLS100 (aux encoder).

Check encoder connector XLS14 (main encoder).

Check that all the pins are inserted properly in connector J41 on the MLC board (table B-N°11).

Check that all the pins are inserted properly in connector J40 on the MLC board (table B-N°11).

If the problem persists:

Replace the auxiliary encoder (BQ100)

Replace the main encoder (BQ01).

Repeat the encoder/sensor timing procedure.

Replace the MLC board (table B-N°11).

#### *Code n°37*

##### *Description:*

Release has failed after 5 attempts

##### *Maining*

The system calculates the errors when looking for the sensors.

This happens when the release position is out of tolerance (bearing in mind the max errors and the encoder corrections); if unsuccessful after 5 attempts, the system generates this alarm.

##### *Remedies:*

Repeat the encoder/sensor timing procedure.

Enter the relevant console page and carefully follow all the steps indicated.

If the problem persists:

Enter the Hi-Drive page.

Jog the loom in slow motion, stopping it every 50 loom degrees.

Check that the 2 encoder keep increasing by the same degrees or if you find staggering above or below the loom position.

If one of the 2 encoders is staggered with respect to the degrees shown on the nonius dial it means it is not in axis.

Remedies:

Remove the encoder and check that the joint is not faulty or worn.

Repeat the encoder/sensor timing procedure.

Check loom efficiency, if the problem persists:

Check encoder connector XLS100 (aux encoder).

Check encoder connector XLS14 (main encoder).

Check that all the pins are inserted properly in connector J41 on the MLC board (table B-N°11).

Check that all the pins are inserted properly in connector J40 on the MLC board (table B-N°11).

Replace the auxiliary encoder (BQ100).  
Replace the main encoder (BQ01).  
Replace the MLC board (table B-N°11).

*Code n°38*

*Description:*

Sensor front search has failed: more than 30° covered

*Maining*

If the system fails to find a sensor needed to start pick-finding, it generates this time-out alarm 30° after the normal position.

*Remedies:*

Check reed sensor 30°.

Check that connector XLS102 (on sensor) is connected.

Check that connector J34 is properly connected on the MLC board (table B-N°11) and especially pins 1-2-3.

Check that there's 24V DC between pin 1 on J34 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.

Check fuse F04 on the SFC board (table C-N°04).

If the fuse F04 on the SFC board (table C-N°04) is OK, replace the board.

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 2 of connector J34 on the MLC board (table B-N°11).

If there's 24V DC, replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS102.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS102 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS364.

Check the air gap on the sensor.

Replace the sensor.

Reed sensor 321°

Check that connector XLS103 (on sensor) is connected.

Check that connector J34 is properly connected on the MLC board (table B-N°11) and especially pins 4-5-6.

Check that there's 24V DC between pin 4 on J34 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.

Check fuse F04 on the SFC board (table C-N°04).

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 5 of connector J34 on the MLC board (table B-N°11).

If there's 24V DC:

Replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS103.  
Replace the sensor.  
If the sensor doesn't come on:  
Disconnect connector XLS103 and check for 24V DC between pin 3 (coming from box) and the earth.  
Check the cabling WLS364  
Check the air gap on the sensor.  
Replace the sensor.

*Code n°39**Description:*

Sensor front search has failed: timeout (15 sec)

*Maining*

If the system fails to find a sensor needed to start pick-finding, it generates this time-out alarm after 15 seconds from the start movement.

*Remedies:*

Check reed sensor 30° (SQ101) and reed sensor 321° (SQ102)

## Reed sensor 30°

Check that connector XLS102 (on sensor) is connected  
Check that connector J34 is properly connected on the MLC board (table B-N°11) and especially pins 1-2-3.  
Check that there's 24V DC between pin 1 on J34 on the MLC board (table B-N°11) and the earth.  
Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.  
Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.  
Check fuse F04 on the SFC board (table C-N°04).  
If the fuse F04 on the SFC board (table C-N°04) is OK, replace the board.  
Make sure the sensor comes on when the flag passes.  
If the sensor comes on:  
Check for 24V DC returning from the sensor (on) at pin 2 of connector J34 on the MLC board (table B-N°11).  
If there's 24V DC, replace the MLC board (table B-N°11).  
If there's no 24V DC:  
Check the cabling, especially pin 1 on the XLS102.  
Replace the sensor.  
If the sensor doesn't come on:  
Disconnect connector XLS102 and check for 24V DC between pin 3 (coming from box) and the earth.  
Check the cabling WLS364.  
Check the air gap on the sensor.  
Replace the sensor.

## Reed sensor 321°

Check that connector XLS103 (on sensor) is connected.  
Check that connector J34 is properly connected on the MLC board (table B-N°11) and especially pins 4-5-6.  
Check that there's 24V DC between pin 4 on J34 on the MLC board (table B-N°11) and the earth.  
Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.  
Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the

earth.

Check fuse F04 on the SFC board (table C-N°04).

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 5 of connector J34 on the MLC board (table B-N°11).

If there's 24V DC:

Replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS103.

replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS103 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS364

Check the air gap on the sensor.

Replace the sensor.

#### *Code n°40*

*Description:*

Sensor fronts not found

*Maining*

The loom moves and finds the fronts of the start movement sensor, but not in the right position.

*Remedies:*

Repeat the encoder/sensor timing procedure.

Enter the relevant console page and carefully follow all the steps indicated.

#### *Code n°41*

*Description:*

Re-synchronising not possible: carry out one turn in slow motion

*Maining*

The system tells you to move the loom in slow motion before the requested re-synchronising.

*Remedies:*

Get the loom to make a turn in slow motion.

#### *Codice 42*

Internal error 42

Significato:

Anomaly (this should only appear if there's a SW problem).

Rimedi:

Contact PROMATECH Customer Service immediately.

#### *Codice 43*

Internal error 43

Significato:

Anomaly (this should only appear if there's a SW problem).

Rimedi:

Contact PROMATECH Customer Service immediately.

### **WARNING MESSAGES- 3(Failed pick-finding):**

*Code n°111*

See code n° 11 of **WARNING MESSAGES -2 (failed disengage)**

Code n°112

See code n° 12 of *WARNING MESSAGES -2 (failed disengage)*

Code n°113

See code n° 13 of *WARNING MESSAGES -2 (failed disengage)*

Code n°114

See code n° 14 of *WARNING MESSAGES -2 (failed disengage)*

Code n°115

See code n° 15 of *WARNING MESSAGES -2 (failed disengage)*

Code n°116

See code n° 16 of *WARNING MESSAGES -2 (failed disengage)*

Code n°117

See code n° 17 of *WARNING MESSAGES -2 (failed disengage)*

Code n°118

See code n° 18 of *WARNING MESSAGES -2 (failed disengage)*

Code n°119

See code n° 19 of *WARNING MESSAGES -2 (failed disengage)*

Code n°120

See code n° 20 of *WARNING MESSAGES -2 (failed disengage)*

Code n°121

See code n° 21 of *WARNING MESSAGES -2 (failed disengage)*

Code n°122

See code n° 22 of *WARNING MESSAGES -2 (failed disengage)*

Code n°123

See code n° 23 of *WARNING MESSAGES -2 (failed disengage)*

*Codice 131*

*Description:*

Incorrect end to rotation

*Maining*

An emergency stop has been generated during the pick-finding procedure.

This messages warns you that the loom is not engaged after pick-finding.

*Remedies:*

This warning normally indicates the actual alarm code on the console.

Check the alarm code and follow the procedures indicated in this manual to deal with the problem.

**WARNING MESSAGES- 4(Failed engage):**

Code n°211

See code n° 11 of *WARNING MESSAGES -2 (failed disengage)*

Code n°212

See code n° 12 of *WARNING MESSAGES -2 (failed disengage)*

Code n°213

See code n° 13 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°214*

See code n° 14 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°215*

See code n° 15 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°216*

See code n° 16 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°217*

See code n° 17 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°218*

See code n° 18 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°219*

See code n° 19 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°220*

See code n° 20 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°221*

See code n° 21 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°222*

See code n° 22 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°223*

See code n° 23 of *WARNING MESSAGES -2 (failed disengage)*

*Code n°231**Description:*

Coupling not released before engaging.

*Maining*

The system finds the coupling already engaged before starting the engaging procedure. Every time you carry out the engage/release procedure you change the status of the coupling. If the system fails to recognise the current status it generates this warning.

*Remedies:*

Check the coupling piloting

In particular:

Check that there's 120V AC on the output of transformer T01 (table D-N°11).

If there's no 120V AC:

Check the power supply for transformer T01 (table D-N°11): this should be 400V AC or selected to suit the line rating.

Check the fuses 10A on the 120V AC output of T01 (table D-N°11).

If the input at T01 and the fuses are OK, replace transformer T01 (table D-N°11).

If there's 120V AC on the output of T01 (table D-N°11).

Check the cable running from transformer T01 (table D-N°11) to the DPS board (table B-N°08) and tighten the terminals on T01.

Check that there's 120V AC between pins 10 and 11 on connector J01 on the DPS board (table B-N°08).

Check that there's 160V DC between pins 5 and 6 on output connector J04 on the DPS board (table B-N°08).

If there's 160V DC, replace the DPS board (table B-N°08).

Check the pins 4-7 of connector J04 on the SFC board (table C-N°04).

Check the pins 1-2-3 of connector J03 on the SFC board (table C-N°04).

Check the pins on connector XLP100 (coupling connection).

Check the impedance of the coupling (this should be approx. 22 Ohms).  
Check the fuse F10 on the SFC board (table C-N°04).  
Replace the SFC board (table C-N°04).

*Code n°232*

*Description:*

Requested staggering not accepted (out of range  $\pm 30^\circ$ )

*Maining*

You have requested coupling when the shafts are more than  $30^\circ$  apart.

*Remedies:*

Check the coupling piloting.

In particular:

Check that there's 120V AC on the output of transformer T01 (table D-N°11).

If there's no 24V AC:

Check the power supply for transformer T01 (table D-N°11): this should be 400V AC or selected to suit the line rating.

Check the fuse 10A on the 120V AC output of T01 (table D-N°11).

If the input at T01 and the fuses are OK, replace transformer T01 (table D-N°11).

If there's 120V AC on the output of T01 (table D-N°11).

Check the cable running from transformer T01 (table D-N°11) to the DPS board (table B-N°08) and tighten the terminals on T01.

Check that there's 120V AC between pins 10 and 11 on connector J01 on the DPS board (table B-N°08).

Check that there's 160V DC between pins 5 and 6 on output connector J04 on the DPS board (table B-N°08).

If there's 160V DC, replace the DPS board (table B-N°08).

Check the pins 4-7 of connector J04 on the SFC board (table C-N°04).

Check the pins 1-2-3 of connector J03 on the SFC board (table C-N°04).

Check the pin on connector XLP100 (coupling connection).

Check the impedance of the coupling (this should be approx. 22 Ohms).

Check the fuse F10 on the SFC board (table C-N°04).

Replace the SFC board (table C-N°04).

Take the shedding machine to the cross-over degrees.

Make sure there's been no slippage in the connection joint between the loom and the shedding machine.

Restore the mechanism if the joint has slipped.

Take the machine to  $0^\circ$  (beat-up position) and check the difference between the two encoders.

Make sure that the encoder is offset from the zero (loom reference) and follow these steps:

Remove the encoder and check that the joints are securely fixed to both the encoder shaft and the loom itself.

Replace the encoder joint.

Repeat the encoder/sensor timing procedure:

Enter the relevant console page and carefully follow all the steps indicated.

If the problem persists:

Replace the encoder

Repeat the encoder/sensor timing procedure: press key "W" at the bottom of the page for details.

Replace the MLC board (table B-N°11).

*Code n°233*

*Description:*

Switch loom off and then back on again and then repeat reset procedure

*Maining*

The encoder degree corrections are calculated during release.

These corrections are applied during the coupling stage.

If still out-of-range after correction by  $\pm 2^\circ$ , the system forces you to reset the loom.

*Remedies:*

Repeat the encoder/sensor timing procedure: press key "W" at the bottom of the page for details.

Enter the relevant console page and carefully follow all the steps indicated.

If the problem persists:

Check encoders.

Enter the Hi-Drive page.

Jog the loom in slow motion, stopping it every 50 loom degrees.

Check that the 2 encoders keep increasing by the same degrees or if you find staggering above or below the loom position.

If the encoder is mistimed, it means it is not in axis.

Remedies:

Remove the encoders and check that the joints are not faulty or worn.

Repeat the encoder/sensor timing procedure: press key "W" at the bottom of the page for details.

Enter the relevant console page and carefully follow all the steps indicated.

Check loom efficiency, if the problem persists:

Check encoder connector XLS100 next to the reed encoder.

Check encoder connector XLS14 next to the main encoder.

Check that all the pins are inserted properly in connector J41 on the MLC board (table B-N°11).

Check that all the pins are inserted properly in connector J40 on the MLC board (table B-N°11).

Replace the MLC board (table B-N°11).

If the problem persists:

See also alarm 234.

*Code n°234**Description:*

PZPT sensor not found before coupling.

*Maining*

the rapier/reed shaft sensor for the start position (321°, 30°) is not read during coupling and so could be faulty or incorrectly set.

Auxiliary encoder faulty or not adjusted properly.

*Remedies:*

Repeat the encoder/sensor timing procedure:

Enter the relevant console page and carefully follow all the steps indicated.

Check loom efficiency, if the problem persists:

Check:

Rapier/reed sensor 30°(SQ101)

Rapier/reed sensor 321°(SQ102)

Reed sensor 30°

Check that connector XLS102 (on sensor) is connected

Check that connector J34 is properly connected on the MLC board (table B-N°11) and especially pins 1-2-3.

Check that there's 24V DC between pin 1 on J34 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.

Check fuse F04 on the SFC board (table C-N°04).

If the fuse F04 on the SFC board (table C-N°04) is OK, replace the board.

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 2 of connector J34 on the MLC board (table B-N°11).

If there's 24V DC, replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS102.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS102 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS364.

Check the air gap on the sensor.

Replace the sensor.

Reed sensor 321°

Check that connector XLS103 (on sensor) is connected.

Check that connector J34 is properly connected on the MLC board (table B-N°11) and especially pins 4-5-6.

Check that there's 24V DC between pin 4 on J34 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.

Check fuse F04 on the SFC board (table C-N°04).

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 5 of connector J34 on the MLC board (table B-N°11).

If there's 24V DC:

Replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS103.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS103 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS364.

Check the air gap on the sensor.

Replace the sensor.

If the problem persists:

See also warning 233.

*Code n°235*

*Description:*

Sensor not found before coupling

*Maining*

Dobby check sensor not found before coupling; the reason could be a faulty dobbie check sensor.

*Remedies:*

Switch the loom off and then back on again.

Bypass the reset procedure by enabling the "power on without reset" function in the HI-DRIVE page.

Enter the sensor set-up page on the Console.

Make two complete turns in slow motion: the appropriate alarm will indicate if a sensor is faulty.

Find the fault sensor.

Check the following sensors:

Dobby sensor 30° (SQ105)

Dobby sensor 321° (SQ103)

Dobby sensor 30°

Check connector XLS106 (on SQ105 sensor): this might not be not connected.

Check that connector J35 is properly connected on the MLC board (table B-N°11) and especially pins 1-2-3.

Check that there's 24V DC between pin 1 on J35 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.

Check fuse F04 on the SFC board (table C-N°04).

If the fuse F04 on the SFC board (table C-N°04) is OK, replace the board.

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 2 of connector J35 on the MLC board (table B-N°11).

If there's 24V DC, replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS106.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS106 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS365.

Check the air gap on the sensor.

Replace the sensor.

Dobby sensor 321°

Check connector XLS104 (on SQ103 sensor): this might not be not connected.

Check that connector J35 is properly connected on the MLC board (table B-N°11) and especially pins 4-5-6.

Check that there's 24V DC between pin 4 on J35 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J01 on the MLC board (table B-N°11) and the earth.

Check that there's 24V DC between pin 9 on J27 on the SFC board (table C-N°04) and the earth.

Check fuse F04 on the SFC board (table C-N°04).

If the fuse F04 on the SFC board (table C-N°04) is OK, replace the board.

Make sure the sensor comes on when the flag passes.

If the sensor comes on:

Check for 24V DC returning from the sensor (on) at pin 5 of connector J35 on the MLC board (table B-N°11).

If there's 24V DC, replace the MLC board (table B-N°11).

If there's no 24V DC:

Check the cabling, especially pin 1 on the XLS104.

Replace the sensor.

If the sensor doesn't come on:

Disconnect connector XLS104 and check for 24V DC between pin 3 (coming from box) and the earth.

Check the cabling WLS365.  
Check the air gap on the sensor.  
Replace the sensor.

*Code n°236*

*Description:*

More than 4.28° covered without coupling

*Maining*

The loom has moved for 4.28° without coupling and so the MLC board has not detected the movement on the rapier/reed encoder at the end of the movement.

This may be due to early release of the coupling anchor.

This causes the HI-DRIVE motor to move when the coupling is still not "tooth against tooth" and so the coupling slips to the next tooth.

*Remedies:*

Repeat the encoder/sensor timing procedure:

There is a special procedure that lets you delay the movement of the motor so that this takes place once the coupling has been released: contact PROMATECH Customer Service.

Enter the relevant console page and carefully follow all the steps indicated.

The circulation circuit on the SFC board (table C-N°04) may be faulty.

Replace the SFC board (table C-N°4).

*Code n°237*

*Description:*

Coupling movement timeout (3.0 sec)

*Maining*

The motor has moved for 3.0 sec without coupling and so the MLC board has not detected the movement on the rapier/reed encoder at the end of the movement.

This is a time-out warning for the previous warning (warning 236).

The system intervenes by stopping the motor after 3.0 seconds without any movement of the rapier/reed encoder.

This may also be caused by releasing the coupling anchor at an unexpected moment.

*Remedies:*

Repeat the encoder/sensor timing procedure.

Enter the relevant console page and carefully follow all the steps indicated.

The circulation circuit on the SFC board (table C-N°04) may be faulty.

Replace the SFC board (table C-N°4).

*Code n°238*

*Description:*

Staggering after coupling cannot be established.

*Maining*

The corrections and compensations in the current position make it impossible to calculate the staggering.

*Remedies:*

Repeat the encoder/sensor timing procedure: press Key "W" at the bottom of the page for details.

Enter the relevant console page and carefully follow all the steps indicated.

*Code n°239*

*Description:*

Incorrect staggering after coupling

*Maining*

The coupling has not been engaged in the start movement position, but on the next tooth.

This may be due to early release of the coupling anchor.

This causes the HI-DRIVE motor to move when the coupling is still not "tooth against tooth"

and so the coupling slips to the next tooth.

*Remedies:*

Repeat the encoder/sensor timing procedure.

There is a special procedure that lets you delay the movement of the motor so that this takes place once the coupling has been released: contact PROMATECH Customer Service.

Enter the relevant console page and carefully follow all the steps indicated.

*Code n°240*

*Description:*

Internal error 42

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

*Code n°241*

*Description:*

Internal error 43

*Maining*

Anomaly (this should only appear if there's a SW problem).

*Remedies:*

Contact PROMATECH Customer Service immediately.

<b>1064</b>	<b>Start interrupted because pick-finding not completed</b>
-------------	---

*Description:*

The loom start has been refused, as the previous pick-finding has not been completed properly. After the movement, the system has detected a divergence of at least 3 degrees between the start and end pick-finding positions.

*Remedies:*

See the alarm code 1063.

<b>1065</b>	<b>No start. Take loom to past 0°</b>
-------------	---------------------------------------

*Description:*

This means that the start-up procedure has been stopped because the machine is in an unsuitable position (in this specific case before the loom 0°).

This usually happens after a weft stop and you've tried to start without going past the 0°. It may also happen after a stop in alarm mode.

*Remedies:*

Move the loom in slow motion past the 0° and then start it up.

<b>1068</b>	<b>Start interrupted due to Jacquard negation</b>
-------------	---

*Description:*

The start-up has been interrupted by the jacquard shedding machine.

This usually happens after having moved the loom with the handwheel engaged.

*Remedies:*

Check the status of the Jacquard on the Jacquard controller display.

Wait about 30 seconds.

Switch the jacquard off and then back on again if the alarm persists.

Contact jacquard Customer Service.

<b>1069</b>	<b>Start interrupted due to Jacquard style change</b>
-------------	---

*Description:*

The start-up has been interrupted by the jacquard shedding machine.

This usually happens while there's a style change in progress on the display of the Jacquard.

*Remedies:*

Wait a few moments until this has finished

Switch the jacquard off and then back on again.

Contact jacquard Customer Service.

<b>1070</b>	<b>Start interrupted due to take-up roller negation</b>
-------------	---

*Description:*

When you press the start-up buttons, the MLC asks for the take-up roller drive status. This alarm is generated if the drive doesn't respond or replies with NOT READY.

*Remedies:*

Press the emergency button and then release it after about 10 seconds to restart the drive.  
 Replace the ETD-EWC drive (table E-N°2)  
 Replace the MLC board (table B-N°11).

<b>1071</b>	<b>Start interrupted due to let-off 1 negation</b>
-------------	--

*Description:*

When you press the start-up buttons, the MLC asks for the let-off 1 drive status. This alarm is generated if the drive doesn't respond or replies with NOT READY.

*Remedies:*

Press the emergency button and then release it after about 10 seconds to restart the drive.  
 Replace the ETD-EWC drive (table E-N°2).  
 Replace the MLC board (table B-N°11).

<b>1072</b>	<b>Start interrupted due to let-off 2 negation</b>
-------------	--

*Description:*

When you press the start-up buttons, the MLC asks for the let-off 2 drive status. This alarm is generated if the drive doesn't respond or replies with NOT READY.

*Remedies:*

Press the emergency button and then release it after about 10 seconds to restart the drive.  
 Replace the EWC2-EWC3 drive (table E-N°1).  
 Replace the MLC board (table B-N°11).

<b>1073</b>	<b>Start interrupted due to Host Computer style change</b>
-------------	--

*Description:*

A style change from Host Computer is in progress and so the start-up is prevented.

*Remedies:*

Wait a few moments until the style has been assigned.

<b>1077</b>	<b>Incorrect shedding machine type configuration</b>
-------------	--

*Description:*

A different shedding machine to that actually installed on the loom has been set in the setup menu.

*Remedies:*

Change the setting in the setup menu by following this procedure:  
 Go to the loom setup menu.  
 Enter code 357282111 in the field for the serial number of the loom.  
 Enter code 39 in the field for the loom number.  
 Switch the loom off and then back on again.  
 Set up the right shedding machine and confirm with OK.  
 Switch the loom off and then back on again.

<b>1078</b>	<b>Movement interrupted due to POSITIVE CUTTER repositioning.</b>
-------------	---

*Description:*

The requested movement is not possible, as the positive cutter motor is carrying out the self-timing procedure.

*Remedies:*

Wait for the positive cutter movement to be completed before moving the loom.

<b>1079</b>	<b>IO_OC line test failed.</b>
-------------	--------------------------------

*Description:*

The loom is fitted with an extra emergency line between the MLC, SFC and MHD boards (the MHD board cannot manage this line at present).  
 The SFC board generates the 24V DC used by this extra emergency line; the MLC board closes a contact to enable it.  
 When you switch the control box on, the MLC board pilots the 24V DC; if the procedure is successful, it sends a message via Can-bus to the SFC board, telling this board to keep this signal low.  
 This alarm appears if something goes wrong during this procedure.

*Remedies:*

Check the WCS314 cabling.  
 Check for 24V DC at wire 53 running between pin 4 on connection J01 on the MLC board and pin 4 in connection J27 on the SFC board.  
 Replace the SFC board (table C-N°04).  
 Replace the MLC board (table B-N°11).

<b>1082</b>	<b>Movement stopped alarm.</b>
-------------	--------------------------------

*Description:*

When you press the enable loom movement buttons, the MLC asks for the dobbie status. This alarm is generated if the shedding machine doesn't respond or replies "not ready".

*Remedies:*

Switch the loom off and then back on again.  
 If the problem persists, replace the MLC (table B-11).  
 If the problem persists, contact the shedding machine manufacturer's Customer Service to replace the board.

<b>1084</b>	<b>Communication problems with SFC board.</b>
-------------	---

*Description:*  
 This means that there are SFC board (table C-N°4) communication problems on the can-bus line.

*Remedies:*  
 If the board is not fed (by removing the 24V DC entering connector J04), there is no power for the other boards and so the console will not even come on.  
 Check that connector J24 is properly connected, in particular pin 14 (can-H) and pin 15 (can-L).  
 Check that connector J25 on the MHD board (table C-N°1) is properly connected, in particular pin 14 (can-H) and pin 15 (can-L).  
 Replace the SFC board.  
 If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1087</b>	<b>Loom stop request from external device.</b>
-------------	--

*Description:*  
 The system has detected a loom stop request from the currently connected external device. In other words, the system has found there's no 24V Dc at pin 12 on connection J36 on the SFC board (table C-N°4).

*Remedies:*  
 If the external device is connected, find cause for the stop on the device (wind-up etc...)  
 If there's no external device, check:  
 That there's a short-circuit jumper between pins 9 and 12 on connector J36 on the SFC board (table D-N°4)  
 That there's a short-circuit jumper between pins 1 and 2 on J20 on the SFC board (table D-N°4)  
 Check the state of fuse F3 on the SFC board (table D-N°4).  
 Replace the SFC board (table D-N°4).

<b>1088</b>	<b>Unsuccessful take-up roller initialising.</b>
-------------	--

*Description:*  
 This means that there are communication problems on the CAN-BUS line concerning the ETD/EWC1 drive (table E-N°2).

*Remedies:*  
 First check that the drive ETD/EWC1 (table E-N°2) is fed.  
 Check for 400V AC between the three black wires, cabling WDP301, in connection J27 in

the drive connection ETD/EWC1 (table E-N°2) using a multimeter (mains rating).  
 The power comes from terminal board XD01 (table E-N°5), which in turn is fed through cable WLP311 via fuse holder FU07 (table B-N°21).  
 Check the state of the fuses and replace if required with others of the same kind.  
 Check that terminals on fuse holder FU07 are properly tightened.  
 Replace the ETD-EWC1 drive (table E-N°2).  
 If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1089</b>	<b>Unsuccessful let-off 1 initialising.</b>
-------------	---

*Description:*

This means that there are communication problems on the CAN-BUS line concerning the ETD/EWC1 drive (table E-N°2).

*Remedies:*

See the alarm code 1088.

<b>1090</b>	<b>Unsuccessful let-off 2 initialising.</b>
-------------	---

*Description:*

This means that there are communication problems on the CAN-BUS line concerning the EWC2/EWC3 drive (table E-N°1).

*Remedies:*

First check that the drive EWC2/EWC3 (table E-N°1) is fed.  
 Check for 400V AC between the three black wires, cabling WDP302, in connection J27 in the drive connection EWC2/EWC3 (table E-N°1) using a multimeter (mains rating).  
 The power comes from terminal board XD01 (table E-N°5), which in turn is fed through cable WLP311 via fuse holder FU07 (table B-N°21).  
 Check the state of the fuses and replace if required with others of the same kind.  
 Check that terminals on fuse holder FU07 are properly tightened.  
 Replace the EWC2/EWC3 drive (table E-N°1).  
 If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1091</b>	<b>Unsuccessful let-off 3 initialising.</b>
-------------	---

*Description:*

This means that there are communication problems on the CAN-BUS line concerning the ETD/EWC1 drive (table E-N°2).

*Remedies:*

See the alarm code 1090.

<b>1100</b>	<b>No start due to dobbie negation because still initialising. Do not switch loom off.</b>
-------------	--

*Description:*

The start-up has been negated because the dobbie is synchronised for initialisation.

*Remedies:*

Wait a few seconds for the dobbie to reset.

If a Fimtextile dobbie:

Check the dobbie board power supply

Check for 50V DC between pins 10 and 11 of the free connection on the left-hand shoulder of the loom XLS10 on the DSR board: if absent, check for 50V DC between pins 1 and 2 of the J31 connection on the SFC board (table C-N°4). If absent, check for 50V DC between pins 3 and 6 on the J04 connection on the SFC board. If present, replace the SFC board; otherwise, check for 50V DC between pins 3 and 4 of the J04 connection on the DPS board (table B-N°8). If absent, replace the DPS board; otherwise check the WCP352 cabling that connects the J04 connection on the SFC board with the J04 connection on the DPS board.

If the problem persists, check the WLS345 e WLS13/2 cabling that connects the J31 connection on the SFC board to the CN110 connection on the FIMTEXTILE board.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

If a STÄUBLI dobbie:

Check the DSR board power supply (table B-N°10).

Check for 24V DC between pins 7 and 10 of the J06 connection on the DSR board: if absent, check for 24V DC between pins 3 and 4 of the J31 connection on the SFC board (table C-N°4). If absent, check the state of fuse F6 on the SFC board and replace the SFC board if necessary. Check the WCP 370 cabling connecting the J31 connection on the SFC board with the J06 connection on the DSR board.

If the problem persists, replace the DSR board.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1101</b>	<b>Movement not possible due to main motor overload cut-out</b>
-------------	---

*Description:*

The requested movement has been refused, as the temperature probe inside the main motor has detected a temperature higher than the accepted max limit. In other words, the main motor is overheated.

*Remedies:*

Check that the motor has no mechanical impediments and turns freely

Check the mechanical transmission of the motor.

Check the state and the cleaning of the cooling fan on main motor.

Make sure that the fan turns whenever the oil pump is running.

Check that the motor are covered with dust that prevents it from cooling down properly.

Check the cabling XCS301 connecting the connection J03 on the MLC board (table B-N°11) with connection J18 inside the HD converter (table B-N°7).

Replace the main motor if the problem persists.

Replace the HD converter motor (table B-N°7) if the problem persists.

If this problem arises on a high-speed loom with exceptionally bulky Jacquard, contact Promatech Customer Service to check that the load is not too high for the motor.

<b>1103</b>	<b>Pattern processing in progress.</b>
-------------	--

*Description:*

This warning appears during the AP change (absolute positioning in the pattern shed) if this takes too long (when changing the shed in a very long pattern).

*Remedies:*

Wait a few seconds for the pattern to be processed by the MLC board.

<b>1104</b>	<b>Start interrupted due to negation from weft colour selector as in auto-setup.</b>
-------------	--

*Description:*

This alarm appears because you have tried to move the loom while the electronic weft colour selector fingers are engaged in the self-learning process.

*Remedies:*

Wait for the self-learning procedure to be completed.

Replace the MHD board (table C-N°1) if the problem persists.

<b>1105</b>	<b>Start interrupted due to negation from weft colour selector, as in finger servicing mode.</b>
-------------	--

*Description:*

You have tried to move the loom during weft colour selector finger maintenance (see console manual).

In this case, all the weft selector fingers should move continuously and in turn.

*Remedies:*

Return to the electronic weft colour selector menu and press the OK button in the centre of the page.

If the alarm persists, switch the loom off and then back on again.

Replace the MHD board (table C-N°1).

<b>1106</b>	<b>Start interrupted due to negation from weft selector, as in auto-setup error mode.</b>
-------------	---

*Description:*

You've tried to start the loom up, but the MHD weft colour selector board (table C-N°1) doesn't permit the movement, as there have been problems during the self-learning.

*Remedies:*

see alarm 6149.

<b>1107</b>	<b>Start interrupted due to negation from weft selector for position error.</b>
-------------	---

*Description:*

You've tried to start the loom up, but the MHD weft colour selector board (table C-N°1) doesn't permit the movement, as the system has detected a finger position that's not compatible with the loom position.

*Remedies:*

see alarm 6149.

<b>1108</b>	<b>Start interrupted due to negation from weft selector for overtemperature error.</b>
-------------	--

*Description:*

You've tried to start the loom up, but the MHD weft colour selector board (table C-N°1) doesn't permit the movement, as there have been overtemperature problems with one of the fingers.

*Remedies:*

see alarm 6147.

<b>1109</b>	<b>Start interrupted due to negation from weft colour selector with internal alarm.</b>
-------------	---

*Description:*

You've tried to start the loom up, but the MHD weft colour selector board (table C-N°1) doesn't permit the movement, as there have been problems inside the board itself.

*Remedies:*

see alarm 6148.

<b>1110</b>	<b>Slow motion interrupted</b>
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*Description:*

Slow motion movement has been interrupted after 5 consecutive turns of the loom. This is a warning.

*Remedies:*

If you want to continue with this type of movement, simply press the Slow Motion button again: the count will start again for another 5 turns etc.

The warning remains on the Console display until the next loom start-up.

1111	<b>Pick-finding due to previous blackout while loom weaving.</b>
------	--

*Description:*

In this case the loom has been switched off or there's been a blackout during weaving. When you press the start-up buttons, the loom therefore carries out a pick-finding cycle to check that the loom isn't out-of-synch with the shedding machine. When you press the start-up buttons, the machine doesn't start as usual, but carries out a pick-finding cycle.

*Remedies:*

Wait for the movement to finish and then restart the loom.

1113	<b>Loom oil temperature alarm.</b>
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*Description:*

This alarm is only active if the loom is fitted with the optional loomcooler kit. This alarm warns that the loom lubrication oil temperature has exceeded the set threshold.

*Remedies:*

Check the set temperature on the Console. Check that there's enough cooling water.  
Check that there's compressed air in the loomcooler pneumatic valve.  
Check the power supply at relay KEV (table E-N°6) in the let-off box: there should be 24V DC between pins 13 and 14. If so, check that the contact between pins 5 and 9 and the contact between pins 12 and 8 of relay KEV are closed.  
Replace relay KEV.  
Replace the loomcooler EV40 solenoid valve.  
If there's no 24V DC between pins 13 and 14 in relay KEV, check for 24V DC between pins 1 and 2 in connection J22 on the RIO board (table E-N°4):  
Check the state of fuses F1 and F3 on the RIO board (table E-N°4).  
Replace the RIO board (table E-N°4). Replace the temperature sensor on the RH oil distributor.

1114	<b>Loom type setup configuration incompatible with dip switch board RIO setting.</b>
------	--

*Description:*

The RIO board (table E-N°4) has a series of dip switches that need to be set-up to suit the loom on which it is fitted. This alarm warns you that the system has found a discrepancy between the set-up of these switches and the loom type.

*Remedies:*

Check the set-up of the switches by comparing it with the table below.

	1	2	3	4	5	6	7	8	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Silver HD
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Silver HD FTS type
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Silver brake-clutch
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Silver brake-clutch FTS type
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Silver HD dyna terry
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Silver brake-clutch dyna terry
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EK505
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	K88
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Alpha HD
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Alpha brake-clutch
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Thema Jet
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	invalid setting
off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<b>1119</b>	<b>Emergency line active QM01-02-03-04 QF01-02-04.</b>
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*Description:*

This alarm warns that the system has detected the opening of one of the magnetothermals FU09 (table B-N°19), QF02 (table C-N°17). These magnetothermals have an auxiliary contact in series with the emergency button circuit: this alarm is generated when this opens.

*Remedies:*

Check that FU09 (table B-N°19) and QF02 (table C-N°17) are closed, otherwise close them and try starting the loom up.

If FU09 fails to remain closed, it means that the suction motor is absorbing too much current (more than 4A; make sure that the suction motor is not mechanically obstructed, that the turbine is not dirty and that the air conduits are not clogged up.

Make sure that the motor and the power cables are not short-circuited. Replace the suction motor if necessary. Replace the electromagnetic switch FU09, if necessary.

If selector QF02 (table C-N°17) fails to remain closed, it means that the thermal cutter circuit is short-circuited.

Make sure that the primary windings in transformer T04 (table D-N°8) are not short-circuited. Replace the magnetothermal switch QF02 if necessary.

If this alarm appears even when FU09 and QF02 are closed, make the following checks:

Check the state of fuse F4 on the SFC board. Check that the contact between terminals 13 and 14 on FU09 is closed when FU09 is closed. Check that the contact between terminals 11 and 14 on QF02 is closed when QF02 is closed. Check the cabling WCS315/2 connecting the FU09 with QF02.

<b>1121</b>	<b>24 V DC emergency line active due to manual microswitch.</b>
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*Description:*

This alarm warns that the system has detected the coupling of the manual movement pinion. In other words, the system has found that one of the contacts inside the microswitch above the manual movement coupling pinion has closed.

*Remedies:*

Check that the safety microswitch for manual movement isn't engaged.

Check that contacts 3-4 on the safety microswitch do not stay closed when the button is released; otherwise replace the microswitch.

Adjust the switch again by moving it slightly downwards.

Replace the RIO board (table E-N°4).

<b>1122</b>	<b>Emergency line active due to emergency buttons</b>
-------------	---

*Description:*

This alarm warns that the system has detected the use of the emergency mushroom button on the sides of the loom. In other words, the system has found that the contacts in series with the emergency button circuit have opened.

*Remedies:*

Make sure that the contacts between pins 1 and 2 for the RH and LH emergency buttons are closed when the button is not pressed; if not, replace the emergency button contacts.

Check the connections and the cabling XLS04 near the LH re-start lamp and XLS02 near the RH re-start lamp.

With the control box on, check for 24V DC (earthed) at the following points:

- SFC board (table C-N°4), connection J33 pin 4, if this isn't so, check jumper between pins 3 and 4 on connection J33 on the SFC board (table C-N°4).

- SFC board (table C-N°4), connection J25 pin 3, if this isn't so, check or replace the SFC board (table C-N°4).

- SFC board (table C-N°4), connection J25 pin 4, if this isn't so, check the RH emergency button, replace emergency button RH of the loom.

- SFC board (table C-N°4), connection J25 pin 7, if this isn't so, check or replace the SFC board (table C-N°4).

- SFC board (table C-N°4), connection J25 pin 8, if this isn't so, check the LH emergency button, replace emergency button LH of the loom.

- SFC board (table C-N°4), connection J29 pin 17, if this isn't so, check jumper between pins 16 and 17 on connection J29 on the SFC board.

- pin 16 in connection J03 of the RIO board (table E-N°4); if not, check the cabling from pin 16 on J26 on the SFC board (table C-N°4) to pin 16 on J03 on the RIO board (table E-N°4)

- pin 1 in connection J41 of the RIO board (table E-N°4); if not, check the closed contact between pins 1 and 2 on connection XLS01 near the manual movement microswitch and adjust its height or replace if necessary.

- pin 2 in connection J41 on the RIO board (table E-N°4); if not, check the cabling of emergency button on the let-off box and replace the emergency button on the let-off box if necessary.

- pin 17 in connection J26 on the SFC board (table C-N°4); if not, check cable WLP360 used to connect connection J26 pin 17 on the SFC board (table C-N°4) to connection J03 pin 17 on the RIO board (table E-N°4).

Click on the green key "S" at the side for more details: an emergency line simulator opens showing you how the circuit works and any active alarms.

Click on the green key "W" for more details on how to deal with this problem: a wizard opens that guides you through the trouble-shooting process.

<b>1124</b>	<b>Emergency line activated by emergency button on main box</b>
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*Description:*

This alarm warns that the system has detected the use of the emergency mushroom button on the main box (table A-N°5). In other words, the system has found that the contact in series with the emergency button circuit has opened and so there is no 24V DC at pin 4 in connection J37 on the SFC board (table C-N°4).

*Remedies:*

Release the mushroom button on the control box.

If the problem persists, switch the loom off and open connection J37 on the SFC board (table C-N°4). Insert the tips of the tester between pins 1 and 4 in the connector in the cabling and check for 0 Ohm (contact closed) when the mushroom button is not pressed. If not, check cable WCS320/1 used to connect connection J37 to the emergency button.

Replace the SFC board (table C-N°4).

<b>1125</b>	<b>24V DC emergency line active due to Jacquard/wind-up/ext. devices</b>
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*Description:*

This alarm warns you that the system has detected the use of the emergency mushroom button on the Jacquard, on the wind-up device or on an external device. More specifically, the system has found there's no 24V DC at pin 4 in connection J22 on the SFC board (table C-N°4).

*Remedies:*

Check that the contact of the emergency button for the Jacquard, wind-up or other external device is closed.

Check that the jumper is fitted between pins 3 and 4 on connection J22 on the SFC board (table C-N°4) if there's no Jacquard.

Make sure that the contact on the emergency button on the Jacquard (if fitted) is closed. This is connected to pins 3-4 in connector J22 on the SFC board (table C-N°4).

Check that the jumper is fitted between pins 3 and 8 on connection J36 on the SFC board (table C-N°4) if there's no wind-up.

Make sure that the contact on the emergency button on the wind-up (if fitted) is closed. This is connected to pins 7-8 in connector J36 on the SFC board (table C-N°4). Also check the jumper between pins 3-6 on this connector.

If the jacquard, check also cable WCS318 used to connect connection J22 on the SFC board to connection XCS10 on the control box edge.

If the wind-up or an external device, check also cable WCS315/1 used to connect connection J36 on the SFC board to the wind-up or external device.

Replace the SFC board (table C-N°4).

<b>1126</b>	<b>Start interrupted due to failed TE-400L programming</b>
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*Description:*

The system prevents the start-up because the TE-400L weft detector programming hasn't been done properly.

The weft detector is programmed when you switch on the control box (weft detector sensitivity channel).

*Remedies:*

Make sure that fuse F2 on the MLC board (table B-N°11) hasn't blown.

Check that there is 24V DC between pins 8 and 9 on connector J43 on the MLC board (table B-N°11).

Check that there is 24V DC between pins 6 and 9 on connector XLS12 on the weft detector. Make sure that sensitivity signal pin 2 in connection J43 on the MLC board (table B-N°11) is wired properly.

Check that the sensitivity signal pin 5 on XLS12 is wired properly.

Replace the weft detector.

Replace the MLC board (table B-N°11).

<b>1127</b>	<b>Incorrect LH min pressure switch status</b>
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*Description:*

The system has detected a malfunction in the LH min pressure switch, i.e. there is 24V DC at pin 2 on connection J 36 on the MLC board (table B-N°11) when the loom is switched on with the oil pump motor off, which means that the contact in the pressure switch is already closed before the oil pump starts and so the reading is not reliable.

*Remedies:*

Check that cable WLS360 used to connect connection J36 on the MLC board to the LH min pressure switch isn't crushed, has holes or is cut.

Replace the pressure switch.

Replace the MLC board (table B-N°11).

<b>1128</b>	<b>Incorrect RH min pressure switch status</b>
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*Description:*

The system has detected a malfunction in the RH min pressure switch, i.e. there is 24V DC at pin 2 on connection J 11 on the RIO board (table E-N°4) when the loom is switched on with the oil pump motor off, which means that the contact in the pressure switch is already closed before the oil pump starts and so the reading is not reliable.

*Remedies:*

Check that cable WLS400 used to connect connection Y11 on the RIO board to the RH min pressure switch isn't crushed, has holes or is cut.

Replace the pressure switch.

Replace the RIO board (table E-N°4).

<b>1132</b>	<b>Pattern colour not associated in STRAP/ASC table</b>
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*Description:*

You have one or more colours in the pattern that haven't been associated to a finger in the STRAP/ASC table.

*Remedies:*

Check that all the colours in the assigned pattern are actually associated to one or more fingers in the STRAP/ASC table.

<b>1135</b>	<b>Start interrupted due to clock not working</b>
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*Description:*

The start-up of the loom has been inhibited because the Console clock hasn't been set.

*Remedies:*

Enter in the loom setup menu and press the date/time button (first button on the left).

Set the date and the time and then confirm with OK.

Start the loom up.

Replace the MLC board (table B-N°11) if the problem persists.

See also the Console user manual.

<b>1145</b>	<b>Start interrupted due to healds working</b>
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*Description:*

You've entered the auxiliary heald functions menu, but forgotten to disable the function before pressing the loom start-up buttons.

*Remedies:*

Enter in the auxiliary heald functions menu and press the END button.

See also the Console user manual.

<b>1147</b>	<b>Shut-down times calculation not done</b>
-------------	---

*Description:*

When the loom is not used for prolonged periods, it will recover up to 60 automatic shift changes when you switch it on. In other words, if more than 60 shift changes have taken place during the period the loom has been switched off, it cannot recover all of these. In this case, the statistics for the shifts will not be realistic when you switch the loom on.

*Remedies:*

Non c'è alcun allarme è solo una segnalazione all'utente.

<b>1148 -1159</b>	<b>Communication problems with pre-feeder n°1-12</b>
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*Description:*

This warns you that the loom system fails to dialog in CAN-BUS with pre-feeder n°1-12.

*Remedies:*

Check the power supply and the connection of the pre-feeder box (when the box isn't connected, the alarm usually concerns the first pre-feeder).

Check connector XC07 at the base of the main control box.

Check the power supply (mains) at FU01 (table B-N°26).

Check the fuses inside FU01 (table B-N°26).

Check that there's 24V DC between pin 12 on connection J47 on the MLC board (table B-N°11) and the earth. If none, check the state of fuse F4 on the SFC board (table C-N°4) and make sure that the short-circuit jumper is fitted between pins 18 and 13 in connection J52 on the MLC board.

Check the cabling WCS336 connecting the connection J47 on the MLC board with the connection XCS07 on the main control box.

Check connection XCP02 on the edge of the main control box and make sure that cable WLP310 is inserted properly.

Check the connection of pre-feeder n°1-12.

Replace pre-feeder n°1-12.

Replace the MLC board (table B-N°11).

Replace the SFC board (table C-N°4).

Contact the pre-feeder manufacturer or PROMATECH Customer Service.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1161</b>	<b>No start due to end cloth, switch off the lamp</b>
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*Description:*

The programmed production has been reached and the loom has been programmed to stop until this alarm has been reset. See also the Console user manual (production programming paragraphs).

To start the loom, you need to switch the lamp off using the relevant button in the cloth programming page.

*Remedies:*

To start the loom, you need to switch the lamp off using the relevant button in the production programming page.

<b>1162</b>	<b>Caution, let-off 1 beam about to end</b>
-------------	---

*Description:*

This message only appears if you've used the end beam warning function. This warns you that beam 1 is about to end, as set in the beam change programming menu.

*Remedies:*

There's no alarm, just a user warning.

<b>1163</b>	<b>Caution, let-off 2 beam about to end</b>
-------------	---

*Description:*

This message only appears if you've used the end beam warning function. This warns you that beam 2 is about to end, as set in the beam change programming menu.

*Remedies:*

There's no alarm, just a user warning.

<b>1164</b>	<b>Caution, let-off 3 beam about to end</b>
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*Description:*

This message only appears if you've used the end beam warning function. This warns you that beam 3 is about to end, as set in the beam change programming menu.

*Remedies:*

There's no alarm, just a user warning.

<b>1165</b>	<b>Meter inconsistency between drive and MLC</b>
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*Description:*

This alarm appears when there is a discrepancy between the metres saved in the MLC (table B-N°11) and those sent from the take-up roller drive when you switch the loom on (table E-N°2).

*Remedies:*

This alarm very often appears after a drive software upgrade. Switch the loom off and then back on again. To check that the data are saved correctly when you switch the control box off, remove the cover on the let-off box and press the emergency stop button. Replace the take-up roller drive if the problem persists (table E-N°2). Replace the MLC board (table B-N°11).

<b>1166</b>	<b>Unacceptable weft density received from Jacquard (4-400 wefts/cm)</b>
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*Description:*

Incorrect weft density parameters have been received from the Jacquard controller.

*Remedies:*

Check the weft density pattern settings in the jacquard controller: these should be between 4 and 400 wefts/cm

Check the Console settings for the jacquard pattern (SOCOS or FULLTRONIC): see Console user manual.

<b>1167</b>	<b>Positive cutter initialisation has failed.</b>
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*Description:*

The positive cutter drive U01 (table B-N°5) hasn't been set properly by the system.

*Remedies:*

Check the input power supply (220V AC three-phase) at drive U01 (table B-N°5). If none, check the fuses on the auxiliaries (outputs) of transformer T05 (table D-N°10) and cable WCP312 used to connect transformer T05 to the "power in" connection in drive U01.

Check the state of the three fuses FU05 (table B-N°23) and make sure that the terminals on the fuse holder are tightened securely. Check the cabling WCP312 connecting the fuses FU05 with transformer T05.

Check connections ENC.A and ENC.B on drive U01.

Replace the drive U01 (table B-N°5).

Replace the MLC board (table B-N°11).

If this alarm appears, but there is no positive cutter fitted on the loom, check the console set-up and change this as required (see console manual).

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>1168</b>	<b>Start interrupted due to beam 1 tension too low</b>
-------------	--

*Description:*

The loom start-up has been inhibited because the tension on beam 1 is too low for the set limits.

These limits, inhibiting the start-up, are or - 80the required tension.

This has been included to prevent the loom from starting up after the manual tensioning/ slackening movements..

*Remedies:*

Check the actual tension of warp 1: if too low, tension warp 1 and then start the loom up.

If the problem persists, it's likely there are problems with the reading of the warp 1 load cell.

Check that there's 24V DC between pins 1 and 3 on connection J13 on the RIO board (table E-N°4), otherwise check the state of fuse F2 on the RIO board. Check the state of fuse F1 on the SFC board (table C-N°4).

Check cable WLS406 used to connect connection J13 on the RIO board with the amplifier of the load cell on the rear RH frame of the loom.

Replace the load cell amplifier on the rear RH frame of the loom.

Replace the beam 1 load cell.

Make sure that the load cell bar bends freely (i.e. no obstructions).

<b>1169</b>	<b>Start interrupted due to beam 1 tension too high</b>
-------------	---

*Description:*

The loom start-up has been inhibited because the tension on beam 1 is too high for the set limits.

These limits, inhibiting the start-up, are or - 80th the required tension.

This has been included to prevent the loom from starting up after the manual tensioning/slackening movements.

*Remedies:*

Check the actual tension of warp 1: if too high, slacken warp 1 and then start the loom up.

If the problem persists, it's likely there are problems with the reading of the warp 1 load cell.

Check that there's 24V DC between pins 1 and 3 on connection J13 on the RIO board (table E-N°4), otherwise check the state of fuse F2 on the RIO board. Check the state of fuse F1 on the SFC board (table C-N°4).

Check cable WLS406 used to connect connection J13 on the RIO board with the amplifier of the load cell on the rear RH frame of the loom.

Replace the load cell amplifier on the rear RH frame of the loom.

Replace the beam 1 load cell.

Make sure that the load cell bar bends freely (i.e. no obstructions).

<b>1170</b>	<b>Start interrupted due to beam 2 tension too low</b>
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*Description:*

The loom start-up has been inhibited because the tension on beam 2 is too low for the set limits.

These limits, inhibiting the start-up, are or - 80th the required tension.

This has been included to prevent the loom from starting up after the manual tensioning/slackening movements.

*Remedies:*

Check the actual tension of warp 2: if too low, tension warp 2 and then start the loom up.

If the problem persists, it's likely there are problems with the reading of the warp 2 load cell.

If a bilateral second let-off (LH let-off):

Check that there's 24V DC between pins 1 and 3 on connection J31 on the MLC board

(table B-N°11), otherwise check the state of fuse F4 on the SFC board (table C-N°4).

Check cable WLS366 used to connect connection J31 on the MLC board with the amplifier of the load cell on the rear LH frame of the loom.

Replace the load cell amplifier on the rear LH frame of the loom.

Replace the beam 2 load cell.

Make sure that the load cell bar bends freely (i.e. no obstructions).

If an upper second let-off (above the frames):

Check that there's 24 V DC between pins 1 and 3 on connection J14 on the RIO board

(table E-N°4), otherwise check the state of fuse F2 on the RIO board. Check the state of fuse F1 on the SFC board (table C-N°4).

Check cable WLS407 used to connect connection J14 on the RIO board with the amplifier of the load cell on the rear RH frame of the loom.

Replace the load cell amplifier on the rear RH frame of the loom.

Replace the beam 2 load cell.

Make sure that the load cell bar bends freely (i.e. no obstructions).

<b>1171</b>	<b>Start interrupted due to beam 2 tension too high</b>
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*Description:*

The loom start-up has been inhibited because the tension on beam 2 is too high for the set limits.

These limits, inhibiting the start-up, are or - 80th the required tension.

This has been included to prevent the loom from starting up after the manual tensioning/slackening movements.

*Remedies:*

Check the actual tension of warp 2: if too high, slacken warp 2 and then start the loom up.

If the problem persists, it's likely there are problems with the reading of the warp 2 load cell.

If a bilateral second let-off (LH let-off):

Check that there's 24V DC between pins 1 and 3 on connection J31 on the MLC board

(table B-N°11), otherwise check the state of fuse F4 on the SFC board (table C-N°4).

Check cable WLS366 used to connect connection J31 on the MLC board with the amplifier of the load cell on the rear LH frame of the loom.

Replace the load cell amplifier on the rear LH frame of the loom.

Replace the beam 2 load cell.

Make sure that the load cell bar bends freely (i.e. no obstructions).

If an upper second let-off (above the frames):

Check that there's 24 V DC between pins 1 and 3 on connection J14 on the RIO board

(table E-N°4), otherwise check the state of fuse F2 on the RIO board. Check the state of fuse F1 on the SFC board (table C-N°4).

Check cable WLS407 used to connect connection J14 on the RIO board with the amplifier of the load cell on the rear RH frame of the loom.

Replace the load cell amplifier on the rear RH frame of the loom.

Replace the beam 2 load cell.

Make sure that the load cell bar bends freely (i.e. no obstructions).

<b>1172</b>	<b>Start interrupted due to beam 3 tension too low</b>
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*Description:*

The loom start-up has been inhibited because the tension on beam 3 is too low for the set limits.

These limits, inhibiting the start-up, are or - 80th the required tension.

This has been included to prevent the loom from starting up after the manual tensioning/slackening movements.

*Remedies:*

Check the actual tension of warp 3: if too low, tension warp 3 and then start the loom up.

If the problem persists, it's likely there are problems with the reading of the warp 3 load cell.

Check that there's 24V DC between pins 1 and 3 on connection J14 on the RIO board (table E-N°4), otherwise check the state of fuse F2 on the RIO board.

Check the state of fuse F1 on the SFC board (table C-N°4).

Check cable WLS407 used to connect connection J14 on the RIO board with the load cell amplifier on the rear RH frame of the loom.

Replace the load cell amplifier on the rear RH frame of the loom.

Replace the beam 3 load cell.

Make sure that the load cell bar bends freely (i.e. no obstructions).

<b>1173</b>	<b>Start interrupted due to beam 3 tension too high</b>
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*Description:*

The loom start-up has been inhibited because the tension on beam 3 is too high for the set limits.

These limits, inhibiting the start-up, are or - 80th the required tension.

This has been included to prevent the loom from starting up after the manual tensioning/slackening movements.

*Remedies:*

Check the actual tension of warp 3: if too high, slacken warp 3 and then start the loom up.

If the problem persists, it's likely there are problems with the reading of the warp 3 load cell.

Check that there's 24V DC between pins 1 and 3 on connection J14 on the RIO board (table E-N°4), otherwise check the state of fuse F2 on the RIO board. Check the state of fuse F1 on the SFC board (table C-N°4).

Check cable WLS407 used to connect connection J14 on the RIO board with the load cell amplifier on the rear RH frame of the loom.

Replace the load cell amplifier on the rear RH frame of the loom.

Replace the beam 3 load cell.

Make sure that the load cell bar bends freely (i.e. no obstructions).

<b>1174</b>	<b>Movements not allowed due to photocell deactivation</b>
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*Description:*

You've tried to move the loom in continuous running or pick-finding mode when the photocell disable selector on the main control box is in position "0" or this selector is in position "0" while the loom is running.

*Remedies:*

If you want to move the loom in slow motion with the photocells disabled, you need to turn the selector to "0" and then enter a level 3 Memory Card.

If you don't want to disable the photocells, turn the selector to position "1".

If the alarm persists even when the selector is in position "1", replace the selector.

Replace the SFC board (table C-N°4).

<b>1175</b>	<b>Start interrupted due to let-offs Off</b>
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*Description:*

The loom can't start because all the let-offs are disabled.

*Remedies:*

Enable at least one of the motors in the configuration page:

Enter in the Console setup menu:

Enter code 357282111 in the field for the serial number of the loom.

Enter code 39 in the field for the loom number.

Switch the loom off and then back on again

Set the correct number of let-offs and confirm with OK.

Switch the loom off and then back on again.

See also the Console user manual.

1280	Generic MLC error level 1
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*Description:*

There's a level 1 internal error on the MLC board (table B-N°11).

*Remedies:*

Replace the MLC board (table B-N°11).

Contact PROMATECH Customer Service.

1536	Generic MLC error level 2
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*Description:*

There's a level 2 internal error on the MLC board (table B-N°11).

*Remedies:*

Replace the MLC board (table B-N°11).

Contact PROMATECH Customer Service.

1792	Generic MLC error level 3
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*D* *escription:*

There's a level31 internal error on the MLC board (table B-N°11).

*Remedies:*

Replace the MLC board (table B-N°11).

Contact PROMATECH Customer Service.

## DRIVE ALARMS

### EWC1 drive - (tav E-N°2)

<b>2048</b>	<b>Generic let-off 1 error level 0</b>
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*Description:*

There's been a level 0 internal error on the let-off 1 drive (table E-N°2).

*Remedies:*

Replace the let-off drive EWC1 (table E-N°2).  
Contact PROMATECH Customer Service.

<b>2053</b>	<b>Set diameter outside accepted limits</b>
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*Description:*

The set diameter for beam 1 is out of range.  
Accepted range: 150-1200mm

*Remedies:*

Set another beam diameter (150 - 1200 mm)

<b>2054</b>	<b>Device not ready</b>
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*Description:*

There's been a hardware problem inside the let-off 1 drive.

*Remedies:*

Switch the control box off/on to see if the problem is resolved.  
Replace the drive if the problem persists (table E-N°2).

<b>2055</b>	<b>Automatic movement speed too slow</b>
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See alarm 2149.

<b>2056</b>	<b>Set tension too low</b>
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*Description:*

You have set a tension below the min accepted limit.

*Remedies:*

If you set a tension that falls outside the accepted range, the Console displays a message: "Value out of range (a, b)".

"a" is the min tension you can set in all the scales.

"b" is the max value for the selected scale.

Set a value between "a" and "b".

<b>2057</b>	<b>Set tension too high</b>
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*Description:*

You have set a tension over the max accepted limit.

*Remedies:*

If you set a tension that falls outside the accepted range, the Console displays a message:

"Value out of range (a, b)".

"a" is the min tension you can set in all the scales.

"b" is the max value for the selected scale.

<b>2059</b>	<b>Drive temperature too high</b>
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*Description:*

Let-off 1 drive temperature (table E-N°2) too high.

*Remedies:*

Check that the room temperature isn't too high.

Motor overload (e.g. when working with low densities at the end of the beam for prolonged periods).

Check that there are no mechanical obstructions impeding the movement of the motor.

Check the mechanical transmission of the motor.

Check that the drive is properly screwed on the dissipator.

Replace the drive if the problem persists (table E-N°2).

<b>2060</b>	<b>Motor temperature too high</b>
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*Description:*

The internal temperature of the let-off 1 motor has reached 140°C.

*Remedies:*

Extract the motor and check that the mechanical transmission hasn't seized.

Replace the motor.

If the problem occurs when the you switch the control box on, replace the drive (table E-N°2).

<b>2061</b>	<b>Motor overload</b>
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*Description:*

The let-off 1 motor has asked the drive to supply high current for a few seconds (16A RMS).

*Remedies:*

&soluzioni=Check the KI and KP settings in the beam diameter setting menu.

Switch the control box off/on.

Check that the motor transmission hasn't seized.

Replace the motor.

Replace the drive (table E-N°2).

<b>2063</b>	<b>Set density too low</b>
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*Description:*

You have tried to enter an unacceptably low weft density (refused by the drive).  
This alarm should never appear; if it does, contact Promatech Customer Service.

*Remedies:*

The minimum wefts/cm limit for the drive is 1.0. All values set on the Console below this are ignored. This means that if you set a weft density of less than 1.0 wefts/cm, there will be no warnings and the drive will automatically adopt 1.0 wefts/cm.

The Console limits, however, are different: min 0.1 wefts/cm and therefore, when you go below this limit, there will be a warning: "Value out of range 0.1 - 200".

This alarm should, therefore, never appear, as the Console limits intervene first.

If the alarm appears, contact Promatech Customer Service (drive software needs to be checked).

<b>2064</b>	<b>Set density too high</b>
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*Description:*

This alarm isn't used as the drive hasn't got a max wefts/cm limit.  
The max limit is set in the Console software: max 200 wefts/cm.

*Remedies:*

This alarm should, therefore, never appear, as the Console limits intervene first.

If the alarm appears, contact Promatech Customer Service (drive software needs to be checked).

<b>2079</b>	<b>Illegal command in current state</b>
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*Description:*

You've asked the loom to move but the let-off 1 drive is in a status that doesn't permit this.  
For example: the drive is carrying out one of these automatic movements:

- 1) Yarn tensioning to the required value after a loom stop.
- 2) Automatic slackening at a loom stop, to be recovered when you next press the buttons on the pushbutton panel.
- 3) Corrections during pick-finding and at start-up.

This alarm appears if another movement request arrives from the MLC at the same time.

*Remedies:*

Wait for the movement to finish before making the next one.

Replace the drive (table E-N°2).

Replace the MLC board (table B-N°11).

If the alarm persists, contact PROMATECH Customer Service, as this alarm means that there's an internal software error.

<b>2082</b>	<b>Timeout for manual command</b>
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*Description:*

During manual movement of the motor, the MLC sends the "manual movement" command every 300ms; the system generates this alarm if this message fails to reach the let-off 1 motor drive.

*Remedies:*

Replace the MLC board (table B-N°11).

Replace the drive (table E-N°2).

<b>2085</b>	<b>ERR_HFK</b>
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*Description:*

The system has detected a hardware problem in the braking resistance in the let-off 1 drive.

*Remedies:*

Replace the drive (table E-N°2).

<b>2086</b>	<b>ERR_PSOS</b>
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*Description:*

This warns that there's a too high tracking error between the loom and the let-off 1 motor (5 turns of the motor); in other words, the motor is 5 turns late or early.

*Remedies:*

Check that there are no mechanical obstructions impeding the free rotation of the motor.

Replace the motor.

Replace the drive (table E-N°2).

<b>2087</b>	<b>ERR_INTERN</b>
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*Description:*

The speed and acceleration settings for the let-off 1 drive for automatic movements received from the loom are incorrect.

The parameters are incoherent.

*Remedies:*

Check the connections J05 and J06 on the drive (table E-N°2).

Replace the drive (table E-N°2).

Replace the MLC (table B-N°11).

<b>2089</b>	<b>ERR_FATAL</b>
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*Description:*

The automatic let-off 1 movements parameter settings are incoherent.  
 When the motor hasn't finished an automatic movement and another command for automatic movement arrives.  
 This alarm is generated when several commands occur at the same time and this should not happen in normal mode.

*Remedies:*

Replace the MLC (table B-N°11).  
 Replace the drive (table E-N°2).  
 Contact PROMATECH Customer Service.

<b>2099</b>	<b>Warp sensor too taut</b>
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*Description:*

Warp tension 1 read by the sensor (load cell) is above the set limits.

*Remedies:*

Change the limits set on the Console or loosen the tension of the yarn.  
 Check the state of the cell for warp 1.  
 Check cabling WLS406 connecting connection J13 on the RIO board (table E-N°4) with connection J01 on the amplifier on the rear RH frame of the loom.  
 Check connections J01 and J02 on amplifier VX047/3 on the rear RH frame of the loom (the device in the black container used to connect the load cell).  
 Replace the let-off 1 load cell.  
 Replace the amplifier VX047/3.  
 Replace the RIO board (table E-N°4).  
 Replace the drive (table E-N°2).  
 Replace the let-off 1 motor.  
 Replace the MLC board (table B-N°11).

<b>2100</b>	<b>Inconsistent main encoder signals</b>
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*Description:*

The main encoder signals reach the let-off 1 drive in the wrong order.

*Remedies:*

Check that the connectors are properly coupled and especially:

Check connectors J40 and J2 on the MLC board (table B-N°11).  
 If it is fitted with motorised positive cutter, check connectors ENC B and ENC A on the cutter motor drive (table B-N°5).  
 Check connectors J24 and J25 on the MHD board (table C-N°1).  
 Check connectors J24 and J26 on the SFC board (table C-N°4).  
 Check connectors J03 and J31 on the RIO board (table E-N°4).  
 Check connector J05 on the drive (table E-N°2).

Replace the drive (table E-N°2).  
 Replace the main encoder.  
 Replace the MLC board (table B-N°11).

<b>2101</b>	<b>Power driver overvoltage</b>
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*Description:*

The DC supply inside the let-off 1 drive exceeds the set limits (565 V DC +15%).

*Remedies:*

Check that the line power rating does not exceed 460 V AC.

If the power supply is OK, replace the drive (table E-N°2).

<b>2102</b>	<b>Power driver undervoltage</b>
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*Description:*

The DC supply inside the let-off 1 drive is below the set limits (565V DC -15%)

*Remedies:*

Check that the line power rating does not fall below 340V AC.

If the power supply is OK, replace the drive (table E-N°2).

Check connector J27 on the drive.

Check that cabling WDP301 is correct and properly secured in the terminal board XD01 (table E-N°5).

Check that cabling WLP311 is correct and properly secured in the terminal board XD01 (table E-N°5).

Check that cabling WLP311 is correct and properly secured in the terminal board XM01 (table C-N°13).

Check that cabling WCP308 is correct and properly secured in the terminal board XM01 (table C-N°13).

Check that cabling WCP308 is correct and properly secured in the fuse holder FU07 (table B-N°21).

Check the state of fuses FU07.

<b>2103</b>	<b>Motor short-circuited</b>
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*Description:*

The current feeding the let-off 1 motor has peaked suddenly.

*Remedies:*

Check the cabling and the connections on the motor, on the let-off 1 drive and especially: cabling WLP361 connecting the drive connection J265 (table E-N°2) and the power connection motor XLP10.

Check that cable WLP362 (towards the let-off 1 motor) isn't crushed or its insulation has been cut.

Replace the let-off 1 motor.

Replace the drive (table E-N°2).

<b>2105</b>	<b>Logic-Power communication interrupted</b>
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*Description:*

The warp 1 tension data are not circulating on the CAN-BUS network.

*Remedies:*

Replace the MLC (table B-N°11).

Replace the drive (table E-N°2).

<b>2106</b>	<b>Inconsistent motor encoder signals</b>
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*Description:*

The let-off 1 motor encoder signals reach the let-off 1 drive in the wrong order.

*Remedies:*

Check the cabling from the let-off 1 drive to the motor and especially:

Cabling WLS392 used to connect the drive connection J07 (table E-N°2) to the motor, signals XLS26 connection.

Check that cable WLS392 (towards the let-off 1 motor) isn't crushed or its insulation has been cut.

Replace the let-off 1 motor.

Replace the drive (table E-N°2).

<b>2107</b>	<b>I<sup>2</sup>T thermal protection</b>
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*Description:*

The let-off 1 motor has asked for too much current (16A RMS) for 4-5 seconds.

*Remedies:*

Switch the loom off and then back on again.

Check that there are no mechanical obstructions impeding the free movement of the motor.

Replace the let-off 1 motor.

Replace the drive (table E-N°2).

<b>2108</b>	<b>Warp sensor too slack</b>
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*Description:*

Warp 1 tension read by the sensor (load cell) is below the set limits.

*Remedies:*

Change the limits set on the Console or tighten the warp.

Replace the drive (table E-N°2).

Replace the let-off 1 motor.

Check the state of the cell for warp 1.

Check the cabling WLS406 connecting the connection J13 on the RIO board (table E-N°4) with the connection J01 on amplifier on the rear RH frame of the loom.

Check connections J01 and J02 on amplifier VX047/3 on the rear RH frame of the loom (the device in the black container used to connect the load cell).

Replace the let-off 1 load cell.

Replace the amplifier VX047/3.  
 Replace the RIO board (table E-N°4).  
 Replace the MLC board (table B-N°11).

<b>2140</b>	<b>Timeout for zero encoder</b>
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*Description:*

Let-off 1 drive (table E-N°2) has not reached the zero encoder pulse after 1450 pulses (A-B), i.e. after a complete turn of the loom.

*Remedies:*

Check that the connectors are properly closed and especially:

- Check connectors J40 and J2 on the MLC board (table B-N°11).
- If it is fitted with motorised positive cutter, check connectors ENC B and ENC A on the cutter motor drive (table B-N°5).
- Check connectors J24 and J25 on the MHD board (table C-N°1).
- Check connectors J24 and J26 on the SFC board (table C-N°4).
- Check connectors J03 and J31 on the RIO board (table E-N°4).
- Check connector J05 on the drive (table E-N°2).
- Replace the drive (table E-N°2).
- Replace the main encoder.
- Replace the MLC board (table B-N°11).

<b>2149</b>	<b>Timeout for automatic movements</b>
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*Description:*

The automatic movement hasn't been completed in time (8 seconds), so this alarm is generated.

The automatic movements made by the loom are:

- 1) Yarn tensioning to the required value after a loom stop.
- 2) Automatic slackening at a loom stop, to be recovered when you next press the buttons on the pushbutton panel.
- 3) Corrections during pick-finding and at start-up.

*Remedies:*

- Check that there are no mechanical obstructions impeding the free movement of the motor.
- Check the rating connector on the let-off 1 motor.
- Replace the let-off 1 motor.
- Replace the drive (table E-N°2).

<b>2186</b>	<b>Lancé signal active for more than 30 picks</b>
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*Description:*

The stop regulator/lancé signal has arrived at the MLC for more than 30 consecutive picks.

*Remedies:*

- Check the pattern, especially in the extra function zone (S) of the pattern.
- See Console user manual.
- If a Jacquard loom, check the pattern programmed in the Jacquard.
- Replace the MLC board (table B-N°11).

2198

**CAN reception message queue overload***Description:*

The CAN-BUS line is overloaded. This alarm warns that the let-off 1 drive cannot process all the messages coming from the CAN-BUS in time and so an excessively long queue has formed.

*Remedies:*

Check the continuity of the CAN-BUS circuit following the guided "CAN-BUS wizard" procedure (click on the green key "W" at the side).

Use the "simulator" tool (click on the green key "S" at the side) to get a better understanding of the CAN-BUS circuit control.

If the problem persists contact PROMATECH Customer Service to check the CAN line.  
Replace the drive (table E-N°2).

2199

**CAN overload***Description:*

The CAN-BUS line is overloaded. This alarm warns that too many messages per second are being sent to the let-off 1 drive by the CAN-BUS and so an excessively long queue has formed.

This alarm is very similar to alarm 2198, but refers to the frequency of CAN-BUS messages.

*Remedies:*

Check the continuity of the CAN-BUS circuit following the guided "CAN-BUS wizard" procedure (click on the green key "W" at the side).

Use the "simulator" tool (click on the green key "S" at the side) to get a better understanding of the CAN-BUS circuit control.

If the problem persists contact PROMATECH Customer Service to check the CAN line.  
Replace the drive (table E-N°2)

2200

**CAN transmission message queue overload***Description:*

The CAN-BUS line is overloaded. This alarm warns that the let-off 1 drive cannot process all the output messages to the CAN-BUS in time and so an excessively long queue has formed inside the drive.

*Remedies:*

Check the continuity of the CAN-BUS circuit following the guided "CAN-BUS wizard" procedure (click on the green key "W" at the side).

Use the "simulator" tool (click on the green key "S" at the side) to get a better understanding of the CAN-BUS circuit control.

If the problem persists contact PROMATECH Customer Service to check the CAN line.  
Replace the drive (table E-N°2).

<b>2201</b>	<b>CAN error</b>
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*Description:*

The CAN-BUS line is overloaded. This alarm warns that the let-off 1 drive cannot process all the output messages to the CAN-BUS in time and so an excessively long queue has formed inside the drive.

*Remedies:*

Check the continuity of the CAN-BUS circuit following the guided "CAN-BUS wizard" procedure (click on the green key "W" at the side).

Use the "simulator" tool (click on the green key "S" at the side) to get a better understanding of the CAN-BUS circuit control.

If the problem persists contact PROMATECH Customer Service to check the CAN line.

Replace the drive (table E-N°2).

<b>2208</b>	<b>Failed Master/Slave set-point procedure</b>
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*Description:*

This alarm only occurs when the loom is set as Master/Slave.

It warns that the set-point procedure carried out after a beam change hasn't been successful and that there's too much out-of-synch between the two Master/Slave motors (let-off 1 and 2).

*Remedies:*

Check that the beam is coupled on both sides.

Check the cabling on the let-off 1 motor and the let-off 2 motor.

Check that two separate beams haven't been fitted, but just one (mechanically coupled).

Replace the let-off 1 motor.

Replace the let-off 2 motor.

Replace the let-off 1 drive (table E-N°2).

<b>2304</b>	<b>Generic let-off 1 error level 1</b>
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*Description:*

There's been a level 1 internal error on the let-off 1 drive (table E-N°2)..

*Remedies:*

Replace the let-off drive EWC1 (table E-N°2).

Contact PROMATECH Customer Service.

<b>2560</b>	<b>Generic let-off 1 error level 2</b>
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*Description:*

There's been a level 1 internal error on the let-off 2 drive (table E-N°2)..

*Remedies:*

Replace the let-off drive EWC1 (table E-N°2).

Contact PROMATECH Customer Service.

2816

Generic let-off 1 error level 3

*Description:*

There's been a level 1 internal error on the let-off 3 drive (table E-N°2)..

*Remedies:*

Replace the let-off drive EWC1 (table E-N°2).

Contact PROMATECH Customer Service.

**LET-OFF 2**  
**(tav E-N°1)**

<b>3072</b>	<b>Generic let-off 2 error level 0</b>
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*Description:*

There's been a level 0 internal error on the let-off 2 drive (table E-N°1)

*Remedies:*

Replace the let-off drive EWC2 (table E-N°1).

Contact PROMATECH Customer Service.

<b>3077</b>	<b>Set diameter outside accepted limits</b>
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*Description:*

See alarm 2053, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3078</b>	<b>Device not ready</b>
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*Description:*

See alarm 2054, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3079</b>	<b>Automatic movement speed too slow</b>
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*Description:*

See alarm 2055, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3080</b>	<b>Set tension too low</b>
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*Description:*

See alarm 2056, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3081</b>	<b>Set tension too high</b>
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*Description:*

See alarm 2057, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3083</b>	<b>Drive temperature too high</b>
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*Description:*

See alarm 2059, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3084	Motor temperature too high
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*Description:*

See alarm 2060, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3085	Motor overload
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*Description:*

See alarm 2061, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3087	Set density too low
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*Description:*

See alarm 2063, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3088	Set density too high
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*Description:*

See alarm 2064, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3103	Illegal command in current state
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*Description:*

See alarm 2079, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3106	Timeout for manual command
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*Description:*

See alarm 2082, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3109	ERR_HFK
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*Description:*

See alarm 2085, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3110	ERR_PSOS
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*Description:*

See alarm 2086, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3111	ERR_INTERN
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*Description:*

See alarm 2087, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3113	ERR_FATAL
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*Description:*

See alarm 2089, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3123	Warp tension too high
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*Description:*

Warp 2 tension read by the sensor (load cell) is above the set limits.

*Remedies:*

- Change the limits set on the Console or loosen the tension of the yarn.
- Replace the drive (table E-N°1).
- Replace the let-off 2 motor.
- Check the state of the cell for warp 2.

If the loom is fitted with the second load cell on the left (bilateral twin beam configuration) make the following checks:

- Check the cabling WLS366 connecting the connection J31 on the MLC board (table B-N°11) with the connection J01 on amplifier on the rear LH frame of the loom.
- Check connections J01 and J02 on amplifier VX047/1 on the rear LH frame of the loom (the device in the black container used to connect the load cell).
- Replace the let-off 2 load cell.
- Replace the amplifier VX047/1 of the load cell warp 2.
- Replace the MLC (table B-N°11).

If the loom is fitted with the second load cell on the right (double beam or beam above the frames configuration) make the following checks:

- Check the cabling WLS407 connecting the connection J14 on the RIO board (table E-N°4) with the connection J01 on amplifier on the rear RH frame of the loom.
- Check connections J01 and J02 on amplifier VX047/2 on the rear RH frame of the loom (the device in the black container used to connect the load cell).
- Replace the let-off 2 load cell.
- Replace the amplifier VX047/2.
- Replace the RIO board (table E-N°4).
- Replace the MLC board (table B-N°11).

3124	Inconsistent main encoder signals
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*Description:*

See alarm 2100, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3125	Power driver overvoltage
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*Description:*

See alarm 2101, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3126	Power driver undervoltage
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*Description:*

See alarm 2102, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3127	Motor short-circuited
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*Description:*

The current feeding the let-off 2 motor has peaked suddenly.

*Remedies:*

Check the cabling and the connections on the motor, on the let-off 2 drive and especially: cabling WLP363 connecting the drive connection J25 (table E-N°1) and the power connection motor XLP11.

Check that cable WLP363 (towards the let-off 2 motor) isn't crushed or its insulation has been cut.

Replace the let-off 2 motor.

Replace the drive (table E-N°1).

3129	Logic-Power communication interrupted
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*Description:*

See alarm 2105, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

3130	Inconsistenza sui segnali encoder motore
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*Description:*

The let-off 2 motor encoder signals reach the let-off 2 drive in the wrong order.

*Remedies:*

Check the cabling from the let-off 2 drive to the motor and especially:

Cable WLS393 used to connect connection J24 in the drive (table E-N°1) to the motor, signal XLS27 connection.

Check that cable WLS393 (towards the let-off 2 motor) isn't crushed or its insulation has been cut.

Replace the let-off 2 motor.  
 Replace the drive (table E-N°1).  
 Sostituire il motore svolgitore 2.  
 Sostituire l'azionamento (tav.E-N°1).

<b>3131</b>	<b>I<sup>2</sup>T thermal protection</b>
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*Description:*

See alarm 2107, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3132</b>	<b>Warp sensor too slack</b>
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*Description:*

See alarm 2108, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3164</b>	<b>Timeout for zero encoderr</b>
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*Description:*

See alarm 2140, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3173</b>	<b>Timeout for automatic movements</b>
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*Description:*

See alarm 2149, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3210</b>	<b>Lancé signal active for more than 30 picks</b>
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*Description:*

See alarm 2186, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3222</b>	<b>CAN reception message queue overload</b>
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*Description:*

See alarm 2198, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3223</b>	<b>CAN overload</b>
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*Description:*

See alarm 2199, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3224</b>	<b>CAN transmission message queue overload</b>
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*Description:*

See alarm 2200, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3225</b>	<b>CAN Error</b>
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*Description:*

See alarm 2201, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3232</b>	<b>Failed Master/Slave set-point procedure</b>
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*Description:*

See alarm 2208, but referred to the let-off motor2 and to the let-off drive 2 (E-N°1).

<b>3328</b>	<b>Generic let-off 2 ERROR level 1</b>
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*Description:*

There's been a level 1 internal error on the let-off 1 drive (table E-N°1).

*Remedies:*

Replace the let-off drive EWC2 (table E-N°1).  
Contact PROMATECH Customer Service.

<b>3584</b>	<b>Generic let-off 2 ERROR level 2</b>
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*Description:*

There's been a level 2 internal error on the let-off 2 drive (table E-N°1).

*Remedies:*

Replace the let-off drive EWC2 (table E-N°1).  
Contact PROMATECH Customer Service.

<b>3840</b>	<b>Generic let-off 2 ERROR level 3</b>
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*Description:*

There's been a level 3 internal error on the let-off 3 drive (table E-N°1).

*Remedies:*

Replace the let-off drive EWC2 (table E-N°1).  
Contact PROMATECH Customer Service.

**LET-OFF 3**  
**(tav E-N°1)**

<b>4096</b>	<b>GENERIC let-off 3 ERROR level 0</b>
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*Description:*

There's been a level 0 internal error on the let-off 3 drive (table E-N°1).

*Remedies:*

Replace the let-off drive EWC3 (table E-N°1)

Contact PROMATECH Customer Service.

<b>4101</b>	<b>Set diameter outside accepted limits</b>
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*Description:*

See alarm 2053, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4102</b>	<b>Device not ready</b>
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*Description:*

See alarm 2054, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4103</b>	<b>Automatic movement speed too slow</b>
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*Description:*

See alarm 2055, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4104</b>	<b>Set tension too low</b>
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*Description:*

See alarm 2056, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4105</b>	<b>Set tension too high</b>
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*Description:*

See alarm 2057, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4107</b>	<b>Drive temperature too high</b>
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*Description:*

See alarm 2059, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4108</b>	<b>Motor temperature too high</b>
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*Description:*

See alarm 2060, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4109</b>	<b>Motor overload</b>
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*Description:*

See alarm 2061, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4111</b>	<b>Set density too low</b>
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*Description:*

See alarm 2063, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4112</b>	<b>Set density too high</b>
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*Description:*

See alarm 2064, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4127</b>	<b>Comando non permesso nello stato attuale</b>
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*Description:*

See alarm 2079, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4130</b>	<b>Timeout su comando manuale</b>
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*Description:*

See alarm 2082, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4133</b>	<b>ERR_HFK</b>
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*Description:*

See alarm 2085, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4134</b>	<b>ERR_PSOS</b>
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*Description:*

See alarm 2086, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4135</b>	<b>ERR_INTERN</b>
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*Description:*

See alarm 2087, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4137</b>	<b>ERR_FATAL</b>
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*Description:*

See alarm 2089, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4147</b>	<b>Warp sensor too taut</b>
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*Description:*

The tension of the warp 3 read by the sensor (load cell) is above the limits set

*Remedies:*

Change the limits set on the Console or loosen the tension of the yarn.

Replace the drive (table E-N°1).

Replace the let-off 3 motor.

Check the state of the cell for warp 3.

Check the cabling WLS407 connecting the connection J14 on the RIO board (table E-N°4) with the connection J01 on amplifier on the rear LH frame of the loom.

Check connections J01 and J02 on amplifier VX047/2 on the rear RH frame of the loom (the device in the black container used to connect the load cell).

Replace the let-off 3 load cell.

Replace the amplifier VX047/2.

Replace the RIO board (table E-N°4).

Replace the MLC (table B-N°11).

<b>4148</b>	<b>Inconsistent main encoder signals</b>
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*Description:*

See alarm 2100, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

<b>4149</b>	<b>Power driver overvoltage</b>
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*Description:*

See alarm 2101, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4150	<b>Power driver undervoltage</b>
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*Description:*

See alarm 2102, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4151	<b>Motor short-circuited</b>
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*Description:*

The current feeding the let-off 3 motor has peaked suddenly.

*Remedies:*

Check the cabling and the connections on the motor, on the let-off 2 drive and especially: cabling WLP364 connecting the drive connection J26 (table E-N°1) and the power connection motor XLP12.

Check that cable WLP364 (towards the let-off 3 motor) isn't crushed or its insulation has been cut.

Replace the let-off 3 motor.

Replace the drive (table E-N°1).

4153	<b>Logic-Power communication interrupted</b>
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*Description:*

See alarm 2105, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4154	<b>Inconsistent motor encoder signals</b>
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*Description:*

The let-off 3 motor encoder signals reach the let-off 3 drive in the wrong order.

*Remedies:*

Check the cabling from the let-off 3 drive to the motor and especially:

Cable WLS394 used to connect the drive connection J7 (table E-N°1) to the motor (signal XLS28 connection).

Check that cable WLS394 (towards the let-off 3 motor) isn't crushed or its insulation has been cut.

Replace the let-off 3 motor.

Replace the drive (table E-N°1).

4155	<b>I<sup>2</sup>T thermal protection</b>
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*Description:*

See alarm 2107, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4156	Warp sensor too slack
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*Description:*

See alarm 2108, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4188	Timeout for zero encoder
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*Description:*

See alarm 2140, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4197	Timeout for automatic movements
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*Description:*

See alarm 2149, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4234	Lancé signal active for more than 30 picks
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*Description:*

See alarm 2186, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4236	CAN reception message queue overload
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*Description:*

See alarm 2198, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4247	CAN overload
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*Description:*

See alarm 2199, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4248	CAN transmission message queue overload
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*Description:*

See alarm 2200, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4249	CAN error
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*Description:*

See alarm 2201, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4256	Failed Master/Slave set-point procedure
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*Description:*

See alarm 2208, but referred to the let-off motor 3 and to the let-off drive 3 (E-N°1).

4352	Generic let-off 3 ERROR level 1
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*Description:*

There's been a level 1 internal error on the let-off 3 drive (table E-N°1).

*Remedies:*

Replace the let-off drive EWC3 (table E-N°1).  
Contact PROMATECH Customer Service.

4608	Generic let-off 3 ERROR level 2
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*Description:*

There's been a level 2 internal error on the let-off 3 drive (table E-N°1).

*Remedies:*

Replace the let-off drive EWC3 (table E-N°1).  
Contact PROMATECH Customer Service.ch.

4864	Generic let-off 3 ERROR level 3
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*Description:*

There's been a level 3 internal error on the let-off 3 drive (table E-N°1).

*Remedies:*

Replace the let-off drive EWC3 (table E-N°1).  
Contact PROMATECH Customer Service.atech.

**TAKE-UP  
(tav E-N°2)**

<b>5120</b>	<b>Generic take-up ERROR level 0</b>
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*Description:*

There's been a level 0 internal error on the take-up roller drive (table E-N°2).

*Remedies:*

Replace the take-up roller drive (table E-N°2).

Contact PROMATECH Customer Service.

<b>5126</b>	<b>Device not ready</b>
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*Description:*

See alarm 2054, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5127</b>	<b>Automatic movement speed too slow</b>
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*Description:*

See alarm 2055, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5131</b>	<b>Drive temperature too high</b>
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*Description:*

See alarm 2097, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5132</b>	<b>Motor temperature too high</b>
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*Description:*

See alarm 2060, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5133</b>	<b>Motor overload</b>
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*Description:*

See alarm 2061, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5135</b>	<b>Set density too low</b>
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*Description:*

See alarm 2063, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5136</b>	<b>Set density too high</b>
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*Description:*

See alarm 2064, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5151</b>	<b>Illegal command in current state</b>
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*Description:*

See alarm 2079, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5154</b>	<b>Timeout for manual command</b>
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*Description:*

See alarm 2082, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5157</b>	<b>ERR_HFK</b>
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*Description:*

See alarm 2085, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5158</b>	<b>ERR_PSOS</b>
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*Description:*

See alarm 2086, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5159</b>	<b>ERR_INTERN</b>
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*Description:*

See alarm 2087, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5161</b>	<b>ERR_FATAL</b>
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*Description:*

See alarm 2089, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5172</b>	<b>Inconsistent main encoder signals</b>
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*Description:*

See alarm 2100, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5173</b>	<b>Power driver overvoltage</b>
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*Description:*

See alarm 2101, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5174</b>	<b>Power driver undervoltage</b>
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*Description:*

See alarm 2102, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5175</b>	<b>Motor short-circuited</b>
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*Description:*

The current fed to the take-up roller motor has peaked suddenly.

*Remedies:*

Check the cabling and the connections on the motor, on the take-up drive and especially: cabling WLP361 connecting the drive connection J25 (table E-N°2) and the power connection motor XLP09.

Check that cable WLP361 (towards the take-up motor) isn't crushed or its insulation has been cut.

Replace the take-up roller motor.

Replace the drive (table E-N°2).

<b>5178</b>	<b>Inconsistent motor encoder signals</b>
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*Description:*

The take-up roller motor encoder signals reach the take-up roller drive in the wrong order

*Remedies:*

Check the cabling from the drive to the motor and especially:

Cable WLS391 used to connect connection J24 in the drive (table E-N°2) to the signal XLS257 connection motor.

Check that cable WLS391 (towards the take-up motor) isn't crushed or its insulation has been cut.

Replace the take-up roller motor.

Replace the drive (table E-N°2).

<b>5179</b>	<b>I<sup>2</sup>T thermal protection</b>
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*Description:*

See alarm 2107, but referred to the take-up motor and to the take-up drive (E-N°2)

<b>5212</b>	<b>Timeout for zero encoder</b>
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*Description:*

After 1450 pulses (A-B), i.e. the zero encoder pulse doesn't reach the take-up drive (table E-N°2) after a complete loom turn.

*Remedies:*

Check that the connectors are properly closed and especially:

Check connectors J40 and J2 on the MLC board (table B-N°11)

If fitted with a motorised positive cutter, check connectors ENC B and ENC A on the cutter motor drive (table B-N°5)

Check connectors J24 and J25 on the MHD board (table C-N°1)

Check connectors J24 and J26 on the SFC board (table C-N°4)

Check connectors J03 and J31 on the RIO board (table E-N°4)

Check connector J05 on the drive (table E-N°2).

Replace the drive (table E-N°2).

Replace the main encoder.

Replace the MLC board (table B-N°11).

<b>5258</b>	<b>Lancé signal active for more than 30 picks</b>
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*Description:*

The stop regulator/lancé signal has arrived at the MLC for more than 30 consecutive picks.

*Remedies:*

Check the pattern, especially in the extra function zone (S) of the pattern.

See Console user manual.

If a Jacquard loom, check the pattern programmed in the Jacquard.

Replace the MLC board (table B-N°11).

<b>5270</b>	<b>CAN reception message queue overload</b>
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*Description:*

See alarm 2198, but referred to the take-up motor and to the take-up drive (E-N°2)).

<b>5271</b>	<b>CAN overload</b>
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*Description:*

See alarm 2199, but referred to the take-up motor and to the take-up drive (E-N°2)).

5272	CAN transmission message queue overload
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*Description:*

See alarm 2200, but referred to the take-up motor and to the take-up drive (E-N°2)

5273	CAN error
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*Description:*

See alarm 2201, but referred to the take-up motor and to the take-up drive (E-N°2)

5376	Generic take-up ERROR level 1
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*Description:*

There's been a level 1 internal error on the take-up roller drive (table E-N°2).

*Remedies:*

Replace the let-off drive ETD (table E-N°2).  
Contact PROMATECH Customer Service.

5632	Generic take-up ERROR level 2
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*Description:*

There's been a level 2 internal error on the take-up roller drive (table E-N°2).

*Remedies:*

Replace the let-off drive ETD (table E-N°2).  
Contact PROMATECH Customer Service.

5888	Generic take-up ERROR level 3
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*Description:*

There's been a level 3 internal error on the take-up roller drive (table E-N°2).

*Remedies:*

Replace the let-off drive ETD (table E-N°2).  
Contact PROMATECH Customer Service.

## Weft selector Alarms

<b>6144</b>	<b>Generic weft colour selector ERROR level 0</b>
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*Description:*

There's a level 0 internal error on the MHD board (table C-N°1).

*Remedies:*

Replace the MHD board (table C-N°1). Once replaced, remember to carry out the self-learning procedure (see Console user manual).

Contact PROMATECH Customer Service.

<b>6145</b>	<b>Pattern ERROR</b>
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*Description:*

The system has detected that there are more than three colours at the same time in the pattern.

*Remedies:*

Check the current pattern, especially if the colour management is incorporated in the jacquard pattern.

<b>6146</b>	<b>Position ERROR</b>
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*Description:*

The weft selector fingers move to suit the position of the loom. This alarm warns that the Hall detectors on the weft colour selector have detected that the movement of one finger fails to follow the movement of the loom correctly (i.e. not in axis with the loom).

*Remedies:*

Carry out the self-learning procedure (see Console user manual).

Switch the loom off and check that when you move the fingers by hand, they move without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the weft colour selector to find what's impeding the movement of the finger.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector CT42 on the weft colour selector, remove the top cover on the weft colour selector and switch the loom on again.

Enter the weft colour selector technical parameters menu and make a note of the values of the finger position (mV) read on the Console (accepted range: 230 mV DC - 1200 mV DC); otherwise you'll need to adjust the Hall detectors on the front of the weft colour selector, or replace them. Manually lower the fingers and then, with the fingers lowered, make a note of the values of the finger position (mV) read on the Console. Check that the values of this second reading (fingers lowered) differ from those for the first reading (fingers raised) by at least 3200 mV. If not, you'll need to adjust the Hall detectors on the front of the weft colour selector, or replace them.

Replace the relevant MHP board above the MHD board (table C-1).

Check connection CT44 on the weft colour selector (also internally, if possible).

Check connection J03 on the MHD board (table C-1).

<b>6147</b>	<b>Overtemperature</b>
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*Description:*

The temperature of a weft colour selector coil is higher than 50°C. This generally happens when too much current is used to move the finger.

*Remedies:*

Carry out the self-learning procedure (see Console user manual).

Switch the loom off and check that when you move the fingers by hand, they move without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the weft colour selector to find what's impeding the movement of the finger.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector CT42 on the weft colour selector, remove the top cover on the weft colour selector and switch the loom on again.

Enter the weft colour selector technical parameters menu and make a note of the values of the finger position (mV) read on the Console (accepted range: 230 mV DC - 1200 mV DC); otherwise you'll need to adjust the Hall detectors on the front of the weft colour selector, or replace them. Manually lower the fingers and then, with the fingers lowered, make a note of the values of the finger position (mV) read on the Console. Check that the values of this second reading (fingers lowered) differ from those for the first reading (fingers raised) by at least 3200 mV. If not, you'll need to adjust the Hall detectors on the front of the weft colour selector, or replace them.

Replace the relevant MHP module above the MHD board (table C-1). To discover which finger is involved, check the relevant weft selector parameters page on the console: the finger at fault will have a red dot in the line indicating the finger temperature.

Check connection CT44 on the weft colour selector (also internally, if possible).

Check connection J03 on the MHD board (table C-1).

<b>6148</b>	<b>Temperature alarm</b>
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*Description:*

This warns you that the MHD board (table C-N°1) has detected internal problems on the board thanks to its internal diagnostics system.

*Remedies:*

Replace the MHD board (table C-N°1).

Repeat weft selector self-learning after replacing the MHD board.

<b>6149</b>	<b>Self-learning alarm</b>
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*Description:*

This tells you that no fingers have been detected during the self-learning procedure and that therefore there are no fingers available for weaving.

*Remedies:*

Replace the MHD board (table C-N°1).

Check connections CT42, CT43 and CT44 on the weft colour selector and connection J03 on the MHD board (table C-N°1).

Disconnect connection CT44 and, with the loom on, check that 5 V DC between pins J and K (from the cabling side).

Switch the loom off and check that when you move the fingers by hand, they move without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the weft colour selector to find what's impeding the movement of the finger.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector CT42 on the weft colour selector, remove the top cover on the weft colour selector and switch the loom on again.

Enter the weft colour selector technical parameters menu and make a note of the values of the finger position (mV) read on the Console (accepted range: 230 mV DC - 1200 mV DC); otherwise you'll need to adjust the Hall detectors on the front of the weft colour selector, or replace them. Manually lower the fingers and then, with the fingers lowered, make a note of the values of the finger position (mV) read on the Console. Check that the values of this second reading (fingers lowered) differ from those for the first reading (fingers raised) by at least 3200 mV. If not, you'll need to adjust the Hall detectors on the front of the weft colour selector, or replace them.

Replace the relevant MHP module above the MHD board (table C-1). To discover which finger is involved, check the relevant weft selector parameters page on the console: the finger at fault will have a red dot in the line indicating the finger temperature.

<b>6151</b>	<b>Colour not received</b>
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*Description:*

From 0° - 100° loom, the MHD board (table C-N°1) should receive the data for the finger to be moved at about 300°. This alarm warns that no data have been received.

*Remedies:*

Check the CAN-BUS connections on the MHD board (table C-N°1).

Replace the MHD board (table C-N°1).

Replace the MLC board (table B-N°11).

<b>6152</b>	<b>Module 1 power supply error</b>
-------------	------------------------------------

*Description:*

This warns you that there is no 42V DC supply for the first MHP module on the MHD board (table C-N°1).

The first module is responsible for controlling fingers 1-4.

*Remedies:*

Replace the MHP board responsible for controlling fingers 1-4.

Replace the MHD board (table C-N°1).

<b>6153</b>	<b>Module 2 power supply error</b>
-------------	------------------------------------

*Description:*

This warns you that there is no 42V DC supply for the first MHP module on the MHD board (table C-N°1).

The first module is responsible for controlling fingers 5-8.

*Remedies:*

Replace the MHP board responsible for controlling fingers 5-8.

Replace the MHD board (table C-N°1).

<b>6154</b>	<b>Module 3 power supply error</b>
-------------	------------------------------------

*Description:*

This warns you that there is no 42V DC supply for the first MHP module on the MHD board (table C-N°1).

The first module is responsible for controlling fingers 9-12.

*Remedies:*

Replace the MHP board responsible for controlling fingers 9-12.

Replace the MHD board (table C-N°1).

<b>6155</b>	<b>Module 1 protection tripped</b>
-------------	------------------------------------

*Description:*

There's a circuit on the MHP board that lets you protect the board against short-circuits in the weft selector coils.

This alarm warns you that the circuit for the first MHP board on the MHD board (table C-N°1) has tripped.

The first board is responsible for controlling fingers 1-4.

*Remedies:*

Make sure that coils 1-4 are not short-circuited.

Check the cabling WLS370 connecting the connection J03 on the MHD board (table C-N°1) with the connection CT44 on the electronic weft colour selector: this should not be cut or earthed.

Replace the MHP board responsible for controlling fingers 1-4.

Replace the MHD board (table C-N°1).

<b>6156</b>	<b>Module 2 protection tripped</b>
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*Description:*

There's a circuit on the MHP board that lets you protect the board against short-circuits in the weft selector coils.

This alarm warns you that the circuit for the second MHP board on the MHD board (table C-N°1) has tripped.

The second board is responsible for controlling fingers 5-8.

*Remedies:*

Make sure that coils 5-8 are not short-circuited.

Check the cabling WLS370 connecting the connection J03 on the MHD board (table C-N°1) with the connection CT44 on the electronic weft colour selector: this should not be cut or earthed.

Replace the MHP board responsible for controlling fingers 5-8.

Replace the MHD board (table C-N°1).

<b>6157</b>	<b>Module 3 protection tripped</b>
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*Description:*

There's a circuit on the MHP board that lets you protect the board against short-circuits in the weft selector coils.

This alarm warns you that the circuit for the third MHP board on the MHD board (table C-N°1) has tripped.

The second board is responsible for controlling fingers 9-12.

*Remedies:*

Make sure that coils 9-12 are not short-circuited.

Check the cabling WLS370 connecting the connection J03 on the MHD board (table C-N°1) with the connection CT43 on the electronic weft colour selector: this should not be cut or earthed.

Replace the MHP board responsible for controlling fingers 9-12.

Replace the MHD board (table C-N°1).

<b>6158</b>	<b>No 40V power supply</b>
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*Description:*

Indicates no 42V DC power supply on the MHD board (table C-N°1).

*Remedies:*

Check for 30V AC coming from the secondary relay on transformer T01 (table D-N°11). If not present, check the state of the fuses on the outputs of transformer T1. Check for 400V AC at the primary relay on transformer T01 and check the state of the fuses FU03 (table B-N°24), plus cable WCP 310 used to connect FU03 to transformer T1.

If there's 30V AC three-phase on the output of transformer T1, check the cabling WCP 349 connecting the transformer T1 with J01 connection on the DPS board (table B-N°8).

Check that there's 42V DC between pins 1 and 3 and between pins 4 and 5 on connection J02 on the DPS board; if this isn't so, replace the DPS board.

Check the cabling WCP351 connecting the connection J02 on the DPS board with the connecting J05 on the MHD board (table C-N°1).

Replace the MHD board (table C-N°1).

<b>6159</b>	<b>No module 1 watchdog</b>
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*Description:*

The watchdog signal is sent every 100msc by the MHP modules to the MHD board (table C-N°1) to indicate correct functioning of the can-bus data transmission system that connects the modules to the MHD board.

This alarm warns you that the MHD board has not received the watchdog signal from the first MHP module for some reason and so there are communication problems. The first MHP module is responsible for controlling fingers 1-4.

*Remedies:*

Replace MHP module responsible for controlling fingers 1-4, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1).

<b>6160</b>	<b>No module 2 watchdog</b>
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*Description:*

The watchdog signal is sent every 100msc by the MHP modules to the MHD board (table C-N°1) to indicate correct functioning of the can-bus data transmission system that connects the modules to the MHD board.

This alarm warns you that the MHD board has not received the watchdog signal from the second MHP module for some reason and so there are communication problems. The second MHP module is responsible for controlling fingers 5-8.

*Remedies:*

Replace MHP module responsible for controlling fingers 5-8, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1).

<b>6161</b>	<b>No module 3 watchdog</b>
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*Description:*

The watchdog signal is sent every 100msc by the MHP modules to the MHD board (table C-N°1) to indicate correct functioning of the can-bus data transmission system that connects the modules to the MHD board.

This alarm warns you that the MHD board has not received the watchdog signal from the third MHP module for some reason and so there are communication problems. The third MHP module is responsible for controlling fingers 9-12.

*Remedies:*

Replace the MHP module responsible for controlling fingers 9-12, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1).

<b>6162</b>	<b>Module 1 encoder incoherence</b>
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*Description:*

The MHP modules (above the MHD board) receive signals from the main encoder via the MHD board (table C-N°1) and use these to link the movement of the fingers to that of the loom. The MHP modules check that there are 1440 switching signals in the encoder signals between any two zero signals.

This alarm means that the first MHP module has received more than or less than 1440 switching signals between one zero signal and the next. The first MHP module is responsible for controlling fingers 1-4.

*Remedies:*

Replace the first MHP module responsible for controlling fingers 9-12, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1).

<b>6163</b>	<b>Module 2 encoder incoherence</b>
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*Description:*

The MHP modules (above the MHD board) receive signals from the main encoder via the MHD board (table C-N°1) and use these to link the movement of the fingers to that of the loom. The MHP modules check that there are 1440 switching signals in the encoder signals between any two zero signals.

This alarm means that the second MHP module has received more than or less than 1440 switching signals between one zero signal and the next. The second MHP module is responsible for controlling fingers 5-8.

*Remedies:*

Replace the second MHP module responsible for controlling fingers 5-8, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1).

<b>6164</b>	<b>Module 3 encoder incoherence</b>
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*Description:*

The MHP modules (above the MHD board) receive signals from the main encoder via the MHD board (table C-N°1) and use these to link the movement of the fingers to that of the loom. The MHP modules check that there are 1440 switching signals in the encoder signals between any two zero signals.

This alarm means that the third MHP module has received more than or less than 1440 switching signals between one zero signal and the next. The third MHP module is responsible for controlling fingers 9-12.

*Remedies:*

Replace the third MHP module responsible for controlling fingers 9-12, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1).

<b>6165</b>	<b>Module 1 disabled on main board</b>
-------------	--

*Description:*

The MHD board (table C-N°1) has detected a software problem that disables the first MHP module on the MHD board responsible for controlling fingers 1-4.

*Remedies:*

Replace the first MHP module responsible for controlling fingers 1-4, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1) if the problem persists.

<b>6166</b>	<b>Module 2 disabled on main board</b>
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*Description:*

The MHD board (table C-N°1) has detected a software problem that disables the first MHP module on the MHD board responsible for controlling fingers 5-8.

*Remedies:*

Replace the second MHP module responsible for controlling fingers 5-8, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1) if the problem persists.

<b>6167</b>	<b>Module 3 disabled on main board</b>
-------------	--

*Description:*

The MHD board (table C-N°1) has detected a software problem that disables the first MHP module on the MHD board responsible for controlling fingers 9-12.

*Remedies:*

Replace the third MHP module responsible for controlling fingers 9-12, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1) if the problem persists.

<b>6168</b>	<b>Colour not received within 100° from module 1</b>
-------------	--

*Description:*

The loom has moved past 100° and the first MHP module on the MHD board (table C-N°1) responsible for controlling fingers 1-4 has not received any command from the MHD board about the colour to use and thus which finger to use.

*Remedies:*

Replace the first MHP module responsible for controlling fingers 1-4, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1) if the problem persists.

<b>6169</b>	<b>Colour not received within 100° from module 2</b>
-------------	--

*Description:*

The loom has moved past 100° and the second MHP module on the MHD board (table C-N°1) responsible for controlling fingers 5-8 has not received any command from the MHD board about the colour to use and thus which finger to use.

*Remedies:*

Replace the second MHP module responsible for controlling fingers 5-8, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1) if the problem persists.

<b>6170</b>	<b>Colour not received within 100° from module 3</b>
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*Description:*

The loom has moved past 100° and the third MHP module on the MHD board (table C-N°1) responsible for controlling fingers 9-12 has not received any command from the MHD board about the colour to use and thus which finger to use.

*Remedies:*

Replace the third MHP module responsible for controlling fingers 9-12, found above the MHD board (table C-N°1).

Replace the MHD board (table C-N°1) if the problem persists.

<b>6171</b>	<b>Bus-off from internal Can communication network to modules</b>
-------------	---

*Description:*

This alarm warns you that no MHP module is communicating via the internal can-bus with the MHD board (table C-N°1).

*Remedies:*

Replace the MHD board (table C-N°1).

<b>6172</b>	<b>Errore I2t</b>
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*Description:*

This means that a finger has absorbed the wrong amount of current: the current has increased rapidly in a short period.

This alarm normally means there's a mechanical obstruction for the finger; the system tries to keep the finger in axis with the loom position and so supplies more current.

*Remedies:*

Carry out the self-learning procedure (see Console user manual).

Switch the loom off and check that when you move the fingers by hand, they move without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the weft colour selector to find what's impeding the movement of the finger.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector CT42 on the weft colour selector, remove the top cover on the weft colour selector and switch the loom on again.

Enter the weft colour selector technical parameters menu and make a note of the values of the finger position (mV) read on the Console (accepted range: 230 mV DC - 1200 mV DC); otherwise you'll need to adjust the Hall detectors on the front of the weft colour selector, or replace them.

Manually lower the fingers and then, with the fingers lowered, make a note of the values of the finger position (mV) read on the Console. Check that the values of this second reading (fingers lowered) differ from those for the first reading (fingers raised) by at least 3200 mV. If not, you'll need to adjust the Hall detectors on the front of the weft colour selector, or replace them.

Replace the relevant MHP board above the MHD board (table C-1). To discover which finger is involved, check the relevant weft selector parameters page on the console: the finger at fault will have a red dot in the line indicating the finger temperature.

Check connection CT44 on the weft colour selector (also internally, if possible).

Check connection J03 on the MHD board (table C-1).

Replace the MHD board (table C-N°1) if the problem persists.

<b>6400</b>	<b>Generic weft colour selector ERROR level 1</b>
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*Description:*

there's a level 1 internal error on the MHD board (table C-N°1).

*Remedies:*

Replace the MHD board (table C-N°1).

Contact PROMATECH Customer Service.

<b>6656</b>	<b>Generic weft colour selector ERROR level 2</b>
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*Description:*

there's a level 1 internal error on the MHD board (table C-N°1).

*Remedies:*

Replace the MHD board (table C-N°1).

Contact PROMATECH Customer Service.

6912	Generic weft colour selector ERROR level 3
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*Description:*

there's a level 1 internal error on the MHD board (table C-N°1).

*Remedies:*

Replace the MHD board (table C-N°1).  
Contact PROMATECH Customer Service.

## Dobby machine alarms

<b>8192</b>	<b>Generic shedding machine error level 0</b>
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*Description:*

If fitted with a Fimtextile dobbie:

it means that the system has detected a level 0 problem inside the dobbie board.

If fitted with a Stäubli dobbie:

it means that the system has detected a level 0 problem inside the DSR board (table B-N°10)

*Remedies:*

If FIM, replace the board inside the dobbie.

If Stäubli, replace the DSR board (table B-N°10).

If the problem persists contact PROMATECH Customer Service.

<b>8193</b>	<b>Fatal error</b>
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*Description:*

The electronic dobbie board hasn't completed its internal initialising procedure that's always done when the control box is switched on.

This error may be due to a fault in the microprocessor or any of the electronic components welded directly on the electronic board; in either case, the error will persist and cannot be reset in any way.

This error may also be caused by an interruption in the program used for the initialising procedure, in which case the error may disappear or only appear occasionally.

*Remedies:*

Switch the loom off, wait at least five seconds and then switch it back on again, thus giving the loom and the dobbie time to shut down completely and delete all anomalies. Then move the loom and check whether the problem reappears.

If FIM, replace the board inside the dobbie.

If Stäubli, replace the DSR board (table B-N°10).

If the problem persists contact PROMATECH Customer Service.

<b>8194</b>	<b>Initialising</b>
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*Description:*

The electronic dobbie/jacquard board hasn't completed its internal initialising procedure that's always done when the control box is switched on.

This error may be due to a fault in the microprocessor or any of the electronic components welded directly on the electronic board; in either case, the error will persist and cannot be reset in any way.

This error may also be caused by an interruption in the program used for the initialising procedure, in which case the error may disappear or only appear occasionally.

*Remedies:*

Switch the loom off, wait at least five seconds and then switch it back on again, thus giving the loom and the dobbie/jacquard time to shut down completely and delete all anomalies. Then move the loom and check whether the problem reappears.

If FIM, replace the board inside the dobby.  
 If Stäubli, replace the DSR board (table B-N°10).  
 If Jacquard, check the connection cable and replace the board inside Jacquard controller.  
 If the problem persists contact PROMATECH Customer Service.

<b>8195</b>	<b>Serious can error</b>
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*Description:*

This message warns of serious problems with the CAN-BUS line.

*Remedies:*

Switch the loom off, wait at least five seconds and then switch it back on again, thus giving the loom and the dobby time to shut down completely and delete all electronic anomalies. Then move the loom and check whether the problem reappears.

If the problem immediately reappears, replace the electronic dobby board:

If FIM, replace the board inside the dobby.  
 If Stäubli, replace the DSR board (table B-N°10).

If the problem persists, check the continuity of the CAN-BUS circuit with “table I” at the of this manual.

If a FIMTEXTILE dobby (with EUTRON dobby board only), check that there's jumper JP1. If it is, try extracting it and then returning it a few times to clean the contact and check that it only enters after applying a little force (if this isn't so, try tightening the slides with a pair of pliers).

<b>8196</b>	<b>Electromagnet error</b>
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*Description:*

This error, when active, includes three different diagnostics board outputs:

Electromagnet overcurrent.

Electromagnet short-circuit or short-circuit towards earth.

Faulty or short-circuited onboard dobby board piloting mosfet.

*Remedies:*

Check that there are no signs of scratching on the insulation of each dobby connector at the edges (e.g. the areas of possible mechanical rubbing or between two adjacent conductors if stripped or interrupted); check the general cabling.

Check that the electromagnet isn't short-circuited (totally or partially) and replace it, if necessary.

Check on the dobby board that none of the piloting mosfets are short-circuited, thus tripping this warning. This error will persist and cannot be reset in any way unless you replace the electronic dobby board.

If FIM, replace the board inside the dobby.

If Stäubli, replace the DSR board (table B-N°10).

Given its type, the error should disappear completely after replacing the electronic board.

<b>8197</b>	<b>No electromagnet power supply</b>
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*Description:*

The rating electronics on the dobbie board hasn't received the right Voltage for correct piloting of the electromagnets.

*Remedies:*

Check for 50V DC between pins 10 and 11 of the free connection on the left-hand shoulder of the loom XLS10 on the DSR board: if absent, check for 50V DC between pins 1 and 2 of the J31 connection on the SFC board (table C-N°4). If absent, check for 50V DC between pins 3 and 6 of the J04 connection on the SFC board. If present, replace the SFC board; otherwise, check for 50V DC between pins 3 and 4 of the J04 connection on the DPS board (table B-N°8). If absent, replace the DPS board; otherwise check the WCP352 cabling that connects the J04 connection on the SFC board with the J04 connection on the DPS board. If the problem persists, check the cabling WCP 370 that connects the J3 connection on the SFC board to the J06 connection on the DSR board. Incorrect rating may lead to abnormal absorption in the board; if so, switch the loom off immediately and disconnect the power wires on the dobbie board. Check the voltage arriving from the loom when the dobbie board is not connected.

If the rating is still out of range, it's probably a problem coming from the loom; if the rating returns within the accepted range, it's probably a problem with the electronic board.

Check the status of the two fuses on the electromagnet power supply line (on the lower electronic board); if open, replace with other identical fuses (F4A 250V AC). If OK, make sure that the fuse holders secure the fuses properly, especially on older boards.

Check the status of the two electromagnet power supply relays on the lower electronic board: during NORMAL functioning the relays should be excited and the contacts should be closed ( 50V DC should reach the piloting mosfet); if faulty replace the electronic dobbie board.

If a Stäubli dobbie, check the power supply for the DSR board (table B-N°10).

Check for 24V DC between pins 7 and 10 of the J06 connection on the DSR board: if absent, check for 24V DC between pins 3 and 4 of the J31 connection on the SFC board (table C-N°4). If absent, check the state of fuse F6 on the SFC board and replace the SFC board if necessary. Check the cabling WCP 370 connection J3 on the SFC board with the connection J06 on the DSR board.

If the problem persists, replace the DSR board.

<b>8198</b>	<b>No BRD power supply</b>
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*Description:*

There's been a drop in the power supply fed to the dobbie and coming from the loom (less than the min 35V DC).

*Remedies:*

Switch the loom off, wait at least five seconds and then switch it back on again, thus giving the loom and the dobbie time to shut down completely and delete all anomalies.

If the problem persists, measure the power supply with the loom at a standstill: it should be about 50V DC (usually 48 - 55V DC). Make sure that the consumption level increases and the voltage drops during electromagnet piloting (easily checked during pick-finding). Here too, the level should not drop below the min.

If there are power supply rating problems, try replacing the DSR board to check for possible abnormal consumption downstream.

Check for 50V DC between pins 10 and 11 of the free connection on the left-hand shoulder of the loom XLS10 on the DSR board: if absent, check for 50V DC between pins 1 and 2 of the J31 connection on the SFC board (table C-N°4). If absent, check for 50V DC between pins 3 and 6 of the J04 connection on the SFC board. If present, replace the SFC board; otherwise,

check for 50V DC between pins 3 and 4 of the J04 connection on the DPS board (table B-N°8). If absent, replace the DPS board; otherwise check the WCP352 cabling that connects the J04 connection on the SFC board with the J04 connection on the DPS board. If the problem persists, check the cabling WCP 370 connection J3 on the SFC board with the connection J06 on the DSR board. Incorrect rating may lead to abnormal absorption in the board; if so, switch the loom off immediately and disconnect the power wires on the doobby board. Check the voltage arriving from the loom when the doobby board is not connected. If the rating is still out of range, it's probably a problem coming from the loom; if the rating returns within the accepted range, it's probably a problem with the electronic board.

<b>8199</b>	<b>Emergency</b>
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*Description:*

If a FIMTEXTILE doobby: one or more magnets are partially short-circuited.

If a STÄUBLI doobby: the diagnostics in the doobby board has detected a fault on the board.

*Remedies*

If a FIMTEXTILE doobby:

Check that the space around the electromagnet pack and between the various electromagnets is free; eliminate any ferrous deposits or dirt using a cloth. Use compressed air to clean the spaces between the electromagnets.

Check that the plastic cover on the electromagnet coil is not perforated or dented (outwards); if in doubt, replace the electromagnet.

Check that there are no signs of scratching on the insulation of each connector at the edges (e.g. the areas of possible mechanical rubbing or between two adjacent conductors if stripped or interrupted).

Check the general cabling.

If a STÄUBLI doobby:

Replace the DSR doobby board (table B-N°10).

<b>8200</b>	<b>FLA/FLB error</b>
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*Description:*

The doobby board hasn't received the raised heald data from the loom when expected.

This alarm is generated when the loom fails to send the required data for the selection of the next raising at the encoder 0° or if this data is not received by the doobby at 157° (input sensor FLB).

The loom is stopped in both cases.

The alarm may also be generated when the CAN-BUS line doesn't receive the pick signal.

*Remedies*

The doobby board hasn't received the raised heald data from the loom when expected.

This alarm is generated when the loom fails to send the required data for the selection of the next raising at the encoder 0° or if this data is not received by the doobby at 157° (input sensor FLB).

The loom is stopped in both cases.

The alarm may also be generated when the CAN-BUS line doesn't receive the pick signal.

Remedies if a FIMTEXTILE dobbie:

- Check the efficiency of proximity sensor FLB; if in doubt, replace the sensor.
- Check the cabling of proximity sensor FLB from the electronic dobbie board (internal/external) up to the sensor. Carry out the full test sequence as for error 8200.
- Check (with the loom moving) that proximity sensor FLB is excited at 157° dobbie.
- Check the cabling of the CAN-BUS connections on the onboard dobbie board connector. It may be that one or both of the CAN-BUS wires are disconnected or open (in this case other warnings might appear with this alarm); if in doubt, redo the cabling.
- Replace the electronic dobbie board.
- If the problem persists, replace the entire power supply CAN-BUS cable between the loom and the Fim dobbie (normally supplied by others).
- If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

Remedies if a Stäubli dobbie:

- Carry out the full test sequence as for error 8200.
- Check the cabling of the CAN-BUS connections on the onboard dobbie board connector. It may be that one or both of the CAN-BUS wires are disconnected or open (in this case other warnings might appear with this alarm); if in doubt, redo the cabling.
- Replace the electronic dobbie board.
- If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>8201</b>	<b>Pattern error</b>
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*Description:*

The dobbie board hasn't received the raised heald data from the loom when expected. This alarm is generated when the loom fails to send the required data for the selection of the next raising at the encoder 0° or if this data is not received by the dobbie at 157° (input sensor FLB).  
 The loom is stopped in both cases.  
 The alarm may also be generated when the CAN-BUS line doesn't receive the pick signal.

*Remedies*

- If a FIMTEXTILE dobbie:
- Check the efficiency of proximity sensor FLB; if in doubt, replace the sensor.
  - Check the cabling of proximity sensor FLB from the electronic dobbie board (internal/external) up to the sensor. Carry out the full test sequence as for error 8200.
  - Check (with the loom moving) that proximity sensor FLB is excited at 157° dobbie.
  - Check the cabling of the CAN-BUS connections on the onboard dobbie board connector. It may be that one or both of the CAN-BUS wires are disconnected or open (in this case other warnings might appear with this alarm); if in doubt, redo the cabling.
  - Replace the electronic dobbie board.
  - If the problem persists, replace the entire power supply CAN-BUS cable between the loom and the Fim dobbie.
  - If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

If a STÄUBLI doobby:

Carry out the full test sequence as for error 8200.

Check the cabling of the CAN-BUS connections on the onboard doobby board connector. It may be that one or both of the CAN-BUS wires are disconnected or open (in this case other warnings might appear with this alarm); if in doubt, redo the cabling.

Replace the DSR electronic doobby board (table B-N° 10).

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>8202</b>	<b>Electromagnet error</b>
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*Description:*

If a FIMTEXTILE doobby: indicates that one or more electromagnet connections are open or not perfectly in contact. If a STÄUBLI doobby: this warns you that one or more electromagnets are open or short-circuited.

*Remedies:*

If a FIMTEXTILE doobby: Check the resistance of the electromagnets: this should be between 71 and 72.5 ohms immediately after starting the doobby and 72.5 and 80.2 ohms when the doobby is hot (i.e. after about 5-6 hours of uninterrupted working); if in doubt about the value of the resistance, replace the electromagnet. Check the status of the connections on the electromagnet connector on the doobby board.

NB: the electromagnet resistance control only happens when you switch the loom on and not during NORMAL functioning; in which case, any anomalies due to an interruption or false contact will only be detected at the next loom start-up.

If the problem immediately reappears, replace the electronic doobby board.

If a STÄUBLI doobby:

Check the resistance of the electromagnets: this should be between 200 ohms immediately after starting the doobby and 300 ohms when the doobby is hot (i.e. after about 5-6 hours of uninterrupted working); if in doubt about the value of the resistance, replace the electromagnet.

Check the status of the connections on the electromagnet connector on the DSR doobby board (table B-N° 10): replace the board if necessar

<b>8203</b>	<b>No oil/level switch faulty</b>
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*Description:*

If a FIMTEXTILE doobby: this error is inactive during the first three minutes of using the doobby; when active, it groups two different diagnostics board outputs:

Case 1 - No oil circuit pressure.

Case 2 - Oil level sensor faulty.

If a STÄUBLI doobby this error is inactive during the first two minutes of using the doobby; when active, it indicates the opening of the oil level switch and therefore that there isn't enough oil for correct lubrication.

*Remedies:*

If a FIMTEXTILE doobby:

Case 1

If this warning happens when the machine has been running for at least three minutes, it means that there isn't enough oil: the oil level sensor contact does not stay closed, but opens for more than a minute at a time.

In this case, check that the warning isn't due to a lack of oil in the tank or a blocked oil filter or pipes.

If there's oil in the tank, check that it flows correctly from the pipe overflow.

Use a tester to check the efficiency of the oil level sensor; if in doubt, replace the oil level sensor (the contact closes when the oil level rises).

Case 2

If this warning happens when the machine has been stopped for at least three minutes, it means that the oil level sensor is faulty: the oil level sensor contact stays closed even when the machine is stopped.

Check that the oil flows from the overflow hole in the oil tank (continual dribble).

Use a tester to find the faulty internal contact and then replace the oil level sensor with a new one.

It may happen that if the temperature is extremely cold, the oil (being very thick) finds it difficult to flow through the hole in the tank: you need to widen the hole slightly to avoid this problem.

If a STÄUBLI doobby

In this case, check that the warning isn't due to a lack of oil in the tank or a blocked oil filter or pipes.

Use a tester to check the efficiency of the oil level sensor; if in doubt, replace the oil level sensor (the contact closes when the oil level rises).

<b>8204</b>	<b>Can-bus error</b>
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*Description:*

This warns of an error on the CAN-BUS transmission line.

*Remedies:*

Switch the loom off, wait at least five seconds and then switch it back on again, thus giving the loom and the doobby time to shut down completely and delete all electronic anomalies. Then move the loom.

Check the connection of the CAN-BUS cable on the electronic doobby board; if in doubt, redo the connection cabling.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of

this manual.  
 If the problem persists, replace the doobby board:  
 for STÄUBLI DSR board (table B-N°10)  
 for FIMTEXTILE the board inside the doobby.

<b>8205</b>	<b>Unauthorised movement</b>
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*Description:*  
 The doobby has detected abnormal movement of the loom or any movement not in line with the doobby data.

*Remedies:*  
 Switch the loom off, wait at least five seconds and then switch it back on again, thus giving the loom and the doobby time to shut down completely and delete all electronic anomalies. Then move the loom.  
 Check that the position in degrees of the loom matches movement when an anomaly occurs.

<b>8206</b>	<b>Pick counter datum not received</b>
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*Description:*  
 The doobby hasn't received the progressive pick number (Pick Counter) sent by the loom at each turn (at each passing of the encoder 0°).

*Remedies:*  
 Switch the loom off, wait at least five seconds and then switch it back on again, thus giving the loom and the doobby time to shut down completely and delete all electronic anomalies. Then move the loom.  
 Check the connection of the CAN-BUS cable on the electronic doobby board; if in doubt, redo the connection cabling.  
 If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.  
 If the problem persists, replace the doobby board:  
 for STÄUBLI DSR board (table B-N°10)  
 for FIMTEXTILE the board inside the doobby  
 Replace the MLC board (table B-N°11) if the problem persists.

<b>8207</b>	<b>Wrong pick counter sequence</b>
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*Description:*  
 The doobby finds a problem with the progressive pick number (Pick Counter) sent by the loom after each turn.  
 The progressive number of the pattern sequence is also sent by the loom after each turn.

*Remedies:*  
 Switch the loom off, wait at least five seconds and then switch it back on again, thus giving the loom and the doobby time to shut down completely and delete all electronic anomalies. Then move the loom.  
 If the problem persists, replace the doobby board:

for STÄUBLI, DSR board (table B-N°10).  
 for FIMTEXTILE, the board inside the dobbie.  
 Check the main encoder and make sure that the joint is fixed properly to the encoder shaft.  
 Repeat the encoder timing procedure after replacing or removing the encoder.  
 If the problem persists, replace the MLC board (table B-N°11).

<b>8208</b>	<b>Oil lubrication error</b>
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*Description:*

This alarm is only active for a Stäubli dobbie and indicates that the contact in the oil level switch on the dobbie is still closed despite the fact that the loom has been at a standstill for more than a minute: it assumes, therefore, that the level switch is faulty (permanently closed).

*Remedies:*

Check that there aren't any deposits of oil around the level switch.  
 Check the dobbie level switch and replace if necessary.  
 Replace the DSR board (table B-N°10).

<b>8209</b>	<b>Heald configuration error</b>
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*Description:*

Inside the dobbie board there's a circuit that checks that the number of the magnets fitted is compatible with the configuration on the dobbie board. This alarm warns you that the fitted dobbie board isn't configured for the number of the magnets actually fitted on the dobbie.

This alarm will occur when you replace the dobbie board if you fit one with the wrong configuration.

*Remedies:*

Replace the DSR board (table B-N°10).  
 Contact the dobbie manufacturer to get the board set up correctly.

<b>8210</b>	<b>Incorrect pick counter timing</b>
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*Description:*

Two pick counter signals have reached the dobbie board without having received the pattern between these.

Pick counter signals count the picks: one should arrive with each new pick. This alarm therefore means that the pattern data have not reached the dobbie board between one pick and the next.

*Remedies:*

If a FIMTEXTILE: replace the board inside the dobbie.  
 If a STÄUBLI: replace the DSR board (table B-N°10).  
 Replace the MLC board (table B-N°11) if the problem persists.

<b>8211</b>	<b>Downloading</b>
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*Description:*

This means that the doobby board software is being upgraded.

*Remedies:*

Wait until the software has been transferred and then switch the loom off and back on again.

<b>8448</b>	<b>Generic shedding machine error level 1</b>
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*Description:*

If fitted with a Fimtextile doobby:

it means that the system has detected a level 1 problem inside the doobby board.

If fitted with a Stäubli doobby:

it means that the system has detected a level 1 problem inside the DSR board (table B-N°10)

*Remedies:*

If FIM, replace the board inside the doobby.

If Stäubli, replace the DSR board (table B-N°10).

If the problem persists contact PROMATECH Customer Service.

<b>8449</b>	<b>loom/jacquard out of synch</b>
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*Description:*

The MLC (table B-N°11) receives the pick number at each pick from the jacquard; a coherence check takes place within the MLC. In other words, the system checks that the jacquard has sent the picks in the right order and without skipping any.

*Remedies:*

This alarm may occur when you load a pattern while the rapiers are still in the shed; in this case, you should take the loom to about 340 degrees and then reassign the pattern.

Replace the MLC board (table B-N°11) if the alarm persists.

Contact the Jacquard machine manufacturer.

<b>8704</b>	<b>Generic shedding machine error level 2</b>
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*Description:*

If fitted with a Fimtextile doobby:

it means that the system has detected a level 2 problem inside the doobby board.

If fitted with a Stäubli doobby:

it means that the system has detected a level 2 problem inside the DSR board (table B-N°10).

*Remedies:*

If FIM, replace the board inside the doobby.

If Stäubli, replace the DSR board (table B-N°10).

If the problem persists contact PROMATECH Customer Service.

<b>8706</b>	<b>Initialising</b>
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*Description:*  
See alarm 8194

<b>8707</b>	<b>Serious Can error</b>
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*Description:*  
See alarm 8195

<b>8708</b>	<b>Electromagnet error</b>
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*Description:*  
See alarm 8196

<b>8709</b>	<b>no electromagnet power supply</b>
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*Description:*  
See alarm 8197.

<b>8710</b>	<b>fuse blown</b>
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*Description:*  
See alarm 8198.

<b>8711</b>	<b>ELM overcurrent</b>
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*Description:*  
See alarm 8199.

<b>8712</b>	<b>Power failure</b>
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*Description:*  
The two proximity sensor signals are inverted when they reach the doobby board. One or both of the proximity sensors are not sending the signal to the electronic board at the right time.

*Remedies:*

If a fimtextile doobby:

Check that the proximity sensors are connected correctly; sensor FLA (i.e. the first that meets the flag during its rotation in the correct direction) is always the one nearest to the sabre levers and therefore the loom (looking at the doobby from side opposite the loom).

If incorrect, invert the male/female connectors inside the doobby.

Or, directly on the terminal board of the electronic board, invert the outputs (the two black wires) for the two cables 3X0.35 to which the sensors are connected (only during start-up).

If not, check that the power supply rating towards the proximity sensors (the two brown wires) is 15V DC.

Check that the yellow doobby LEDs on the sensor come on with the flag, as this means that the sensor is correctly fed and that the distance (between 0 and 1.5 mm) is correct. Check also that the output of the sensors (the two black wires) returns to the electronic board and that the wires aren't interrupted. If in doubt, replace both the proximity sensors. If the problem immediately reappears, replace the electronic doobby board.

If a STÄUBLI doobby:  
 Check the cabling of the doobby proximities.  
 Check that the doobby proximities are fed properly.  
 Replace the doobby proximities.  
 Replace the DSR board (table B-N°10).

<b>8713</b>	<b>Pattern error</b>
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*Description:*  
 Vedi errore 8201.

<b>8714</b>	<b>Interlock signal error</b>
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*Description:*  
 Only if a STÄUBLI doobby:  
 this message means that there are problems when main encoder signals reach the DSR board, i.e. not in the right sequence.

*Remedies:*  
 Check the connection J42 on the MLC board (table B-N°11).  
 Check the connection J06 on the DSR board (table B-N°10).  
 Check the cabling WCS330 connecting the connection J42 on the MLC board with the connection J06 on the DSR board.  
 Replace the DSR doobby board (table B-N°10).  
 Replace the MLC board (table B-N°11).

<b>8722</b>	<b>Pattern not received</b>
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*Description:*  
See alarm 8201.

<b>8723</b>	<b>ELM not connected</b>
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*Description:*  
See alarm 8202.

<b>8724</b>	<b>Board diagnostics error</b>
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*Description:*  
Only if a STÄUBLI doobby:  
this message means that the DSR board (table B-N°10) has detected less than 2 active magnets.

*Remedies:*  
Check the doobby magnets and their connections.  
Replace the magnet pack.  
Replace the DSR doobby board (table B-N°10) if the problem persists.  
Replace also the MLC board (table B-N°11) if the problem persists.

<b>8725</b>	<b>No oil</b>
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*Description:*  
See alarm 8203.

<b>8726</b>	<b>faulty level switch</b>
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*Description:*  
See alarm 8208.

<b>8727</b>	<b>Can-bus error</b>
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*Description:*  
See alarm 8204.

<b>8728</b>	<b>Can status error</b>
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*Description:*  
See alarm 8204.

<b>8729</b>	<b>CAN overflow</b>
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*Description:*  
See alarm 8204.

8730	can buffer overload
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*Description:*  
See alarm 8204.

8731	Pick counter datum not received
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*Description:*  
See alarm 8206.

8732	Wrong pick counter sequence
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*Description:*  
See alarm 8207.

8733	Oil lubrication error
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*Description:*  
See alarm 8208.

8734	Heald configuration error
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*Description:*  
See alarm 8209.

8735	incorrect pick counter timing
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*Description:*  
See alarm 8207.

8885	Timeout for a movement request message
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*Description:*  
Only if a STÄUBLI dobbie:  
this message means that the MLC board (table B-N°11) has not received an answering message from the DSR board (table B-N°10) for a movement request.

*Remedies:*  
Replace the DSR dobbie board (table B-N°10).  
Replace the MLC board (table B-N°11).connection J06 on the DSR board.

<b>8886</b>	<b>Encoder out of synch</b>
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*Description:*

Only if a STÄUBLI doobby:

The DSR doobby board (table B-N°10) counts the degrees coming from the main encoder; the same is true of the MLC board (table B-N°11). These two boards then swap the position data. This alarm means that the counts from these two boards do not tally, i.e. they have counted different positions.

*Remedies:*

Replace the DSR doobby board (table B-N°10).  
 Replace the MLC board (table B-N°11).

<b>8905</b>	<b>Internal error 1</b>
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*Description:*

Only if a STÄUBLI doobby:

When the main encoder zero pulse reaches the DSR doobby board (table B-N°10), the internal circuits reset the encoder counter. This operation is called "interrupt". This alarm means that the zero encoder signal has arrived, but there has been no interrupt.

*Remedies:*

Replace the DSR doobby board (table B-N°10).

<b>8906</b>	<b>Internal error 2</b>
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*Description:*

Only if a STÄUBLI doobby:

When the main encoder zero pulse reaches the DSR doobby board (table B-N°10), the internal circuits reset the encoder counter. This operation is called "interrupt". This alarm means that the zero encoder signal has arrived, but there has been no interrupt.

*Remedies:*

Replace the DSR doobby board (table B-N°10).

<b>8907</b>	<b>Internal error 3</b>
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*Description:*

Only if a STÄUBLI doobby:

When the main encoder zero pulse reaches the DSR doobby board (table B-N°10), the internal circuits reset the encoder counter. This operation is called "interrupt". This alarm means that the zero encoder signal has arrived, but there has been no interrupt.

*Remedies:*

Replace the DSR doobby board (table B-N°10).

<b>8908</b>	<b>Internal error 4</b>
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*Description:*

Only if a STÄUBLI doobby:

When the main encoder zero pulse reaches the DSR doobby board (table B-N°10), the internal circuits reset the encoder counter. This operation is called "interrupt". This alarm means that the zero encoder signal has arrived, but there has been no interrupt.

*Remedies:*

Replace the DSR doobby board (table B-N°10).

<b>8909</b>	<b>Internal error 5</b>
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*Description:*

Only if a STÄUBLI doobby:

When the main encoder zero pulse reaches the DSR doobby board (table B-N°10), the internal circuits reset the encoder counter. This operation is called "interrupt". This alarm means that the zero encoder signal has arrived, but there has been no interrupt.

*Remedies:*

Replace the DSR doobby board (table B-N°10).

<b>8910</b>	<b>EEprom Error</b>
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*Description:*

Only if a STÄUBLI doobby:

This means that the EEPROM on the DSR board (table B-N°10) contains no software or is corrupted.

*Remedies:*

Replace the DSR doobby board (table B-N°10).

<b>8911</b>	<b>EEprom checksum error</b>
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*Description:*

Only if a STÄUBLI doobby:

This means that the EEPROM on the DSR board (table B-N°10) contains no software or is corrupted.

*Remedies:*

Replace the DSR doobby board (table B-N°10).

<b>8912</b>	<b>Dobby type selection error</b>
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*Description:*

Only if a STÄUBLI doobby:

This means that the system has detected the presence of the Stäubli DSR doobby board (table B-N°10), yet the loom set-up (from the console) foresees a different doobby type.

*Remedies:*

Check that the loom set-up programming corresponds to the actual configuration of the loom, paying special attention to the shedding machine.

<b>8960</b>	<b>Generic shedding machine error level 3</b>
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*Description:*

If fitted with a Fimtextile doobby:

it means that the system has detected a level 3 problem inside the doobby board.

If fitted with a Stäubli doobby:

it means that the system has detected a level 3 problem inside the DSR board (table B-N°10)

*Remedies:*

If FIM, replace the board inside the doobby.

If Stäubli, replace the DSR board (table B-N°10).

If the problem persists contact PROMATECH Customer Service.

## IES Alarms

<b>11264</b>	<b>Generic IES ERROR level 0</b>
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*Description:*

There's a level 0 internal error on the MHD board (table C-N°1).

*Remedies:*

Replace the MHD board (table C-N°1).  
Contact PROMATECH Customer Service.

<b>11265</b>	<b>Motor 1 position alarm</b>
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*Description:*

The selvedge device (IES) moves to suit the position of the loom. This alarm warns that Hall detector on selvedge device 1 (RH) has found that the position of this device is not in line with the loom position during weaving.

*Remedies:*

Check that there is 5V DC between pins 8 and 9 on connection J07 on the MHD board (table C-N°1), if this isn't so, replace the MHD board (table C-N°1).

Carry out the levelling calibration operation for distance A and B of the device (see Console user manual).

Switch the loom off and check that when you move it by hand, the selvedge device moves without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the device to find out what's obstructing the movement.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector J02 on the selvedge device and switch the loom on again.

Manually move the device and check (in the selvedge device menu) that the value of the Hall detector when the device fully left is about 0.7V DC, while when fully right it's about 4.7V DC. If this isn't so, replace the selvedge device or replace the MHD board (table C-N°1).

If the problem persists, replace the MHP module that commands the IES above the MHD (table C-N°1).

Check the connections selvedge device.

Check connection J07 on the MHD board (table C-N°1).

Check the cabling WLS380 connection the connection J07 on the MHD board (table C-N°1) with the connection J1 on the selvedge device.

<b>11266</b>	<b>Motor 2 position alarm</b>
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*Description:*

The selvedge device (IES) moves to suit the position of the loom. This alarm warns that Hall detector on selvedge device 2 (LH) has found that the position of this device is not in line with the loom position during weaving.

*Remedies:*

Check that there is 5V DC between pins 19 and 20 on connection J07 on the MHD board (table C-N°1), if this isn't so, replace the MHD board (table C-N°1).

Carry out the levelling calibration operation for distance A and B of the device (see Console user manual).

Switch the loom off and check that when you move it by hand, the selvedge device moves

without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the device to find out what's obstructing the movement.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector J02 on the selvedge device and switch the loom on again.

Manually move the device and check (in the selvedge device menu) that the value of the Hall detector when the device fully left is about 0.7V DC, while when fully right it's about 4.7V DC. If this isn't so, replace the selvedge device or replace the MHD board (table C-N°1).

If the problem persists, replace the MHP module that commands the IES above the MHD (table C-N°1).

Check the connections on the selvedge device.

Check connection J07 on the MHD board (table C-N°1).

Check the cabling WLS381 connecting the connection J07 on the MHD board (table C-N°1) with the connection J1 on the selvedge device.

<b>11267</b>	<b>Motor 3 position alarm</b>
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*Description:*

The selvedge device (IES) moves to suit the position of the loom. This alarm warns that Hall detector on selvedge device (IES) 3 (centre-right) has found that the position of this device is not in line with the loom position during weaving.

*Remedies:*

Check that there is 5V DC between pins 8 and 9 on connection J08 on the MHD board (table C-N°1), if this isn't so, replace the MHD board (table C-N°1).

Carry out the levelling calibration operation for distance A and B of the device (see Console user manual).

Switch the loom off and check that when you move it by hand, the selvedge device moves without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the device to find out what's obstructing the movement.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector J02 on the selvedge device and switch the loom on again.

Manually move the device and check (in theselvedge device menu) that the Value of the Hall detector when the device fully left is about 0.7V DC, while when fully right it's about 4.7V DC. If this isn't so, replace the selvedge device or replace the MHD board (table C-N°1).

If the problem persists, replace the MHP module that commands the IES above the MHD (table C-N°1).

Check the connections on the selvedge device.

Check connection J08 on the MHD board (table C-N°1).

Check the cabling WLS382 connecting the connection J08 on the MHD board (table C-N°1) with the connection J1 on the selvedge device.

<b>11268</b>	<b>Motor 4 position alarm</b>
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*Description:*

The selvedge device (IES) moves to suit the position of the loom. This alarm warns that Hall detector on selvedge device (IES) 4 (centre-left) has found that the position of this device is not in line with the loom position during weaving.

*Remedies:*

Check that there is 5V DC between pins 19 and 20 on connection J08 on the MHD board (table C-N°1), if this isn't so, replace the MHD board (table C-N°1).

Carry out the levelling calibration operation for distance A and B of the device (see Console user manual).

Switch the loom off and check that when you move it by hand, the selvage device moves without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the device to find out what's obstructing the movement.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector J02 on the selvage device and switch the loom on again.

Manually move the device and check (in the selvage device menu) that the value of the Hall detector when the device fully left is about 0.7V DC, while when fully right it's about 4.7V DC. If this isn't so, replace the selvage device or replace the MHD board (table C-N°1).

If the problem persists, replace the MHP module that commands the IES above the MHD (table C-N°1).

Check the connections on the selvage device.

Check connection J08 on the MHD board (table C-N°1).

Check the cabling WLS383 connecting the connection J08 on the MHD board (table C-N°1) with the connection J1 on the selvage device.

<b>11269</b>	<b>Motor 1 temperature alarm</b>
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*Description:*

The temperature of the coils in the selvage device (IES) 1 (RH) is higher than 55°C: this generally happens when too much current is used to move the device.

*Remedies:*

Check that there is 5V DC between pins 8 and 9 on connection J07 on the MHD board (table C-N°1), if this isn't so, replace the MHD board (table C-N°1).

Carry out the levelling calibration operation for distance A and B of the device (see Console user manual).

Switch the loom off and check that when you move it by hand, the selvage device moves without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the device to find out what's obstructing the movement.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector J02 on theselvage device and switch the loom on again.

Manually move the device and check (in the selvage device menu) that the value of the Hall detector when the device fully left is about 0.7V DC, while when fully right it's about 4.7V DC. If this isn't so, replace the selvage device or replace the MHD board (table C-N°1).

If the problem persists, replace the MHP module that commands the IES above the MHD (table C-N°1).

Check the connections on the selvage device.

Check connection J07 on the MHD board (table C-N°1).

Check the cabling WLS380 connecting the connection J07 on the MHD board (table C-N°1) with the connection J1 on the selvage device.

<b>11270</b>	<b>Motor 2 temperature alarm</b>
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*Description:*

The temperature of the coils in the selvage device (IES) 2 (RH) is higher than 55°C: this generally happens when too much current is used to move the device.

*Remedies:*

Check that there is 5V DC between pins 19 and 20 on connection J07 on the MHD board (table C-N°1), if this isn't so, replace the MHD board (table C-N°1).

Carry out the levelling calibration operation for distance A and B of the device (see Console user manual).

Switch the loom off and check that when you move it by hand, the selvedge device moves without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the device to find out what's obstructing the movement.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector J02 on the selvedge device and switch the loom on again.

Manually move the device and check (in the selvedge device menu) that the Value of the Hall detector when the device fully left is about 0.7V DC, while when fully right it's about 4.7V DC. If this isn't so, replace the selvedge device or replace the MHD board (table C-N°1).

If the problem persists, replace the MHP module that commands the IES above the MHD (table C-N°1).

Check the connections on the selvedge device.

Check connection J07 on the MHD board (table C-N°1).

Check the cabling WLS381 connecting the connection J07 on the MHD board (table C-N°1) with the connection J1 on the selvedge device.

<b>11271</b>	<b>Motor 3 temperature alarm</b>
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*Description:*

The temperature of the coils in the selvedge device (IES) 3 (centre-right) is higher than 55°C: this generally happens when too much current is used to move the device.

*Remedies:*

Check that there is 5 V DC between pins 8 and 9 on connection J08 on the MHD board (table C-N°1), if this isn't so, replace the MHD board (table C-N°1).

Carry out the levelling calibration operation for distance A and B of the device (see Console user manual).

Switch the loom off and check that when you move it by hand, the selvedge device moves without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the device to find out what's obstructing the movement.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector J02 on the selvedge device and switch the loom on again.

Manually move the device and check (in the selvedge device menu) that the value of the Hall detector when the device fully left is about 0.7 V DC, while when fully right it's about 4.7 V DC. If this isn't so, replace the selvedge device or replace the MHD board (table C-N°1).

If the problem persists, replace the MHP module that commands the IES above the MHD (table C-N°1).

Check the connections on the selvedge device.

Check connection J08 on the MHD board (table C-N°1).

Check the cabling WLS382 connecting the connection J08 on the MHD board (table C-N°1) with the connection J1 on the selvedge device.

<b>11272</b>	<b>Motor 4 temperature alarm</b>
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*Description:*

The temperature of the coils in the selvedge device (IES) 4 (centre-left) is higher than 55°C: this generally happens when too much current is used to move the device.

*Remedies:*

Check that there is 5V DC between pins 19 and 20 on connection J08 on the MHD board (table C-N°1), if this isn't so, replace the MHD board (table C-N°1).

Carry out the levelling calibration operation for distance A and B of the device (see Console user manual).

Switch the loom off and check that when you move it by hand, the selvage device moves without using excessive force, otherwise it means that there is a mechanical obstruction and so you need to open the device to find out what's obstructing the movement.

Check the efficiency of the Hall detectors as follows:

Switch the loom off, disconnect connector J02 on the selvage device and switch the loom on again.

Manually move the device and check (in the selvage device menu) that the value of the Hall detector when the device fully left is about 0.7V DC, while when fully right it's about 4.7V DC. If this isn't so, replace the selvage device or replace the MHD board (table C-N°1).

If the problem persists, replace the MHP module that commands the IES above the MHD (table C-N°1).

Check the connections on the selvage device.

Check connection J08 on the MHD board (table C-N°1).

Check the cabling WLS383 connecting the connection J08 on the MHD board (table C-N°1) with the connection J1 on the selvage device.

<b>11273</b>	<b>IES number doesn't match</b>
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*Description:*

This means that at least one IES has been set during set-up, but the MHP board is missing.

*Remedies:*

If the loom expects the use of IES:

Check for the MHP board above the MHD board (table C-N°1).

If the loom doesn't expect the use of IES:

Check the loom set-up programming from the console.

<b>11274</b>	<b>No encoder zero</b>
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*Description:*

With each turn of the loom, the main encoder sends a pulse called the "zero pulse" that should coincide with the mechanical zero of the loom. This is needed to start the loom position count again and to synchronise the count for all the boards that need to know the position of the loom.

*Remedies:*

Check the cabling of the encoder, especially the zero signal at pin 3 on connector J40 on the MLC board (table B-11).

Check connection J02 on the MLC board (table B-11).

If the loom is fitted with the positive cutter, check connections ENC.A and ENC.B on the cutter drive (table B-N°5).

Check the cabling WCS340 connecting the connection J02 on the MLC board with the connection J24 on the MHD board: this should not be cut or crushed.

Check that there's 5V DC between pins 5 and 10 on connection J40 on the MLC board.

Check the state of fuse F1 on the MLC board.

Replace the MLC board (table B-N°11).

Replace the MHD board (table C-N°1).

11520	Generic IES ERROR level 1
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*Description:*

There's a level 1 internal error on the MHD board (table C-N°1)

*Remedies:*

Replace the MHD board (table C-N°1).  
Contact PROMATECH Customer Service.

11776	Generic IES ERROR level 2
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*Description:*

There's a level 1 internal error on the MHD board (table C-N°1)

*Remedies:*

Replace the MHD board (table C-N°1).  
Contact PROMATECH Customer Service.

11032	Generic IES ERROR level 3
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*Description:*

There's a level 1 internal error on the MHD board (table C-N°1)

*Remedies:*

Replace the MHD board (table C-N°1).  
Contact PROMATECH Customer Service.

## HI-DRIVE Alarms

<b>13312</b>	<b>Generic Hi-Drive device ERROR level 0</b>
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*Description:*

This means that the system has detected a level 0 problem in the Hi-Drive device (table B-N°7).

*Remedies:*

Replace the Hi-Drive device (table B-N°7).  
If the problem persists contact PROMATECH Customer Service.

<b>13313</b>	<b>Timeout on drive start-up</b>
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*Description:*

The Hi-Drive device (table B-N°7) sends a signal 24V DC to SFC board. This signal is called "DRIVE OK" and tells the SFC (table C-N°04) that the drive is switched on and working. This alarm warns you that 10 seconds have passed since switching on the loom, but the DRIVE OK signal has not been sent to the MLC.

*Remedies:*

Switch the loom off and then back on again.  
If the problem persists check that there's 24V DC between pin 16 of connection J19 on the SFC board and the earth; if not, check the state of fuse F4 on the SFC board; replace the SFC board if necessary (table C-N°04).  
Check that there's 24V DC between pin 5 on connection J19 on the SFC board and the earth, if this isn't so, replace the Hi-Drive device (table B-N°7), otherwise replace the SFC board (table C-N°04).  
Check the state of the cabling WCS 304 used to connect connection J19 on the SFC board with connection J20 inside the Hi-Drive converter (table B-N°7).

<b>13314</b>	<b>Drive fail</b>
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*Description:*

The Hi-Drive drive (table B-N°7) sends a signal 24V DC to SFC board. This signal is called "DRIVE OK" and tells the SFC (table C-N°04) that the drive is switched on and working. This alarm warns you that the DRIVE OK signal has not been sent to the SFC when the loom was switched on or while working.

*Remedies:*

Switch the loom off and then back on again.  
If the problem persists check that there's 24V DC between pin 16 of connection J19 on the SFC board and the earth; if not, check the state of fuse F4 on the SFC board; replace the SFC board if necessary (table C-N°04).  
Check that there's 24V DC between pin 5 on connection J19 on the SFC board and the earth, if this isn't so, replace the Hi-Drive device (table B-N°7), otherwise replace the SFC board (table C-N°04).  
Check the state of the cabling WCS 304 used to connect connection J19 on the SFC board with connection J20 inside the Hi-Drive converter (table B-N°7).

<b>13317</b>	<b>Position error. Slow motion pick required</b>
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*Description:*

This alarm warns you that the loom has stopped and that the actual position of the motor read by the motor resolver and the theoretical position calculated by the MLC board software (table B-N°11) do not tally.

*Remedies:*

Press the Slow Motion button once. This is needed to reset the alarm and lets you attempt to move the machine again.

If the alarm persists:

Make sure that there are no external forces moving the motor (e.g. excessive load from the Jacquard).

Check cable WLS301 used to connect connection J12 in the drive to the main motor.

Check cable WCS301 used to connect connection J18 in the drive to connection J03 on the MLC board (table B-N°11).

Replace the MLC board (table B-N°11).

Replace the Hi-Drive device (table B-N°7).

Replace the main motor.

<b>13318</b>	<b>Speed tracking error. Slow motion pick required</b>
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*Description:*

This alarm means that the loom was carrying out a movement when the system detected a discrepancy between the actual position of the motor read by the motor resolver and the theoretical position calculated by the MLC board software (table B-N°11).

*Remedies:*

Press the Slow Motion button once. This is needed to reset the alarm and lets you attempt to move the machine again.

If the alarm persists:

Make sure that there are no external forces moving the motor (e.g. excessive load from the Jacquard).

Check cable WLS301 used to connect connection J12 in the drive to the main motor.

Check cable WCS301 used to connect connection J18 in the drive to connection J03 on the MLC board (table B-N°11).

See also errors 1063-1064 (warnings during the disengage/pick-finding/engage sequence, code 20-120-220).

Replace the MLC board (table B-N°11).

Replace the Hi-Drive device (table B-N°7).

Replace the main motor.

<b>13319</b>	<b>15V DC supply error in board MLC</b>
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*Description:*

This alarm indicates that there is no 15V DC for the MLC board (table B-N°11), used to generate the positive Vref signal needed to tell the Hi-Drive device the speed required of the main motor.

*Remedies:*

Replace the MLC board (table B-N°11).

<b>13320</b>	<b>Over speed</b>
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*Description:*

The MLC board (table B-N°11) checks that the loom does not exceed the max accepted speed (700 rpm). This alarm therefore warns you that the main motor has picked up too much speed and is out of control.

*Remedies:*

- Switch the loom off and then back on again.
- Replace the Hi-Drive device (table B-N°7).
- Replace the MLC board (table B-N°11).
- Replace the SFC board (table C-N°04).
- Replace the main motor.

<b>13321</b>	<b>Incoherent encoders</b>
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*Description:*

There is a system in the Hi-Drive device (table B-N°7) that checks that each motor degree corresponds to 3.5 loom degrees. The resolver device in the motor and the main encoder in the loom read this.

This alarm appears when the motor has moved a space more than or less than 3.5° for each loom degree.

*Remedies:*

- This alarm may also appear after adjusting the encoders or a software upgrade; simply switch the loom off and back on again to deal with this. If the problem persists, check cable WLS301 used to connect connection J12 in the Hi-Drive device (table B-N°7) to connection J01 in the main motor.
- Check cable WCS301 used to connect connection J18 in the Hi-Drive device (table B-N°7) to connection J03 in the MLC board (table B-N°11).
- Check the mechanical closing of the clamp that secures the motor shaft to the loom mechanism.
- Replace the Hi-Drive device (table B-N°7).
- Replace the MLC board (table B-N°11).
- Replace the SFC board (table C-N°04).
- Replace the main motor.

<b>13322</b>	<b>No I/O signal coherence during check immediately after switching on</b>
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*Description:*

When you switch the loom on, the MLC board (table B-N°11) checks that contactor KD02 (table B-N°13) is not already excited. It also checks that the "run" signal coming from the SFC board (table C-N°04) is not already excited. This alarm warns you that one of the two above conditions exists.

*Remedies:*

- Check that contactor KD02 (table B-N°13) isn't mechanically jammed and replace if necessary.
- Replace the Hi-Drive device (table B-N°7).
- Replace the MLC board (table B-N°11).
- Replace the SFC board (table C-N°04).

<b>13324</b>	<b>Error during continuous running</b>
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*Description:*

The Hi-Drive device software has detected a continuous running error due to:

- wrong direction of motor rotation

*Remedies:*

Switch the loom off and then back on again.

If the problem persists, check cable WCS304 used to connect connection J20 in the Hi-Drive device (table B-N°7) to connection J19 on the SFC board (table C-N°4).

If necessary replace the Hi-Drive device (table B-N°7).

If necessary replace the SFC board (table C-N°04).

<b>13325</b>	<b>Error during start pick-up in continuous running</b>
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*Description:*

The Hi-Drive device software has detected an error during the acceleration pick-up in continuous running mode due to:

- wrong direction of motor rotation

*Remedies:*

Switch the loom off and then back on again.

Replace the SFC board (table C-N°04) if the problem persists.

Make sure that there are no mechanical obstructions preventing the closing of the coupling.

Check the cabling WLS356 connecting the connection J40 on the MLC board (table B-N°11) to the main encoder.

Replace the main encoder (dobby side).

Check the cabling WLS357 connecting the connection J41 on the MLC board (table B-N°11) to auxiliary encoder.

Replace the auxiliary encoder (loom side).

The replacement of an encoder requires the implementation of the re-synchronising procedure.

See console manual.

Replace the MLC board (table B-N°11).

Check cable WLP301 connecting the motor power section to the drive.

The black wire 1 is used to connect the U terminal on the drive to the U terminal on the motor.

The black wire 2 is used to connect the V terminal on the drive to the V terminal on the motor.

The black wire 3 is used to connect the W terminal on the drive to the W terminal on the motor.

<b>13326</b>	<b>Error during stop pick-up in continuous running</b>
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*Description:*

The Hi-Drive device software has detected an error during the slow-down (from continuous running to loom stop) due to:

- wrong direction of motor rotation

*Remedies:*

Switch the loom off and then back on again.

Replace the SFC board (table C-N°04) if the problem persists.

Make sure that there are no mechanical obstructions preventing the closing of the coupling.

Check the cabling WLS356 connecting the connection J40 on the MLC board (table B-N°11) to the main encoder.  
 Replace the main encoder (dobby side).  
 Check the cabling WLS357 connecting the connection J41 on the MLC board (table B-N°11) to auxiliary encoder.  
 Replace the auxiliary encoder (loom side).

The replacement of an encoder requires the implementation of the re-synchronising procedure; press key "W" for details.  
 Replace the MLC board (table B-N°11).  
 Check cable WLP301 connecting the motor power section to the drive.  
 The black wire 1 is used to connect the U terminal on the drive to the U terminal on the motor.  
 The black wire 2 is used to connect the V terminal on the drive to the V terminal on the motor.  
 The black wire 3 is used to connect the W terminal on the drive to the W terminal on the motor.

<b>13327</b>	<b>Stop timeout exceeded during stop slow-down in continuous running (1st control)</b>
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*Description:*  
 The Hi-Drive device continues to receive signals from the main motor resolver after a loom stop. This means that the motor is still moving.

*Remedies:*  
 Switch the loom off and then back on again.  
 Replace the SFC board (table C-N°04) if the problem persists.  
 Replace the MLC board (table B-N°11) if the problem persists.  
 Replace the Hi-Drive motor if the problem persists.  
 Replace the Hi-Drive device (table B-N°7) if the problem persists.  
 Check the cabling WLS301 connecting the connection J03 on the MLC board (table B-N°11) to connection J20 in the Hi-Drive device (table B-N°7).

<b>13328</b>	<b>Stop timeout exceeded during stop slow-down in continuous running (2nd control)</b>
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*Description:*  
 The Hi-Drive device continues to receive signals from the main motor resolver after a loom stop. This means that the motor is still moving.

*Remedies:*  
 Switch the loom off and then back on again.  
 Replace the SFC board (table C-N°04) if the problem persists.  
 Replace the MLC board (table B-N°11) if the problem persists.  
 Replace the Hi-Drive motor if the problem persists.  
 Replace the Hi-Drive device (table B-N°7) if the problem persists.  
 Check the cabling WLS301 connecting the connection J03 on the MLC board (table B-N°11) to connection J20 in the Hi-Drive device (table B-N°7).

<b>13329</b>	<b>-15V DC supply error in board MLC</b>
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*Description:*

This alarm warns you that there is no -15V DC power at the MLC board (table B-N°11), needed to generate the positive Vref signal used to tell the Hi-Drive device the speed required of the main motor.

*Remedies:*

Replace the MLC board (table B-N°11).

<b>13330</b>	<b>No dobbie sensor signal</b>
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*Description:*

The MLC board software checks that, during start and when the loom is moving and the 321°-30° proximity on the loom is enabled, the corresponding 321°-30° proximity on the shedding machine is on.

This alarm warns you that one of the rapier/reed proximities is on, but the corresponding proximity on the dobbie is off. The problem may be due to the shedding machine and the loom being out-of-synch.

*Remedies:*

Make sure that the loom and the shedding machine are not mechanically out-of-synch; otherwise, re-time and adjust the settings of the sensors and the encoders.

See console manual.

Make sure that proximity switches on the side of the shedding machine come on when the "flags" pass.

Make sure that connector XLS104 next to the shedding machine 321° sensor (SQ103) is not disconnected.

Make sure that connector XLS106 next to the shedding machine 30° sensor (SQ105) is not disconnected.

Check the state of fuse F4 on the SFC board (table C-N°4).

Check that there is 24 V DC between pins 4 and 6 in connection J35 on the MLC board (table B-N°11) to control the 330° sensor power supply (SQ103); make sure that there is a return signal when the sensor is on at pin 5 in connector J35.

Check that there is 24 V DC between pins 1 and 3 in connection J35 on the MLC board (table B-N°11) to control the 30° sensor power supply (SQ105); make sure that there is a return signal when the sensor is on at pin 2 in connector J35.

Check the air gap on the sensors (this should be 0,5 mm).

Check the cabling WCS314 used to connect connection J27 on the SFC board to connection J01 on the MLC board.

Replace the shedding machine 330° sensor (SQ103).

Replace the shedding machine 30° sensor (SQ105).

Replace the MLC board (table B-N°11).

Replace the SFC board (table C-N°4).

<b>13331</b>	<b>Oil pump off</b>
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*Description:*

The MLC board software checks that a command signal is sent to contactor KM30 on the oil pump when the loom is moving.

*Remedies:*

Replace the MLC board (table B-N°11).

<b>13337</b>	<b>No coherence between heald sensor and rapier/reed sensor</b>
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*Description:*

The MLC board software continuously checks that the shed is not closed or that the rapiers are in the shed. This is done by using the open shed proximity on the shedding machine joint and the rapiers-out-of-shed proximity on the nonius dial.

The combination of these two signals must never be "rapiers in shed" and "shed closed": this tells you that the loom is out-of-synch and you risk breaking all the warp threads.

*Remedies:*

Check that the loom is effectively synchronised with the shedding machine.

If not, check that the mechanical terminals on the shedding machine joint are closed and that the drive belt for the nonius dial is not broken.

If the loom is out-of-synch, re-time it using the re-timing procedure.

See console manual.

If, on the other hand, the loom is properly synchronised, there may be a problem with the proximity switches. Deal with this as follows:

Check that there's 24V DC between points 4 and 6 on connection J12 on the RIO board (table E-N°4). If absent, check the state of fuse F3 on the RIO board (table E-N°4).

Replace the RIO board (table E-N°4).

Check cable WLS404 used to connect connection J12 with the proximity on the nonius dial.

Replace the rapier-out-of-position proximity switches on the nonius dial.

Check that there's 24V DC between points 10 and 12 on connection J35 on the MLC board (table B-N°11). If none, check the state of fuse F4 on the SFC board (table C-N°4).

Replace the MLC board (table V-N°11).

Replace the SFC board (table C-N°4).

Check cable WLS365 used to connect connection J35 on the MLC board with the proximity by the shedding machine joint.

Check cable WLS314 used to connect connection J01 on the MLC board with connection J27 on the SFC board.

<b>13338</b>	<b>Unacceptable rapier/reed movement</b>
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*Description:*

The MLC board software has commanded the coupling to open, but the system still detects signals coming from the loom encoder.

*Remedies:*

Use the console to open the coupling manually (see console manual) and make sure that the coupling is actually open.

Otherwise, if the coupling fails to open, check cable WLP332 used to connect connection J03 on the SFC board (table C-N°4) to the coupling coil.

Make sure that the coil is not earthed and that its resistance is roughly 21 Ohm.

Check the state of fuse F10 on the SFC board.

Replace relay K3 on the SFC board. This is easily replaced by removing it from its holder.

Replace the SFC board.

Replace the encoder on the loom (rapier/reed encoder).

Replace the MLC board (table B-N°11).

<b>13339</b>	<b>Drive OK signal active when drive off</b>
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*Description:*

The MLC board software has not commanded the drive power-up, but there is a 24V DC signal coming from the drive at pin 5 on connection J19 in the SFC board (table C-N°4) indicating that the drive is on and running.

*Remedies:*

Switch the loom off for 3 minutes and then back on again.

Check cable WCS304 used to connect connection J19 on the SFC board to connection J20 on the Hi-Drive device.

If the problem persists, the MLC board (table B-N°11) may have been reset.

Replace the MLC board (table B-N°11).

Replace the SFC board (table C-N°4)

Replace the Hi-Drive device (table B-N°7).

<b>13341</b>	<b>Rapier reed movement in wrong direction</b>
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*Description:*

The MLC board software has detected that the motor turns in one sense and main encoder in the opposite sense in slow motion.

This alarm usually appears during final testing; it is most unlikely during normal use of the loom.

*Remedies:*

Replace the loom encoder (rapier/reed). NB: If you have to change the auxiliary encoder, you need to time this using the guided console procedure. Click on "W" at the side to open a "wizard" procedure that guides you through the re-timing of the loom/dobby/main encoder/auxiliary encoder.

Replace the MLC board (table B-N°11).  
 Check cable WLS357 used to connect connection J41 on the MLC board with the rapier/  
 reed encoder, paying special attention to signals A and B (these must not be inverted).

<b>13342</b>	<b>No rapier reed encoder zero</b>
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*Description:*  
 The MLC board software has detected more than 1440 switching signals (360°) from the rapier/reed encoder, but the zero pulse has not been received.

*Remedies:*  
 Replace the loom encoder (rapier/reed).  
 Replace the MLC board (table B-N°11).  
 Check cable WLS357 used to connect connection J41 on the MLC board to the rapier/reed encoder, paying special attention to the Z signal (pin 3 - connection J41 - board MLC).

<b>13344</b>	<b>Reed/rapier shaft 30° sensor faulty</b>
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*Description:*  
 The MLC board software has found that the rapier/reed encoder has completed 2 turns in slow motion (i.e. the loom has made two turns), but the 30° proximity on the loom has not generated two signals. This proximity should generate a signal between 28° and 32°.

*Remedies:*  
 Make sure the sensor is connected, check cabling WLS364, especially connector XLS102 on SQ101.  
 Check that there's 24V DC between pins 1 and 3 on connection J34 on the MLC board (table B-N°11), otherwise check the state of fuse F4 on the SFC board (table C-N°4).  
 Check the cabling WCS314 used to connect connection J27 on the SFC board (table C-N°04) to connection J01 on the MLC board (table B-N°11).  
 If there's 24V DC, replace the 30° proximity on the loom. NB The gap between the proximity and the flag should be 0.5mm.  
 Replace the MLC board (table B-N°11) if the problem persists.

<b>13345</b>	<b>Reed/rapier shaft 42° sensor faulty</b>
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*Description:*  
 This alarm is only present on Silver HS loom and warns you that the MLC board software has found that the rapier/reed encoder has completed 2 turns in slow speed (i.e. the loom has made two turns), but the 42° proximity on the loom has not generated two signals. This proximity should generate a signal between 40° and 44°.

*Remedies:*  
 Make sure the sensor is connected, check cabling WLS364, especially connector XLS101 on SQ100.

Check that there is 24V DC between pins 7 and 9 in connection J35 on the MLC board (table B-N°11); if absent, check the state of fuse F4 on the SFC board (table C-N°4) and check cable WCS314 used to connect connection J27 on the SFC board (table C-N°4) to connection J01 on the MLC board (table B-N°11).  
 If there's 24V DC, replace the 42° proximity on the loom. NB The gap between the proximity and the flag should be 0.5mm.  
 Replace the MLC board (table B-N°11) if the problem persists.

<b>13346</b>	<b>Sensore 330° albero pinza pettine guasto</b>
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*Description:*  
 The MLC board software has found that the rapier/reed encoder has completed 2 turns in slow motion (i.e. the loom has made two turns), but the 321° proximity on the loom has not generated two signals. This proximity should generate a signal between 319° and 323°.

*Remedies:*  
 Make sure the sensor is connected, check cabling WLS364, especially connector XLS103 on SQ102.  
 Check that there is 24V DC between pins 4 and 6 in connection J34 on the MLC board (table B-N°11); if absent, check the state of fuse F4 on the SFC board (table C-N°4) and check cable WCS314 used to connect connection J27 on the SFC board (table C-N°4) to connection J01 on the MLC board (table B-N°11).  
 If there's 24V DC, replace the 321° proximity on the loom. NB The gap between the proximity and the flag should be 0.5mm.  
 Replace the MLC board (table B-N°11) if the problem persists.

<b>13347</b>	<b>Rapiers-out sensor faulty</b>
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*Description:*  
 The MLC board software has found that the rapier/reed encoder has completed 2 turns in slow motion (i.e. the loom has made two turns), but the PF proximity (rapiers out) on the nonius dial has not generated two signals. This proximity should generate a signal between 280° and 70°.

*Remedies:*  
 Make sure the sensor is connected, check cabling WLS404, especially connector XLS20/2 on SQ14/2.  
 Check that there is 24V DC between pins 4 and 6 in connection J12 on the RIO board (table E-N°4); if absent, check the state of fuse F4 on the SFC board (table C-N°4) and fuse F3 on the RIO board (table E-N°4). Check cable WLP360 used to connect connection J26 on the SFC board to connection J03 on the RIO board.  
 If there is 24V DC, replace the rapier-out proximity on the nonius dial. NB The gap between the proximity and the flag should be 0.5mm.  
 Replace the RIO board (table E-N°4) if the problem persists.

<b>13348</b>	<b>Dobby shaft 30° sensor faulty</b>
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*Description:*

The MLC board software has found that the main encoder has completed 2 turns in slow motion (i.e. the dobbie has made two turns), but the 30° proximity on the dobbie shaft has not generated two signals. This proximity should generate a signal between 0° and 60°.

*Remedies:*

Make sure the sensor is connected, check cabling WLS365, especially connector XLS106 on SQ105.

Check that there is 24V DC between pins 1 and 3 in connection J35 on the MLC board (table B-N°11); if absent, check the state of fuse F4 on the SFC board (table C-N°4) and check cable WCS314 used to connect connection J27 on the SFC board to connection J01 on the MLC board.

If there's 24V DC, replace the 30° proximity on the dobbie shaft. NB The gap between the proximity and the flag should be 0.5mm.

Replace the MLC board (table B-N°11) if the problem persists.

<b>13349</b>	<b>Dobby shaft 42° sensor faulty</b>
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*Description:*

This alarm is only present on Silver HS loom and warns you that the MLC board software has found that the main encoder has completed 2 turns in slow motion (i.e. the dobbie has made two turns), but the 42° proximity on the dobbie shaft has not generated two signals. This proximity should generate a signal between 12° and 72°.

*Remedies:*

Make sure the sensor is connected, check cabling WLS365, especially connector XLS105 on SQ104.

Check that there is 24V DC between pins 7 and 9 in connection J35 on the MLC board (table B-N°11); if absent, check the state of fuse F4 on the SFC board (table C-N°4) and check cable WCS314 used to connect connection J27 on the SFC board to connection J01 on the MLC board.

If there's 24V DC, replace the 42° proximity on the dobbie shaft. NB The gap between the proximity and the flag should be 0.5mm.

Replace the MLC board (table B-N°11) if the problem persists.

<b>13350</b>	<b>Dobby shaft 330° sensor faulty</b>
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*Description:*

The MLC board software has found that the main encoder has completed 2 turns in slow motion (i.e. the dobbie has made two turns), but the 321° proximity on the dobbie shaft has not generated two signals. This proximity should generate a signal between 291° and 351°.

*Remedies:*

Make sure the sensor is connected, check cabling WLS365, especially connector XLS104 on SQ103.

Check that there is 24V DC between pins 4 and 6 in connection J35 on the MLC board (table B-N°11); if absent, check the state of fuse F4 on the SFC board (table C-N°4) and

check cable WCS314 used to connect connection J27 on the SFC board to connection J01 on the MLC board.

If there's 24V DC, replace the 321° proximity on the dobbie shaft. NB The gap between the proximity and the flag should be 0.5mm.

Replace the MLC board (table B-N°11) if the problem persists.

<b>13351</b>	<b>Shed open/closed sensor faulty</b>
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*Description:*

The MLC board software has found that the main encoder has completed 2 turns in slow motion (i.e. the dobbie has made two turns), but the "shed open/shed closed" proximity on the dobbie shaft has not generated two signals. This proximity should generate a signal between 40° and 310°.

*Remedies:*

Make sure the sensor is connected, check cabling WLS365, especially connector XLS107 on SQ106.

Check that there is 24V DC between pins 10 and 12 in connection J35 on the MLC board (table B-N°11); if absent, check the state of fuse F4 on the SFC board (table C-N°4) and check cable WCS314 used to connect connection J27 on the SFC board to connection J01 on the MLC board.

If there's 24V DC, replace the "shed open/shed closed" proximity on the dobbie shaft. NB

The gap between the proximity and the flag should be 0.5mm.

Replace the MLC board (table C-N°11) if the problem persists.

<b>13353</b>	<b>Motor temperature too high</b>
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*Description:*

The MLC board software has found that the main motor has exceeded a temperature of 112°C, thanks to a thermal probe in the motor that sends an analog signal to the MLC board.

*Remedies:*

Check that the motor is not too hot. If so, check the cooling fan in the main motor (this should turn during loom movement). Make sure that this fan turns freely and is not clogged with thread or dust.

Check that there's 24V DC between pins 1 and 2 on connection J34 on the SFC board (table C-N°4), otherwise check the state of fuse F8 on the SFC board.

Make sure that wires 24L5 and 24L5- are inserted properly in points 1 and 3 on terminal board X24DC (table C-N°11).

Check that the contact between terminals 13 and 14 on contactor KM30 (table B-N°15) closes during the movements.

Check the tightness of the terminals 1 and 2 on terminal board XM02 (table N°12).

Replace the cooling fan.

Check and clean the space between the motor and conveyor cover.

Check that there are no mechanical obstructions impeding the free rotation of the motor (broken mechanical bearings or stiff parts).

If the motor is not hot, but the alarm still appears, check:

Cable WLS 301 used to connect connection J12 (especially pins 7-8) on the Hi-Drive device (table B-N°7) with connection J01 (especially pins J-K) on the motor.  
 Cable WCS301 used to connect connection J03 (especially pins 11-12) on the MLC board (table B-N°11) with connection J18 (especially pins 11-12) on the Hi-Drive device.  
 Replace the MLC board (table B-N°11).  
 Replace the Hi-Drive motor.  
 Replace the Hi-Drive device (table B-N°7).

<b>13359</b>	<b>No auxiliary encoder degrees (rapier/reed shaft)</b>
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*Description:*

The MLC board software has detected signals from the main encoder in slow motion with the coupling closed, but not from the auxiliary encoder.

*Remedies:*

Check cable WLS357 used to connect connection J41 on the MLC board (table B-N°11) to connection XLS100 next to the auxiliary encoder (rapier/reed).  
 Replace the auxiliary encoder. NB When replacing the auxiliary encoder, you need to time this using the console guided procedure.  
 See console manual.  
 Check that there's 5V DC between pins 10 and 5 on connection J41 on the MLC board (table B-N°11). If absent, check the state of fuse F1 on the SFC board.  
 Check the state of fuse F1 on the SFC board (table C-N°4).  
 Check the cabling WCS314 used to connect connection J27 on the SFC board to connection J01 on the MLC board.  
 Replace the SFC board (table C-N°4).  
 Replace the MLC board (table B-N°11).

<b>13360</b>	<b>Reverse movement in prohibited zone</b>
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*Description:*

The MLC board software has found via the auxiliary encoder that in reverse slow motion with the coupling closed the loom has moved to less than 300°, i.e. with the rapiers in the shed, leading to the risk of broken warp threads.

*Remedies:*

Check cable WLS357 used to connect connection J41 on the MLC board (table B-N°11) to connection XLS100 next to the auxiliary encoder (rapier/reed).  
 Replace the auxiliary encoder. NB When replacing the auxiliary encoder, you need to time this using the console guided procedure. Click on "W" at the side to open a "wizard" window that guides you through the loom/dobby/main encoder/auxiliary encoder re-timing procedure.  
 Check that there's 5V DC between pins 10 and 5 on connection J41 on the MLC board (table B-N°11). If absent, check the state of fuse F1 on the SFC board.  
 Check the state of fuse F1 on the SFC board (table C-N°4).  
 Check the cabling WCS314 used to connect connection J27 on the SFC board to connection J01 on the MLC board.

Replace the SFC board (table C-N°4).  
 Replace the MLC board (table B-N°11).

<b>13361</b>	<b>Problems with motor resolver or connections</b>
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*Description:*

There's a resolver device inside the main motor that controls the effective sense and speed of rotation of the motor.

The MLC board software has found that in continuous running the signals from the simulated encoder (created by the HI-Drive device on the basis of the resolver signals) indicate that the main motor is turning at a speed above 3200 and so the loom should be working at a speed of about 900 rpm (impossible).

*Remedies:*

Check cable WLS301 used to connect connection J12 in the Hi-Drive device (table B-N°7) with connection J01 in the main motor.  
 Check cable WLS301 used to connect connection J03 on the MLC board (table B-N°11) to connection J18 in the Hi-Drive device.  
 Replace the MLC board (table B-N°11).  
 Replace the Hi-Drive device (table B-N°7).  
 Replace the main motor.

<b>13362</b>	<b>Auxiliary encoder zero inconsistent with angle</b>
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*Description:*

The MLC board software has detected the zero encoder signal via the auxiliary encoder, but 360° have not passed since the last zero signal.

*Remedies:*

Check cable WLS357 used to connect connection J41 on the MLC board (table B-N°11) to connection XLS100 next to the auxiliary encoder (rapier/reed).  
 Replace the auxiliary encoder. NB: When replacing the auxiliary encoder, you need to time this using the console guided procedure. Click on "W" at the side to open a "wizard" window that guides you through the loom/dobby/main encoder/auxiliary encoder re-timing procedure.  
 Check that there's 5V DC between pins 10 and 5 on connection J41 on the MLC board (table B-N°11). If absent, check the state of fuse F1 on the SFC board.  
 Check the state of fuse F1 on the SFC board (table C-N°4).  
 Check the cabling W314 connecting the connection J27 on the SFC board with the connection J01 on the MLC board.  
 Replace the SFC board.  
 Replace the MLC board.

13374

Loom width not correct, setup setting error

*Description:*

There is a hidden configuration cable inside the loom, cabled to suit the width of the loom. This alarm warns you that you have set a loom width during the set-up procedure that does not correspond to the configuration cable setting.

*Remedies:*

Use the console to check the correct width loom set-up; correct as required.

13375

Incorrect loom width, wiring error

*Description:*

There is a hidden configuration cable inside the loom, cabled to suit the width of the loom. This alarm warns you that the cable configuration is not foreseen by the system and so incorrect.

*Remedies:*

Replace the MLC board (table B-N°11).  
Contact Promatech Customer Service to change the configuration cable.

13377

Hi-Drive device alarm: motor thermal overload

*Description:*

The main motor has reached its max working temperature and so the incorporated overload cutout has tripped.

*Remedies:*

This alarm should be silenced by the jumper on connection J12 (between pins 11 and 12) in the Hi-Drive device (table B-N°7).  
Check the presence of this jumper.  
Replace the MLC board (table B-N°11).  
Replace the Hi-Drive device (table B-N°7).

<b>13378</b>	<b>Hi-Drive device alarm: motor resolver disconnected.</b>
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*Description:*

The Hi-Drive device (table B-N°7) has detected the absence of at least one retro signal from the resolver in the main motor (reference, sen sen-, cos cos-).

*Remedies:*

The 7-segment display on the Hi-Drive device (table B-N°7) should read "b0". See also the "LEDs and fuses" section by clicking on the button above.

Check cable WLS301 used to connect connection J12 in the Hi-Drive device with connection J01 in the main motor.

Replace the Hi-Drive device (table B-N°7).

<b>13379</b>	<b>Hi-Drive device alarm: 24 Volt supply error within drive</b>
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*Description:*

The Hi-Drive device (table B-N°7) has detected a faulty current sensor in the device, due to a very high offset in the reading of the current by one of the sensors. It's therefore likely that there is a problem with the 15V and -15V power supply inside the device feeding these sensors.

*Remedies:*

The 7-segment display on the Hi-Drive device (table B-N°7) should read "C0". See also the "LEDs and fuses" section by clicking on the button above.

Replace the Hi-Drive device (table B-N°7).

If you have electrical/electronic expertise, you can find the cause for the problem inside the drive by carefully inspecting the drive parts:

Switch off the control box and make sure that the Hi-Drive device is off. Disconnect the 3 current sensors by detaching the coloured 4-wire cables. Switch the control box back on (NB Without starting the loom again) and monitor the absence of the alarm on the Hi-Drive. If the alarm disappears, repeat the above steps this time re-inserting one cable at a time in its sensor (loom off) until you find the faulty sensor. Replace the sensor with a compatible spare-part.

Monitor (TELL in the TEST2K application) the values of the Offset IA and Offset IB variables, making sure their values do not exceed 80. Replace the faulty current sensor (Offset IA reading on the "U" phase sensor and Offset IB reading on the "W" phase).

Switch off the loom and extract one of the 3 current sensor cables on the power board 11910, then switch on the control box (NB without switching the loom on again) and check presence following frequency:

- 15V: place the positive tip of the tester on pin 4 and the negative tip on pin 1
- 15V: place the positive tip of the tester on pin 3 and the negative tip on pin 1 (tables D/4, D/5, D6).

If these values are not found: replace the power board EI11900 with a compatible spare-part (defective welding or broken components/diodes).

Replace the control board EI11910 with a compatible spare-part.

Replace the power board EI11900 with a compatible spare-part.

<b>13380</b>	<b>Hi-Drive device alarm: 24 Volt supply error inside the drive</b>
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*Description:*

The Hi-Drive device (table B-N°7) has detected continuous tension higher than its max accepted working value. This happens when the voltage exceeds a set alarm threshold.

*Remedies:*

The 7-segment display on the Hi-Drive device (table B-N°7) should read "d2". See also the "LEDs and fuses" section by clicking on the button above.

Check that there's 400V AC (three-phase/the same as the mains supply) between the RST terminals in the Hi-Drive device. If the mains supply is too high, discover the reason by contacting your electricity provider.

Replace the Hi-Drive device (table B-N°7).

If you have electrical/electronic expertise, you can find the cause for the problem inside the drive by carefully inspecting the drive parts:

Switch off the control box and check the efficiency of the braking resistance inside the Hi-Drive device.

Use a multimeter to check the value of this resistance: it should be around 8 Ohm. Replace as required.

- Replace the control board 11910 with a compatible spare-part.

- Replace the power board 11900 with a compatible spare-part.

<b>13381</b>	<b>Hi-Drive device alarm: dissipator temperature</b>
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*Description:*

The Hi-Drive device (table B-N°7) has reached the manufacturer's alarm temperature (70°C) in the dissipated section (radiator).

*Remedies:*

The 7-segment display on the Hi-Drive device (table B-N°7) should read "A1". See also the "LEDs and fuses" section by clicking on the button above.

Lower the machine cycle or ventilate the Hi-Drive device accordingly.

If the Hi-Drive device generates this alarm, but the radiator appears to be cold: replace the Hi-Drive device (table B-N°7).

If you have electrical/electronic expertise, you can find the cause for the problem inside the drive by carefully inspecting the drive parts.

Try replacing the temperature sensor in the Hi-Drive device.

Try replacing the control board 11910 in the Hi-Drive device.

<b>13382</b>	<b>Hi-Drive device alarm: motor short-circuited</b>
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*Description:*

The Hi-Drive device (table B-N°7) has detected an anomaly in the main motor current detection circuit.

This may indicate that the motor is jammed or short-circuited/earthed.

*Remedies:*

The 7-segment display on the Hi-Drive device (table B-N°7) should read "C1". See also the "LEDs and fuses" section by clicking on the button above.

Check cable WLP301 used to connect connection "motor" in the Hi-Drive device with the main motor (this should not be crushed or cut).

Check that the main motor windings are not short-circuited or earthed.

Switch the loom off and then back on again, if the alarm persists, replace the Hi-Drive device (table B-N°7).

If you have electrical/electronic expertise, you can find the cause for the problem inside the drive by carefully inspecting the drive parts:

Switch off the control box and make sure that the Hi-Drive device is off. Disconnect the 3 current sensors by detaching the coloured 4-wire cables. Switch the control box back on (NB: Without starting the loom again) and monitor the absence of the alarm on the Hi-Drive. If the alarm disappears, repeat the above steps this time re-inserting one cable at a time in its sensor (loom off) until you find the faulty sensor. Replace the sensor.

Make sure that the current sensors are inserted correctly on the power board.

Replace the control board EI11910 in the Hi-Drive device.

Replace the power board EI11900 in the Hi-Drive device.

<b>13383</b>	<b>Hi-Drive device alarm: drive overvoltage</b>
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*Description:*

The Hi-Drive device (table B-N°7) has found an error in the power module piloting circuit.

*Remedies:*

The 7-segment display on the Hi-Drive device (table B-N°7) should read "C2". See also the "LEDs and fuses" section by clicking on the button above.

Replace the Hi-Drive device (table B-N°7).

If you have electrical/electronic expertise, you can find the cause for the problem inside the drive by carefully inspecting the drive parts:

Make sure that the screws for the red and black cables running from the power unit to the IGBT modules in the inverter are inserted and tightened properly.

Make sure that the black wire on the braking IGBT module passes under the copper bars and is connected to the power board.

Find which of the IGBT modules in the inverter is to blame (LED warnings); use a multimeter to check the efficiency of the modules.

Replace the power board EI11900.

<b>13385</b>	<b>Hi-Drive device alarm: error during recovery</b>
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*Description:*

The Hi-Drive device (table B-N°7) has failed to recover the energy released by the motor during braking.

*Remedies:*

The 7-segment display on the Hi-Drive device (table B-N°7) should read "D3". See also the "LEDs and fuses" section by clicking on the button above.

Check that there's 400V Ac (three-phase, the same as the mains supply) between the RST terminals in the Hi-Drive device. If the mains supply is too high, discover the reason by contacting your electricity provider.

If you have electrical/electronic expertise, you can find the cause for the problem by carefully inspecting the drive parts:

Slow down the motor deceleration rate or reduce the inert load on the motor shaft.

The Hi-Drive device (table B-N°7) has failed to recover the energy released by the motor during braking. Check the efficiency of the braking resistance.

Use a multimeter to check the value of this resistance: it should be around 8 Ohms.

Replace as required.

Use a multimeter to check the efficiency of the braking IGBT module.

Replace the control board EI11910 inside the Hi-Drive device.

Check the efficiency of the braking resistance

Replace the Hi-Drive device (table B-N°7).

<b>13388</b>	<b>Hi-Drive device alarm: undervoltage</b>
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*Description:*

The Hi-Drive device (table B-N°7) has found too little DC at the DC BUS. This happens when the voltage drops below a 300V DC set threshold.

*Remedies:*

The 7-segment display on the Hi-Drive device (table B-N°7) should read "D1". See also the "LEDs and fuses" section by clicking on the button above.

Check that there's 400V Ac (three-phase, the same as the mains supply) between the RST terminals in the Hi-Drive device. If the mains supply is too low, discover the reason by contacting your electricity provider.

If one phase is missing, check cable WCP307 used to connect terminal board RST in the Hi-Drive to fuses FU08 (table B-N°20).

Check the state of fuses FU08 (table B-N°20).

Check that terminals on fuse holder FU08 are properly tightened.

Check the state of fuse F3 on the SFC board (table C-N°4).

Replace the SFC board (table C-N°4).

Check the cabling WCP315 connecting the connection J19 on the SFC board with the connection J20 on the Hi-Drive device.

If you have electrical/electronic expertise, you can find the cause for the problem inside the drive by carefully inspecting the drive parts:

Make sure that the power remote switch on the drive is closed.

Check for any loom alarms (switching-off of the drive)

Use a multimeter (QADM5MB drive) to check the three 50 A power supply fuses.

Make sure that the green LED (D41 prefeeding) comes on.

Make sure that the cable is properly inserted in connector CN8 on the EI11900 power board.

Replace the EI11910 control board.

Replace the Hi-Drive device (table B-N°7).

<b>13390</b>	<b>Hi-Drive device alarm: Incorrect EEPROM</b>
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*Description:*

The Hi-Drive device (table B-N°7) has found missing or incoherent parameters in EEPROM, or a malfunction in EEPROM.

*Remedies:*

The 7-segment display on the Hi-Drive device (table B-N°7) should read "F2". See also the "LEDs and fuses" section by clicking on the button above.

If you have electrical/electronic expertise, you can find the cause for the problem inside the drive by carefully inspecting the drive parts:

Check the welded parts U26 on the control board.

Replace the control board EI11910 inside the Hi-Drive device.

Replace the Hi-Drive device (table B-N°7).

<b>13391</b>	<b>Hi-Drive device alarm: generic alarm</b>
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*Description:*

The Hi-Drive device (table B-N°7) has detected the opening of the DRIVEOK contact in the device, or a malfunction in the DRIVEOK relay.

This alarm may also be caused by other loom alarms that switch the Hi-Drive device off.

*Remedies:*

The 7-segment display on the Hi-Drive device (table B-N°7) should read "F2". See also the "LEDs and fuses" section by clicking on the button above.

Make sure there are no other alarms; if so, deal with these first.

If you have electrical/electronic expertise, you can find the cause for the problem inside the drive by carefully inspecting the drive parts:

If the drive is not in alarm mode, check the continuity of the cable on the DRIVEOK pins in the cabling.

Use a multimeter to check the continuity of the DRIVEOK contact on the drive control board (pins 5 and 16 on JP5) by bypassing the axis board.

Replace the control board EI11910 with a compatible spare-part or replace the DRIVEOK relay.

Replace the Hi-Drive device (table B-N°7).

<b>13392</b>	<b>Oil pump motor temperature too high</b>
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*Description:*

There's a temperature sensor inside the oil pump motor that tells the MLC board the actual temperature of this motor.

This alarm means that the MLC board (table B-N°11) has received a temperature reading indicating that the motor has overheated (more than 125°C).

*Remedies:*

This may happen in very cold environments or on first switching the loom after a long stop: the oil viscosity is very high and so the pump has to work hard to send it around the circuit, thus overheating the pump motor. Wait for the oil pump motor to cool partially and then try

starting the loom again.

If the motor overheats, even when the oil is at the right temperature, make sure that nothing stops the oil pump motor from turning freely.

Also check that the oil has the right characteristics recommended by PROMATECH.

If this alarm occurs when the motor is cold, check the cabling WLS402 connecting the connection J11 on the RIO board (table E-N°4) with the thermal probe of the oil pump motor. Replace the MLC RIO board (table E-N°4).

<b>13402</b>	<b>Mode selector used while loom moving</b>
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*Description:*

The SFC board (table C-N°4) has received a signal from the photocell exclusion selector on the LH pushbutton panel during loom movement.

*Remedies:*

Reset the selector and start the loom again.

If this alarm occurs when the selector is in the correct position, check cable WLS329 used to connect connection J29 on the SFC board (table C-N°4) to connection J01A on the LH pushbutton panel.

Check the cabling WLS331 connecting the connection J02A on the LH pushbutton panel with the connection J01A on the LH pushbutton panel.

If the loom has a central pushbutton panel, check the cables running from the central pushbutton panel to the LH and RH pushbutton panels.

Replace the LH pushbutton panel.

Replace the SFC board (table C-N°4).

<b>13568</b>	<b>Generic Hi-Drive device ERROR level 1</b>
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*Description:*

There's been a level 1 internal error on the Hi-Drive device (tabel B-N°7).

*Remedies:*

Replace the Hi-Drive device (table B-N°7).

Contact PROMATECH Customer Service.

<b>13824</b>	<b>Generic Hi-Drive device ERROR level 2</b>
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*Description:*

There's been a level 2 internal error on the Hi-Drive device (tabel B-N°7).

*Remedies:*

Replace the Hi-Drive device (table B-N°7).

Contact PROMATECH Customer Service.

14080

Generic Hi-Drive device ERROR level 3

*Description:*

There's been a level 3 internal error on the Hi-Drive device (tabel B-N°7).

*Remedies:*

Replace the Hi-Drive device (table B-N°7).

Contact PROMATECH Customer Service.

## Weft brakes and weft feeder alarms

<b>15360</b>	<b>Generic TEC BRAKE error level 0</b>
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*Description:*

There's been a level 0 internal error on a pre-feeder.

*Remedies:*

Replace the pre-feeder in alarm.  
Contact PROMATECH Customer Service.

<b>15361</b>	<b>Switch S/Z position changed. Switch weft feeder off and on again</b>
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*Description:*

You have inverted the direction of rotation of a pre-feeder.

S: anti-clockwise  
Z: clockwise

*Remedies:*

This isn't an alarm, but only a warning.  
To reset, switch the pre-feeder in alarm mode off and then back on again.  
NB: after doing this, you need to reset the movement mechanically for the pre-feeder spare spool.

<b>15362</b>	<b>No end at entrance to weft feeders</b>
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*Description if weft feeder LGL:*

Meaning - LGL pre-feeder: the pre-feeder hasn't been able to wind the spare coil of weft within the max time (15 seconds).

*Description if weft feeder ROJ:*

Meaning - ROJ pre-feeder: there's a photocell above the pre-feeder drum that checks whether there's enough spare weft. This alarm warns you that the rotor of a pre-feeder has made 100 turns without the spare weft photocell detecting any weft. This alarm should not normally appear, as alarm 15363 should appear first.

*Remedies if weft feeder LGL:*

Try to load the spare weft again, holding the thread near the winding spool to make it easier.  
Check for any problems with the fuses in the power supply box.  
Manually turn the flywheel to check that the motor shaft turns freely.  
Check the settings in the STRAP table and in the Finger number/Pre-feeder number association table.  
Check the weft feeder output sensor and replace if necessary.

*Remedies if weft feeder ROJ:*

Meaning - ROJ pre-feeder: there's a photocell above the pre-feeder drum that checks whether there's enough spare weft. This alarm warns you that the rotor of a pre-feeder has made 100 turns without the spare weft photocell detecting any weft. This alarm should not normally appear, as alarm 15363 should appear first.

<b>15363</b>	<b>Broken or no end at entrance. Rethread pre-feeder</b>
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*Description if weft feeder LGL:*

Meaning - LGL pre-feeder: the weft detector at the entrance of the pre-feeder fails to detect any weft, despite the fact that the motor is turning correctly. It therefore tells the system that the spool is broken or finished.

*Description if weft feeder ROJ:*

Meaning - ROJ pre-feeder: there's a photocell that checks the presence of weft on the entrance of the drum and tells the system if there's no weft (broken spool).

*Remedies if weft feeder LGL:*

Switch the pre-feeder off, rethread it and then switch back on again.

If the alarm persists despite the fact that the weft is correctly wound and present, replace the weft detector at the entrance of the pre-feeder.

Replace the pre-feeder board.

*Remedies if weft feeder ROJ:*

Repair the broken or finished spool.

If, however, this alarm appears (despite the fact that the thread is correctly threaded and the weft is OK), you need to do the following checks:

Clean the photocell above the drum (do not use solvents).

Clean the reflector.

Check that the reflector is correctly positioned.

Replace the pre-feeder.

<b>15364</b>	<b>Clean photocell A</b>
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*Descriptipn:*

This alarm is only active on ROJ pre-feeders. It warns you that the system has detected that one of the photocells A, at the bottom of the pre-feeder drum (delivery) is having difficulties in reading the light signal.

*Remedies:*

Clean photocell (do not use solvents).

Check the alignment of the reflecting glass.

Replace photocell A.

Replace the weft pre-feeder in alarm mode.

<b>15365</b>	<b>Clean photocell B</b>
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*Descriptipn:*

This alarm is only active on ROJ pre-feeders. It warns you that the system has detected that one of the photocells B, at the centre of the pre-feeder drum (checking the spare weft coil) is having difficulties in reading the light signal.

*Remedies:*

Clean photocell (do not use solvents).

Check the alignment of the reflecting glass.

Replace photocell B.

Replace the weft pre-feeder in alarm mode.

<b>15366</b>	<b>15366 Clean photocell D</b>
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*Description:*

This alarm is only active on ROJ pre-feeders. It warns you that the system has detected that one of the photocells D, at the entrance of the pre-feeder drum (checking for broken or finished spool) is having difficulties in reading the light signal.

*Remedies:*

Clean photocell (do not use solvents).  
 Check the alignment of the reflecting glass.  
 Replace photocell D.  
 Replace the weft pre-feeder in alarm mode.

<b>15367</b>	<b>Photocell A not calibrated</b>
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*Description:*

This alarm is only active on ROJ pre-feeders. The photocells responsible for detecting the presence of weft on the pre-feeder are calibrated and automatically updated by the electronic pre-feeder board.

This alarm occurs when a pre-feeder fails to calibrate photocell A leaving the pre-feeder.

*Remedies:*

Replace photocell A in the pre-feeder in alarm mode.  
 Replace the electronic board in the pre-feeder in alarm mode.

<b>15368</b>	<b>Photocell B not calibrated</b>
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*Description:*

This alarm is only active on ROJ pre-feeders. The photocells responsible for detecting the presence of weft on the pre-feeder are calibrated and automatically updated by the electronic pre-feeder board.

This alarm occurs when a pre-feeder fails to calibrate photocell B checking the spare weft on the drum.

*Remedies:*

Replace photocell B in the pre-feeder in alarm mode.  
 Replace the electronic board in the pre-feeder in alarm mode.

<b>15369</b>	<b>Photocell D not calibrated</b>
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*Description:*

This alarm is only active on ROJ pre-feeders. The photocells responsible for detecting the presence of weft on the pre-feeder are calibrated and automatically updated by the electronic pre-feeder board.

This alarm occurs when a pre-feeder fails to calibrate photocell D checking the weft entering the drum and whether the weft spool is broken or finished.

*Remedies:*

Replace photocell D in the pre-feeder in alarm mode.  
 Replace the electronic board in the pre-feeder in alarm mode.

<b>15370</b>	<b>Supply voltage too low (check fuses)</b>
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*Description if weft feeder LGL:*

Meaning - LGL pre-feeder: an internal circuit on the weft feeder board checks the voltage fed to the motor: this should not be too low. This power supply is supplied by the pre-feeder supply box.

*Description if weft feeder ROJ:*

Meaning - ROJ pre-feeder: an internal circuit on the weft feeder board checks the voltage fed to the motor: this should not be lower than 290 V DC. This power supply is supplied by the pre-feeder supply box.

*Remedies if weft feeder LGL:*

Check the 6.3 A fuse on the main feeder control board; if the fuse has blown, replace the main control board.

Check for any problems with the fuses in the power supply box.

Replace the pre-feeder board.

Check the state of fuses FU01 (table B-N°26).

Check the cabling WCP311 connecting the fuses FU01 with the connection on the main control box edge XCP02.

Check the cabling WLP310 connecting the connection XCP02 with the pre-feeder supply box.

*Remedies if weft feeder ROJ:*

Check the fuses in the pre-feeder supply box.

Check the connections and the cabling between the pre-feeder and the pre-feeder supply box.

Replace the electronic board in the pre-feeder in alarm mode.

Replace the pre-feeder supply box.

Check the mains voltage.

Check the state of fuses FU01 (table B-N°26).

Check the cabling WCP311 connecting the fuses FU01 with the connection on the main control box edge XCP02.

Check the cabling WLP310 connecting the connection XCP02 with the pre-feeder supply box.

<b>15371</b>	<b>Supply voltage too high</b>
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*Description:*

This alarm is only found with ROJ pre-feeders. An internal circuit on the weft feeder board checks the voltage fed to the motor: this should not be higher than 340V DC. This power supply is supplied by the pre-feeder supply box.

*Remedies:*

Replace the electronic board in the pre-feeder in alarm mode.

Replace the pre-feeder supply box.

Check the mains voltage.

<b>15372</b>	<b>Motor overcurrent</b>
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*Description if weft feeder LGL:*

Meaning - LGL pre-feeder: a pre-feeder motor has too much current absorption and so a protection circuit on the pre-feeder internal board has tripped.

*Description if weft feeder ROJ:*

Meaning - ROJ pre-feeder: a pre-feeder motor has too much current absorption and so a protection circuit on the pre-feeder internal board has tripped.

*Remedies if weft feeder LGL:*

Check the 6.3 A fuse on the main feeder control board.  
 If the fuse keeps blowing, replace the board for the pre-feeder in alarm mode.  
 Check for any problems with the fuses in the power supply box.  
 Replace the pre-feeder.

*Remedies if weft feeder ROJ:*

Check that there are no mechanical obstructions impeding the free rotation of the pre-feeder motor in alarm mode.  
 Replace the electronic board in the pre-feeder in alarm mode.  
 Replace the pre-feeder.

<b>15373</b>	<b>Motor blocked</b>
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*Description if weft feeder LGL:*

Meaning - LGL pre-feeder: the pre-feeder motor is blocked because the torque from the motor isn't enough to unwind the weft from the spool.

*Description if weft feeder ROJ:*

Meaning - ROJ pre-feeder: the system has detected that the motor of a pre-feeder fails to turn, despite the fact that it is fed.

*Remedies if weft feeder LGL:*

Check that there are no mechanical obstructions impeding the free rotation of the motor.  
 Switch the pre-feeder off, rethread it and then switch back on again.  
 Check for any problems with the fuses in the power supply box.  
 If the problem persists, check the path of the weft from the spool to the pre-feeder, making sure that there's no risk of the weft getting caught or snagged.  
 Replace the board in the pre-feeder in alarm mode.

*Remedies if weft feeder ROJ:*

Check that there are no mechanical obstructions impeding the free rotation of the pre-feeder motor in alarm mode.  
 Replace the electronic board in the pre-feeder in alarm mode.  
 Replace the pre-feeder.

<b>15374</b>	<b>Motor temperature too high</b>
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*Description if weft feeder LGL:*

The board in the pre-feeder has detected an excessive motor temperature.

*Description if weft feeder ROJ:*

This indicates that the board in the pre-feeder in alarm mode has found that the temperature of the motor is above 95°C.

*Remedies if weft feeder LGL:*

Check that there are no mechanical obstructions impeding the free rotation of the motor.

Switch the pre-feeder off, rethread it and then switch back on again.

Check for any problems with the fuses in the power supply box.

If the problem persists, check the path of the weft from the spool to the pre-feeder, making sure that there's no risk of the weft getting caught or snagged.

Replace the board in the pre-feeder in alarm mode.

*Remedies if weft feeder ROJ:*

Check that there are no mechanical obstructions impeding the free rotation of the pre-feeder motor in alarm mode.

Replace the electronic board in the pre-feeder in alarm mode.

Replace the pre-feeder.

<b>15375</b>	<b>Incorrect or no 'PATTERN PREVIEW' data</b>
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*Description:*

This alarm mainly occurs when you switch the loom on: enough data aren't supplied for the correct functioning of the pre-feeder and so the pre-feeder awaits the data it requires for the weft pattern.

NB: this alarm doesn't actually stop the loom.

*Remedies:*

If the alarm disappears after a few seconds from switching the loom on, this is quite NORMAL. If, however, the alarm persists or appears during loom running, it's warning you that there's a CAN-BUS communication problem.

Replace the electronic board in the pre-feeder in alarm mode.

Replace the pre-feeder supply box.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

15376	Awaiting STRAP parameters
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*Description:*

This alarm mainly occurs when you switch the loom on: enough data aren't supplied for the correct functioning of the pre-feeder and so the pre-feeder awaits the STRAP data (finger/colour/pre-feeder association).

*Remedies:*

If the alarm disappears after a few seconds from switching the loom on, this is quite NORMAL. If, however, the alarm persists or appears during loom running, it's warning you that there's a CAN-BUS communication problem.

Replace the electronic board in the pre-feeder in alarm mode.

Replace the pre-feeder supply box.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

15377	Awaiting TEC parameters
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*Description:*

This alarm mainly occurs when you switch the loom on: enough data aren't supplied for the correct functioning of the pre-feeder and so the pre-feeder awaits the TEC weft brake programming data.

*Remedies:*

If the alarm disappears after a few seconds from switching the loom on, this is quite NORMAL. If, however, the alarm persists or appears during loom running, it's warning you that there's a CAN-BUS communication problem.

Replace the electronic board in the pre-feeder in alarm mode.

Replace the pre-feeder supply box.

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

## Cutter drive Alarm

<b>16384</b>	<b>Generic Positive Cutter ERROR: level 0</b>
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*Description:*

This means that the system has detected a level 0 problem in the positive cutter drive (table B-N°5).

*Remedies:*

Replace the positive cutter drive (table B-N°5).  
If the problem persists contact PROMATECH Customer Service.

<b>16385</b>	<b>No degrees sent from loom to cutter</b>
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*Description:*

When you switch the loom on, the MLC board sends (via the CAN-BUS) the data on the loom position saved before it was last switched off. This alarm appears if the motorised cutter drive (table B-N°5) hasn't received the data for any reason.

*Remedies:*

Check the connections above the cutter drive (table B-N°5).  
Replace the cutter drive (table B-N°5).  
Replace the MLC (table B-N°11).  
If the problem persists, check the continuity of the encoder circuit.

<b>16386</b>	<b>Failed set-point procedure</b>
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*Description:*

During the set-point procedure, the cutter motor proximity hasn't detected the flag. The set-point is a procedure that the cutter automatically carries out when you switch the loom on or after a cutter zero calibration and is a procedure that is needed for the drive to check the physical position of the cutter. The cutter automatically makes one full turn while the loom is at a standstill during the automatic test after switching the loom on.

*Remedies:*

Check that the cutter cams turn properly during this procedure.  
Check that the red LED on IN1 on the cutter drive (table B-N°5) comes on when the flag on the cutter cams passes in front of the sensor.  
Check the state of the flag and the air-gap between the flag and the proximity (0.5mm).  
Check the power supply at the 24V DC proximity between pins 1 and 2 on drive connection J1 and the power supply proximity cabling on loom connection XLS211.  
Replace the proximity.  
Replace the cutter drive (table B-N°5).  
Replace the cutter drive (table B-N°5).  
Replace the MLC (table B-N°11).

<b>16387</b>	<b>No encoder zero</b>
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*Description:*

The cutter drive (table B-N°5) has received no zero signal from the main encoder. This check is carried out by the drive every 2 seconds when the loom is running.

*Remedies:*

Check the cabling WCS312A connecting the connection J2 on the MLC board (table B-N°11) with the connecting ENC.A on the cutter drive (table B-N°5).

Check the cabling WLS356 connecting the connection J40 on the MLC board (table B-N°11) with connection XLS14 near the main encoder.

Replace the main encoder. NB When you replace the auxiliary encoder you need to time this with the loom by following a guided procedure: press key "W" at the side here to open a wizard window that guides you through the loom/dobby/main encoder/auxiliary encoder timing procedure.

Replace the cutter drive (table B-N°5).

<b>16388</b>	<b>Calibration error</b>
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*Description:*

When you switch the cutter drive on, there's an efficiency test for the sensor responsible for controlling the current to the motor. This alarm warns you that the results of this test are out-of-range.

*Remedies:*

Replace the cutter drive (table B-N°5).

<b>16389</b>	<b>Drive temperature too high</b>
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*Description:*

The temperature of the dissipator on the motorised cutter drive (table B-N°5) has exceeded 65°C. The automatic protection has tripped.

*Remedies:*

Check that the room temperature isn't too high.

Check that the cutter drive (table B-N°5) is correctly screwed on the dissipator so that it adheres properly to the dissipating plate.

Replace the cutter drive (table B-N°5).

<b>16390</b>	<b>BUS overvoltage</b>
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*Description:*

The direct current (V DC) generated inside the cutter drive (table B-N°5) and used to feed the cutter motor has exceeded the accepted max limit of 360V after switching the loom on or 470V when the motor is running.

*Remedies:*

Check the power supply rating of the drive: 220V AC three-phase at the terminals on the RST drive.

Check that the line rating is correct and not too high.

Replace the cutter drive (table B-N°5).

<b>16391</b>	<b>BUS undervoltage</b>
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*Description:*

The internal direct current (cutter motor power supply) is below the accepted max limit of 265V after switching the loom on or below 250V when the motor is running.

*Remedies:*

Check the power supply rating of the cutter drive (table B-N°5): this should be 220V AC three-phase at the terminals on the RST drive.

Check the state of the fuses leaving transformer T5 (table D-N°10).

Check the state of fuses FU05 (table B-N°23).

Check the cabling WCP312 connecting the fuses FU05 (table B-N°23) with transformer T5 (table D-N°10).

Check the cabling WCP312 connecting the transformers T5 (table D-N°10) with cutter drive (table B-N°5).

Check that the transformer primary winding is properly connected to suit the line rating.

Check that the line rating is correct and not too low.

Replace the cutter drive (table B-N°5).

<b>16392</b>	<b>Hall detectors combination error</b>
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*Description:*

In order for the cutter drive (table B-N°5) to control the motor correctly, it needs to know the position of the rotor. This is supplied by the sensors (Hall detectors). This alarm warns you that the combination read by the Hall detectors in the cutter motor is incorrect. The valid combinations are 001, 010, 100, 011, 110 and 101. Incorrect combinations are 111 and 000.

*Remedies:*

Check the cables and connections connecting the drive and the motor.

Replace the motor.

Replace the cutter drive (table B-N°5).

<b>16393</b>	<b>Current protection active</b>
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*Description:*

The short-circuit protection has tripped during the cutter motor piloting. There's a short-circuit in the power cable leading to the motor or in the motor windings or the piloting has failed inside the drive.

*Remedies:*

Check cable WCP313 (connecting the cutter motor drive to the motor): this should not be cut or crushed.

Switch the loom off and then back on again.

Replace the cutter motor

Replace the cutter drive (table B-N°5).

<b>16394</b>	<b>FATAL error</b>
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*Description:*

There's been an irretrievable internal error on the motorised cutter drive (table B-N°5).

*Remedies:*

Switch the loom off and then back on again.  
Replace the cutter drive (table B-N°5).

<b>16395</b>	<b>I2t at motor</b>
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*Description:*

The thermal protection calculated by the cutter motor drive has tripped (table B-N°5). The motor is being used above the accepted max limit. The drive is efficient.

*Remedies:*

Check that the motor shaft turns freely: bear in mind that there's a brake in the motor that tends to brake the motor when the loom is switched off and so it should never be completely free nor completely blocked.  
Check that the blades aren't caught or that there's anything preventing the free rotation of the cams.  
Check (with the loom moving) that there's 24V DC at terminals 1 and 2 on connection J2 on the SFC board (table C-N°4), otherwise replace the SFC board.  
Check that the brake coil between pins 1 and 5 on connection XLP210 in the cutter motor is not short-circuited or its power is cut.  
Replace the cutter drive (table B-N°5).  
Replace the cutter motor.

<b>16396</b>	<b>Motor temperature too high</b>
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*Description:*

The thermal protection (thermal probe) in the cutter motor has tripped.

*Remedies:*

Check that the motor shaft turns freely: bear in mind that there's a brake in the motor that tends to brake the motor when the loom is switched off and so it should never be completely free nor completely blocked.  
Check that the blades aren't caught or that there's anything preventing the free rotation of the cams.  
Check (with the loom moving) that there's 24V DC at terminals 1 and 2 on connection J2 on the SFC board (table C-N°4), otherwise replace the SFC board.  
Check that the brake coil between pins 1 and 5 on connection XLP210 in the cutter motor is not short-circuited or its power is cut.  
Replace the cutter drive (table B-N°5).  
Replace the cutter motor.

<b>16397</b>	<b>CAN-BUS fatal error</b>
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*Description:*

Too many cutter drive communication errors in the CAN-BUS (table B-N°5).

*Remedies:*

Replace the cutter drive (table B-N°5).

If the problem persists, check the continuity of the CAN-BUS circuit with "table I" at the of this manual.

<b>16398</b>	<b>Faulty motor encoder</b>
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*Description:*

The cutter motor encoder is faulty: test by comparing it with the rotation of the Hall detectors. (See alarm 16392).

*Remedies:*

Check the motor encoder (ENC.MOT.) connection on the cutter drive (table B-N°5) and check the encoder connection on the motor; check that the cabling WLS307 isn't broken or crushed.

Replace the cutter motor.

Replace the cutter drive (table B-N°5).

<b>16399</b>	<b>Max exceeded space error</b>
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*Description:*

The cutter motor works with space tracking of the loom encoder. If the space error between the loom encoder and the motor encoder is higher than the max accepted value (15° loom), the drive stops and generates this error. In other words, the cutter motor isn't in time with the loom movement and therefore has accumulated a delay of 15°.

*Remedies:*

Check that the motor turns freely: bear in mind that there's a brake in the motor that tends to brake the motor when the loom is switched off and so it should never be completely free nor completely blocked.

Check that there are no problems with the mechanical parts (toothed wheels, arms, blades,...). Check (with the loom moving) that there's 24V DC at terminals 1 and 2 on connection J2 on the SFC board (table C-N°4), otherwise replace the SFC board.

Check that the brake coil between pins 1 and 5 on connection XLP210 in the cutter motor is not short-circuited or its power is cut. Check the power supply rating of the cutter drive (table B-N°5): this should be 220V AC three-phase at the terminals on the RST drive.

Check the state of the fuses leaving transforme T5 (table D-N°10).

Check the state of fuses FU05 (table B-N°23).

Check the cabling WCP312 connecting the fuses FU05 (table B-N°23) with transformers T5 (table D-N°10).

Check the cabling WCP312 connecting the transformer T05 (table D-N°10) with cutter drive (table B-N°5).

Check that the transformer primary winding is properly connected to suit the line rating.

Replace the cutter motor.

Replace the cutter drive (table B-N°5).

16401

**Motor sensor problems**

*Description:*

In order for the cutter drive (table B-N°5) to control the motor correctly, it needs to know the position of the rotor. This is supplied by the sensors (Hall detectors).  
The system has detected cutter motor Hall detector timing/reading problems.

*Remedies:*

Check the cables and connections connecting the drive and the motor.  
Replace the cutter motor.  
Replace the cutter drive (table B-N°5).

## SFC alarms

<b>19456</b>	<b>Generic SFC ERROR level 0</b>
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*Description:*

It means that the system has detected a level 0 problem inside the SFC board (table C-N°4)

*Remedies:*

Replace the SFC board (table C-N°4).

If the problem persists contact PROMATECH Customer Service.

<b>19457</b>	<b>No 24V loom battery</b>
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*Description:*

This means that the SFC board (table C-N°4) does not receive 24V DC from the buffer batteries (table D-N°12-13).

*Remedies:*

Check the cabling WCP355 connecting the connection J35 on the SFC board (table C-N°4) with the buffer batteries (table D-N°12-13).

Make sure that there is at least 21V DC between pins 1 and 2 in connection J35 on the SFC board when switching the loom off; if not, replace the buffer batteries G01 and G02 (table D-N°12-13).

Make sure that the batteries are not rusted; otherwise replace them.

Check the state of fuse F12 on the SFC board.

Replace the SFC board (table C-N°4).

<b>19458</b>	<b>No 24V logic, check fuse F1</b>
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*Description:*

This means that the SFC board (table C-N°4) fails to detect 24V Dc below fuse PF1 on the board. This voltage is needed to feed the logic circuits of the various boards.

*Remedies:*

Check the state of fuse PF1 on the SFC board (table C-N°4). To view the location of the fuse on the board, click on the button above the "LEDs and Fuses Table".

Check the cabling WCP 352 connecting the connection J04 on the DPS board (table B-N°8) with the connection J04 on the SFC board.

Check that there's three-phase 380V AC below fuses FU03 (table B-N°24); if none, check the state of fuses FU03.

Check that the terminals below FU03 are properly tightened.

Check the cabling WCP310 connecting FU03 with transformer T01 (table D-N°11).

Check the state of the fuses on the three-phase 19V AC output on transformer T01.

Check the cabling WCP349 connecting the three-phase 19V AC output on transformer T1 to connection J01 on the DPS board (table B-N°8).

Replace the DPS board (table B-N°8).

Replace the SFC board (table C-N°4).

If the fuse keeps blowing, check:

the cabling WCS314 connecting the connection J27 on the SFC board (table C-N°4) with the connection J01 on the MLC board (table B-N°11): this should not be cut or crushed.

The cabling connecting the connection J45 on the MLC board with the connection XCS09 on

the main control box edge: this should not be cut or crushed.  
 The cabling WLS385 connecting the connection J26 on the SFC board (table C-N°4) with the connection J03 on the RIO board (table E-N°04): this should not be cut or crushed.  
 Cabling connecting the Console: this should not be cut or crushed.  
 Replace the RIO board (table E-N°04).  
 Replace the MLC board (table B-N°11).

<b>19459</b>	<b>No 24V power, check fuse F3</b>
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*Description:*

This means that the SFC board (table C-N°4) fails to detect 24V Dc below fuse PF3 on the board. This voltage is used by the various boards to feed the power circuits of the various devices (warp stop motion, warning lamps, etc...)

*Remedies:*

Check the state of fuse PF3 on the SFC board (table C-N°4). To view the location of the fuse on the board, click on the button above the "LEDs and Fuses Table".  
 Replace the SFC board (table C-N°4).  
 If the fuse keeps blowing:  
 Check the cabling WLS355 connecting the connection J38 on the MLC board (table B-N°11) with the warp stop motion: this should not be cut or crushed.  
 Check the cabling WLS345 connecting the connection J60 on the MLC board (table B-N°11) with the lamps: this should not be cut or crushed.  
 Check the cabling WCP304 connecting the connection J19 on the SFC board with the connection J20 on the Hi-Drive device (table B-N°7); this should not be cut or crushed.  
 Check the cabling WCS310/1 connecting the connection J32 on the SFC board with the connection J01 on the EMC2.1 board (table B-N°3): this should not be cut or crushed.  
 Check the cabling WCS310/2 connecting the connection J02 on the EMC2.1 board (table B-N°3) with the connection J01 on the EMC2.2 board (table B-N°9): this should not be cut or crushed.  
 Check the cabling WCP314 connecting the connection J27 on the SFC board with the connection J01 on the MLC board (table B-N°11): this should not be cut or crushed.  
 Check the cabling connecting the connection J15 on the SFC board with the board cooling fan on the main control box rear panel: this should not be cut or crushed.  
 Check the cabling WLP308 connecting the connection J12 on the MLC board (table B-N°11) with the suction motor thermal probe: this should not be cut or crushed.  
 Check the cabling WLP360 connecting the connection J26 on the SFC board with the connection J03 on the RIO board (table E-N°4): this should not be cut or crushed.  
 Check the cabling WLS390 connecting the connection J15 on the RIO board with the manual movement safety switch on the right-hand frame of the loom: this should not be cut or crushed.  
 If a Promatech thermal cutter, check the cabling WCP345 connecting the connection J32 on the SFC board with the connection XCS08 near the thermal cutter relays KT01 and KT02: this should not be cut or crushed.

<b>19460</b>	<b>No 24V relays, check fuse F4</b>
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*Description:*

This means that the SFC board (table C-N°4) fails to detect 24V Dc below fuse PF4 on the board. This voltage is used to feed the relay circuits (emergency, start movement, remote switch coils, etc...).

*Remedies:*

Check the state of fuse PF4 on the SFC board (table C-N°4). To view the location of the fuse on the board, click on the button above the "LEDs and Fuses Table".

Replace the SFC board (table C-N°4).

If the fuse keeps blowing:

Check that the coil of KQ01 (table B-N°18) is not short-circuited, replace if necessary.

Check that the coil of KD02 (table B-N°13) is not short-circuited, replace if necessary.

Check that the coil of KM30 (table B-N°15) is not short-circuited, replace if necessary.

Check that the coil of KM02 (table B-N°17) is not short-circuited, replace if necessary.

Check that the coil of KA03 (table B-N°16) is not short-circuited, replace if necessary.

Check that the cables going to the push-button panels aren't cut or crushed.

Check that the cables going to the emergency stop buttons on the loom aren't cut or crushed.

Check that the emergency/relay circuits are not earthed (see wiring diagrams).

**19461**

**No 24V Dobby, check fuse F6**

*Description:*

This means that the SFC board (table C-N°4) fails to detect 24V Dc below fuse PF6 on the board. This voltage is used to feed the Stäubli dobbie.

*Remedies:*

Verificare l'integrità del fusibile PF6 sulla scheda SFC (tav.C-N°4). Per visualizzare l'ubicazione del fusibile sulla scheda, clicca sul pulsante soprastante "tabelle led e fusibili".

Sostituire la scheda SFC (tav.C-N°4).

Se il fusibile continua a bruciare:

Verificare il cablaggio WCP370 che collega la connessione J31 della scheda SFC con la connessione J06 della scheda DSR (tav.B-N°10), che non sia schiacciato o tagliato.

Sostituire la scheda DSR (tav.B-N°10).

**19462**

**No 24V Services, check fuse F8**

*Description:*

This means that the SFC board (table C-N°4) fails to detect 24V Dc below fuse PF8 on the board. This voltage is used to feed the main motor fan, the LOEPFE thermal cutter, the Jacquard and relay KA01 for the neon lamps.

*Remedies:*

Check the state of fuse PF8 on the SFC board (table C-N°4).

To view the location of the fuse on the board, click on the button above the "LEDs and Fuses Table".

Replace the SFC board (table C-N°4). If the fuse keeps blowing:

Check the cabling WCP350 connecting the connection J34 on the SFC board with the terminal board X24DC (table C-N°11): this should not be cut or crushed.

If the loom is fitted with the LOEPFE thermal cutter control unit, replace this and check the cables running from terminal board XA05 (table C-N°7) to the control unit: these should not be damaged.

Check the cabling WCP360 connecting terminal board X24DC (table C-N°11) to connection XCS10 on the main control box edge: this should not be cut or crushed.

Check the cabling XCS10 on the main control box to the Jacquard: this should not be cut or crushed. Check the cabling WCP330 connecting the terminal board X24DC (table C-N°11) with the coil A1-A2 on the relay KA01 (table C-N°19): this should not be cut or crushed.

Check the cabling WLP323 connecting terminal board XA02 (table C-N°8) to switch SQ02 on the left-hand frame of the loom in order to light the neon lamps: this should not be cut or crushed.

Check that the coil on relay KA01 (table C-N°19) isn't earthed or short-circuited.

Check the cabling WCP316 connecting terminal board X24DC (table C-N°11) to contact KM30

(table B-N°15): this should not be cut or crushed.  
 Check the cabling WLP303 connecting terminal board XM02 (table C-N°12) to the connection XLP101 near the cooling fan on the main Hi Drive motor: this should not be cut or crushed.  
 Check that the fan isn't earthed or short-circuited.

<b>19463</b>	<b>No 24V T.C. check fuse F7.</b>
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*Description:*

This means that the SFC board (table C-N°4) fails to detect 24V Dc below fuse PF7 on the board. This voltage is used to feed the main motor fan, the LOEPFE thermal cutter, the Jacquard and power relay KA01 for the neon lamps.

*Remedies:*

Check the state of fuse PF7 on the SFC board (table C-N°4). To view the location of the fuse on the board, click on the button above the "LEDs and Fuses Table".

Replace the SFC board (table C-N°4).

If the fuse keeps blowing:

If the motorised selvedge cutter is fitted, check the cabling WCS310/1 connecting the connection J32 on the SFC board with the connection J01 on the EMC2.1 board (table B-N°3): this should not be cut or crushed.

If the third motorised selvedge cutter is fitted, check the cabling WCS310/2 connecting the connection J32 on the SFC board with the connection J01 on the EMC2.2 board (table B-N°9): this should not be cut or crushed.

If the thermal cutter is fitted, check the cabling WCP345 connecting the connection J32 on the SFC board with the connection XCS08 near the thermal cutter relays KT01 and KT02 (table D-N°12-13): this should not be cut or crushed.

If the thermal cutter is fitted, check the cabling WCS33 connecting thermal cutter relays KT01 and KT02 (table D-N°12-13) with temperature selector QS03 (table A-N°8): this should not be cut or crushed.

If the motorised selvedge cutter is fitted, replace the EMC2.1 board (table B-N°3).

If the third motorised selvedge cutter is fitted, replace the EMC2.2 board (table B-N°9).

If a Promatech thermal cutter is fitted, replace temperature selector QS03 (table A-N°8).

<b>19464</b>	<b>Mancanza 24V Com, verificare fusibile F11.</b>
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*Description:*

This means that the SFC board (table C-N°4) has failed to detect 9V AC coming from the main transformer T01 (table D-N°11).

**Voltage currently not used.**

*Remedies:*

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<b>19465</b>	<b>No 50V, check fuse on transformer.</b>
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*Description:*

This means that the SFC board (table C-N°4) has failed to detect 50V DC coming from the DPS board (table B-N°08). This voltage is then re-sent by the SFC board to the board in the FIMTEXTILE dobbie in order to feed the magnets.

*Remedies:*

Check the state of the fuses for the three-phase 38V AC terminals on transformer T1 (table D-N°11). To view the location of the fuse on the transformer, click on the button above the "LEDs and Fuses Table".

Check that the transformer T1 is connected to the corresponding line voltage primary.

Check the state of fuses FU03 (table B-N°24).

Check the tightness of the terminals on fuse holder FU03.

Check the cabling WCP310 connecting the fuse holder FU03 with main transformer T1.

Check the cabling WCP349 connecting the transformer T1 with connection J01 on DPS board (table B-N°08).

Check the cabling WCP352 connecting the connection J04 on the DPS board (table B-N°08) with the connecting J04 on the SFCi board (table C-N°4).

Replace the DPS board (table B-N°8).

Replace the SFC board (table C-N°4).

If the fuses on the transformer T1 keep blowing:

Replace the board on the Fimtextile dobbie

Check the cabling WLP335 connecting connection J31 on the SFC board to connection XLS10 near the dobbie: this should not be cut or crushed.

<b>19466</b>	<b>No 160V coupling check fuse F10.</b>
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*Description:*

This means that the SFC board (table C-N°4) fails to detect 160V DC below fuse PF10 on the board. This voltage is used to feed the coupling coil.

*Remedies:*

Check the state of fuse PF10 on the SFC board (table C-N°4). To view the location of the fuse on the board, click on the button above the "LEDs and Fuses Table".

Check the connection WCP352 connecting the connection J04 on the DPS board (table B-N°8) with the connecting J04 on the SFC board (table C-N°4).

Replace the SFC board (table C-N°4).

Replace the DPS board (table B-N°8).

If the fuse keeps blowing:

Check the cabling WLP332 connecting connection J03 on the SFC board to connection XLP100 near the coupling coil on the loom: this should not be cut or crushed.

Check the connection WCP352 connecting the connection J04 on the DPS board (table B-N°08) with the connecting J04 on the SFC board (table C-N°4): this should not be cut or crushed.

Check that the resistance of the coupling coil is about 21 ohms and that it isn't earthed.

<b>19467</b>	<b>No 160V brake, check fuse F9.</b>
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*Description:*

This means that the SFC board (table C-N°4) fails to detect 160V DC below fuse PF9 on the board. This voltage is used to feed the coil on the parking brake.

*Remedies:*

Check the state of fuse PF9 on the SFC board (table C-N°4). To view the location of the fuse on the board, click on the button above the "LEDs and Fuses Table".

Check the connection WCP352 connecting the connection J04 on the DPS board (table B-N°8) with the connection J04 on the SFC board (table C-N°4).

Replace the SFC board (table C-N°4).

Replace the DPS board (table B-N°8).

If the fuse PF9 keeps blowing:

Check the cabling WLP330 connecting the connection J03 on the SFC board with the connection XLP102 near the brake coil: this should not be cut or crushed.

Check the connection WCP352 connecting the connection J04 on the DPS board (table B-N°8) with the connection J04 on the SFC board (table C-N°4): this should not be cut or crushed.

Check that the resistance of the brake coil is about 100 ohms and that it isn't earthed.

<b>19468</b>	<b>Coupling relay K3 faulty (open)</b>
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*Description:*

This means that the SFC board (table C-N°4) has failed to detect the closure of the relay contacts, despite having sent the closure command to relay K3. Relay K3 is located on the SFC board and is a safety relay that cuts the 160V DC supply to the coupling coil when the loom turns at a speed of more than 100 rpm.

*Remedies:*

Replace relay K3 on the SFC board (table C-N°4).

Replace the SFC board (table C-N°4).

<b>19469</b>	<b>Coupling relay K3 faulty (closed)</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected the closure of the relay contacts, despite not having sent the closure command to relay K3. Relay K3 is located on the SFC board and is a safety relay that cuts the 160V DC supply to the coupling coil when the loom turns at a speed of more than 100 rpm.

*Remedies:*

Replace relay K3 on the SFC board (table C-N°4).

Replace the SFC board (table C-N°4).

<b>19470</b>	<b>Coupling relay K2 faulty (open)</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected the opening of the relay contacts, despite having sent the closure command to relay K2. Relay K2 is located on the SFC board and is needed to feed the brake coil when you insert the manual movements handwheel.

*Remedies:*

- Replace relay K2 on the SFC board (table C-N°4).
- Replace the SFC board (table C-N°4).

<b>19471</b>	<b>Coupling relay K2 faulty (closed)</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected the closure of the relay contacts, despite not having sent the closure command to relay K2. Relay K2 is located on the SFC board and is needed to feed the brake coil when you insert the manual movements handwheel.

*Remedies:*

- Replace relay K2 on the SFC board (table C-N°4).
- Replace the SFC board (table C-N°4).

<b>19472</b>	<b>Main motor running with brake engaged</b>
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*Description:*

This means that the SFC board (table C-N°4) has failed to detect any current in the brake coil, despite the fact that this board received signals from the main encoder indicating that the loom is moving. In other words, the loom is moving with the brake closed.

*Remedies:*

- Check the cabling WLP330 connecting the connection J03 on the SFC board with the connection XLP102 near the brake coil: this should not be cut or crushed.
- Check that the resistance of the brake coil is about 100 ohms and that it isn't earthed.
- Replace the SFC board (table C-N°4).
- Replace the main encoder. NB When you replace the auxiliary encoder, you need to time this with the loom by following a Console guided procedure.

<b>19473</b>	<b>System has found brake engaged while loom weaving</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected via the main encoder that the loom is moving in continuous running mode, but it fails to detect the current in the brake coil. In other words, the loom is moving with the brake engaged.

*Remedies:*

- Replace the SFC board (table C-N°4).
- Check the cabling WLP330 connecting the connection J03 on the SFC board with the connection XLP102 near the brake coil: this should not be cut or crushed.
- Check that the resistance of the brake coil is about 100 ohms and that it isn't earthed.
- Replace the main encoder. NB When you replace the auxiliary encoder you need to time this with the loom by following a guided procedure.

<b>19474</b>	<b>Disengage command used while loom weaving</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected via the main encoder that the loom is moving in continuous running mode, but it detects the current in the coupling coil. In other words, the loom is moving with the coupling open.

*Remedies:*

Replace the SFC board (table C-N°4).

Check the cabling WLP332 connecting the connection J03 on the SFC board with the connection XLP100 near the coupling coil: this should not be cut or crushed.

Check that the resistance of the coupling coil is about 21 ohms and that it isn't earthed.

Replace the main encoder. NB When you replace the auxiliary encoder you need to time this with the loom by following a Console guided procedure: press key "W" at the side here to open a wizard window that guides you through the loom/dobby/main encoder/auxiliary encoder timing procedure.

<b>19475</b>	<b>No brake coil current. Check connections</b>
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*Description:*

This means that the SFC board (table C-N°4) has sent the power command to the brake coil, but it has also failed to detect current in the brake coil.

*Remedies:*

Replace the SFC board (table C-N°4).

Check the cabling WLP330 connecting the connection J03 on the SFC board with the connection XLP102 near the brake coil: this should not be cut or crushed.

Check that the resistance of the brake coil is about 100 ohms and that it isn't earthed

<b>19476</b>	<b>Incoherent continuous running mode command, check KA03</b>
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*Description:*

This means that the SFC board (table C-N°4) has received Via the Can-Bus the command from the MLC to activate the output that activates relay KA03 (table C-N°16), but the SFC board hasn't received 24V DC at pin 9 on connection J16. In other words, the retroaction contact on KA03 isn't closed and so the KA03 is not activated.

*Remedies:*

Check that there's 24V DC with continuous running at pin 12 in connection J17 on the SFC board. If present, replace the KA03 relay (table C-N°16), and check cable WCS 321 connecting the connection J17 on the SFC with coil (A1-A2) on KA03 relay. If absent, replace the SFC board (table C-N°4).

You see that relay KA03 is activated in continuous running mode, but the alarm persists: check the contact between terminals 12 and 8 on relay KA03. The contact should be normally open, closing when the relay is activated. Otherwise, replace relay KA03.

Check that there's 24V DC on pin 1 on connection J16 on the SFC board, otherwise check the state of fuse F4 on the SFC board and replace SFC board if necessary (table C-N°4).

Check the cabling WCS323 connecting the connection J16 on the SFC board with the retroaction contact on KA03 relay.  
 Check that terminals 12 and 8 on KA03 relay are properly tightened.

<b>19477</b>	<b>Power enable self-check error: check KQ01.</b>
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*Description:*

This means that the SFC board (table C-N°4) has received via the Can-Bus the command from the MLC to activate the output that activates power contactor KQ01 (table B-N°18), but the SFC board has also received 24V DC at pin 3 in connection J16. In other words, the retroaction contact on KQ01 is closed, but the SFC board has failed to detect the closure of the contact between terminals 13 and 14 on KQ01. This means that all the contactor is working properly apart from the relay activating contact.

*Remedies:*

Check the cabling WCS321 connecting the connection J17 on the SFC board with the relay enabling contact on KQ01 (terminals 13-14).  
 Check that terminals 13 and 14 on KQ01 are properly tightened.  
 Replace the SFC board (table C-N°4).  
 Replace the contactor (table B-N°18).

<b>19478</b>	<b>Power enable malfunction, check KQ01</b>
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*Description:*

This means that the SFC board (table C-N°4) has received via the Can-Bus the command from the MLC to activate the output that activates power contactor KQ01 (table B-N°18), but the SFC board has also received 24V DC at pin 2 in connection J16. In other words, the enabling contact on KQ01 located on KD02 (table B-N°13) is opened. In other words, the system has detected that KQ01 has been activated, but cannot work due to KD02.

*Remedies:*

Make sure that remote switch KD02 is not excited with the loom on but not moving; otherwise replace the SFC board (table C-N°4).  
 Make sure that the contact between terminals 21 and 22 on KD02 is closed when the remote switch is not excited; otherwise replace KD02.  
 Replace the SFC board (table C-N°4).  
 Check that terminals 21 and 22 on KD02 are properly tightened.

<b>19479</b>	<b>Power enable detected, but KQ01 not excited: check KQ01, SFC wiring.</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected 24V DC at pin 2 in connection J17 (from contact 13-14 on KQ01), but has failed to detect 24V at pin 3 in connection J16 (from contact 21-22 on KQ01). In other words, remote switch KQ01 (table B-N°18) is excited, but the SFC board has detected that KQ01 has not been piloted. In other words, the KQ01 has not been piloted, but is detected as being excited.

*Remedies:*

- Check the cabling WCS321 connecting the connection J17 (pins 1-2) on the SFC board with the relay enabling contact on KQ01 (terminals 13-14).
- Check the cabling WCS323 connecting the connection J16 (pins 1-3) on the SFC board with the relay enabling contact on KQ01 (terminals 21-22).
- Check the cabling WCS321 connecting the connection J17 (pins 5-20) on the SFC board with coil on KQ01 (terminals A1-A2).
- Check that the remote switch KQ01 (table B-N°18) is not mechanically blocked, replace if necessary.
- Replace the SFC board (table C-N°4).
- Replace the contactor KQ01 (table B-N°18).

<b>19480</b>	<b>Power enable detected, but KQ01 not excited: check KQ01, KD02, SFC wiring.</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected 24 V DC at pin 2 in connection J17 (from contact 13-14 on KQ01), but has failed to detect 24 V at pin 3 in connection J16 (from contact 21-22 on KQ01). In other words, remote switch KQ01 (table B-N°18) is excited, but the SFC board has detected that KQ01 has not been piloted. In other words, the KQ01 has not been piloted, but is detected as being excited.

*Remedies:*

- Check the cabling WCS321 connecting the connection J17 (pins 1-2) on the SFC board with the relay enabling contact on KQ01 (terminals 13-14).
- Check the cabling WCS323 connecting the connection J16 (pins 1-3) on the SFC board with the relay enabling contact on KQ01 (terminals 21-22).
- Check the cabling WCS321 connecting the connection J17 (pins 5-20) on the SFC board with coil on KQ01 (terminals A1-A2).
- Check the cabling WCS321 connecting the connection J17 (pins 4-20) on the SFC board with coil on KQ02 (table B-N°13) (terminals A1-A2).
- Check that the remote switch KQ01 (table B-N°18) is not mechanically blocked, replace if necessary.
- Check that the remote switch KD02 (table B-N°13) is not mechanically blocked, replace if necessary.
- Replace the SFC board (table C-N°4).
- Replace the contactor KQ01 (table B-N°18).

<b>19481</b>	<b>Relay K1 malfunction</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected, that relay K1 on the SFC board has been piloted, but the system has also detected that the relay contacts have not closed.

*Remedies:*

- Replace relay K1 on the SFC board (table C-N°4).
- Replace the SFC board (table C-N°4).

<b>19482</b>	<b>REL signal detected, but K1 not excited: check wiring and SFC</b>
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*Description:*

This means that the SFC board (table C-N°4) has failed to pilot relay K1 on the SFC board, but the system has detected that relay contacts have closed. In other words, relay K1 is excited without being piloted.

*Remedies:*

Replace relay K1 on the SFC board (table C-N°4).  
 Replace the SFC board (table C-N°4).

<b>19483</b>	<b>KD02 malfunction (open)</b>
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*Description:*

This means that the SFC board (table C-N°4) has piloted contactor KD02 (table B-N°13), but it has failed to detect 24V DC at pin 2 in connection J16 on the SFC board. This voltage comes from retroaction contact KD02 (terminals 13-14). In other words, the SFC board has piloted KD02, but KD02 is not excited.

*Remedies:*

Check the cabling WCS321 connecting the connection J17 (pins 4-20 excitation), (pins 3-20 self-engage) at the coil of remote switch KD02.  
 Check that the contact between terminals 5 and 6 on KD02 is open when the remote switch is not excited and that it closes when the remote switch is excited.  
 Check that the contact between terminals 13 and 14 on KD02 is open when the remote switch is not excited and that it closes when the remote switch is excited.  
 Check that the coil of remote switch KD02 isn't earthed or in short-circuited.  
 Check the cabling WCS323 connecting the connection J16 on the SFC board with the contact 22-21 on remote switch KD02.  
 Replace the remote switch KD02 (table B-N°13).  
 Replace the SFC board (table C-N°4).

<b>19484</b>	<b>KD02 malfunction (closed)</b>
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*Description:*

This means that the SFC board (table C-N°4) has failed to pilot contactor KD02 (table B-N°13), but it has detected 24V DC at pin 2 in connection J16 on the SFC board. This voltage comes from retroaction contact KD02 (terminals 13-14). In other words, the SFC board has not piloted KD02, but this is still excited.

*Remedies:*

Check that the remote switch KD02 (table B-N°13) is not mechanically blocked.  
 Check the cabling WCS321 connecting the connection J17 on the KD02 remote switch.  
 Check that the contact between terminals 5 and 6 on KD02 is open when the remote switch is not excited and that it closes when the remote switch is excited.  
 Check that the contact between terminals 13 and 14 on KD02 is open when the remote switch is not excited and that it closes when the remote switch is excited.  
 Check the cabling WCS323 connecting the connection J16 on the SFC board with the contact 22-21 on remote switch KD02.  
 Replace the remote switch KD02 (table B-N°13).  
 Replace the SFC board (table C-N°4).

<b>19485</b>	<b>No cutter OK line, T.C.</b>
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*Description:*

This means that the SFC 1C board (table C-N°4) has detected that there is no 24V DC at pin 2 in connection J32 on the SFC board. This means that the thermal cutter selector is turned to "0".

*Remedies:*

If the loom is not fitted with a thermal cutter or the motorised selvedge cutters, check the short-circuit jumper between pins 1 and 2 in connection J32 on the SFC board. Check that there's 24V DC between pin 1 on connection J32 and the earth, otherwise check the fuse F3 on the SFC board and replace the SFC board if necessary.

Replace thermal cutter selector.

Replace the SFC 1C board (table C-N°4)

If the loom is fitted with the thermal cutter and you don't want to use this, take the thermal cutter selector (table A-N°8) to "DIS"; if, on the other hand, you want to use the thermal cutter at any temperature (1, 2, 3, etc...).

If the selector is in the right position, check cable WCP 340 used to connect connection J32 on the SFC board to the thermal cutter selector.

Check that there's 24V DC between pin 1 on connection J32 and the earth, otherwise check the fuse F3 on the SFC board and replace the SFC board if necessary.

If the loom is fitted with the motorised cutters, check that there's a short-circuit jumper between pins 3 and 4 in connection J02 on the EMC2.1 board, or if present, on the EMC2.2 board.

Check that there's 24V DC between pin 1 on connection J32 and the earth, otherwise check the fuse F3 on the SFC board and replace the SFC board if necessary.

Check the cabling WCS310/1 connecting the connection J32 on the SFC board with the connection J1 on the EMC2.1 board.

If also EMC2.2 board is present, check the cabling WCS310/2 connecting the connection J02 on the EMC2.1 board with the connection J01 on the EMC2.2 board.

Replace the EMC2.1 board.

Replace the EMC2.2 board.

Replace the SFC board (table C-N°4)

If the loom is fitted with motorised cutters and thermal cutter, check that the thermal cutter selector isn't turned to position "0".

Check that there's 24V DC between pin 1 on connection J32 and the earth, otherwise check the fuse F3 on the SFC board and replace the SFC board if necessary.

Check the cabling WCP340/2 connecting the connection J02 on the EMC2.1 board (or EMC2.2 if present) to the thermal cutter selector.

Check the cabling WCS310/1 connecting the connection J32 on the SFC board with the connection J1 on the EMC2.1 board.

If also EMC2.2 board is present, check the cabling WCS310/2 connecting the connection J02 on the EMC2.1 board with the connection J01 on the EMC2.2 board.

Replace thermal cutter selector.

Replace the EMC2.1 board.

Replace the EMC2.2 board.

Replace the SFC board (table C-N°4)

<b>19486</b>	<b>KM30 malfunction (open): oil pump and Hi Drive motor fan</b>
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*Description:*

This means that the SFC board (table C-N°4) is piloting the 24V DC power supply to pin 7 in connection J17 on the SFC board in order to excite KM30 (table B-N°15), but is also receiving 24V DC at pin 4 in connection J16 coming from the N.C. contact (terminals 21 and 22) in

contactor KM30. In other words: the SFC board has piloted KM30, but this is not excited.

*Remedies:*

Check the cabling WCS321 connecting the connection J17 (pins 7-20) on the SFC board (table C-N°4) with terminals A1 and A2 on remote switch KM30 (table B-N°15).

Check the cabling WCS323 connecting the connection J16 (pins 1-4) on the SFC board (table C-N°4) with terminals 21 and 22 on remote switch KM30 (table B-N°15).

Check that the contact between terminals 21 and 22 on remote switch KM30 is closed when the contactor isn't excited, and vice-versa is open when the contactor is excited.

Replace the contactor KM30 (table B-N°15).

Replace the SFC board (table C-N°4).

<b>19487</b>	<b>KM30 malfunction (closed): oil pump and Hi Drive motor fan</b>
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*Description:*

This means that the SFC board (table C-N°4) is not piloting the 24V DC power supply to pin 7 in connection J17 on the SFC board in order to excite KM30 (table B-N°15), but it is not receiving 24V DC at pin 4 in connection J16 coming from the N.C. contact (terminals 21 and 22) in contactor KM30. In other words: the SFC board hasn't piloted KM30, but this still is activated.

*Remedies:*

Check that the contactor KM30 (table B-N°15) is not mechanically blocked.

Check the cabling WCS321 connecting the connection J17 (pins 7-20) on the SFC board (table C-N°4) with terminals A1 and A2 on remote switch KM30 (table B-N°15).

Check the cabling WCS323 connecting the connection J16 (pins 1-4) on the SFC board (table C-N°4) with terminals 21 and 22 on remote switch KM30 (table B-N°15).

Check that the contact between terminals 21 and 22 on remote switch KM30 is closed when the contactor isn't excited, and vice-versa is open when the contactor is excited.

Check the tightness of the terminals 21 and 22 on remote switch KM30.

Check the state of fuse F4 on the SFC board

Replace the contactor KM30 (table B-N°15).

Replace the SFC board (table C-N°4).

<b>19490</b>	<b>KM02 malfunction (open)</b>
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*Description:*

This means that the SFC board (table C-N°4) is piloting the 24V DC power supply to pin 10 in connection J17 on the SFC board in order to excite KM02 suction motor (table B-N°17), but it is also receiving 24V DC at pin 7 in connection J16 coming from the N.C. contact (terminals 21 and 22) in contactor KM02. In other words: the SFC has piloted KM02 on the suction motor, but this still isn't activated.

*Remedies:*

If the loom is fitted with standard suction motor:

Check that there's a short-circuit jumper between pins 3 and 6 on connection J37 on the SFC board .

Check the cabling WCS321 connecting the connection J17 (pins 10-20) on the SFC board (table C-N°4) with terminals A1 and A2 on remote switch KM02 (table B-N°17).

Check the cabling WCS323 connecting the connection J16 (pins 1-7) on the SFC board (table C-N°4) with terminals 21 and 22 on remote switch KM02 (table B-N°17).

Check that the contact between terminals 21 and 22 on remote switch KM02 is closed when

the contactor isn't excited, and vice-versa is open when the contactor is excited.  
 Replace the contactor KM02 (table B-N°17).  
 Replace the SFC board (table C-N°4).

If the loom is fitted with boosted suction motor:  
 Check the cabling WCS320/1 connecting the connection J37 on the SFC board with suction motor on/off selector S03 (table A-N°6).  
 Check that conductors are properly tightened on selector S03 terminal.  
 Make sure that there is 24V DC at pin 6 in connection J37 on the SFC board when selector S03 is turned to ON; replace the selector S03 if necessary. If there is no selector S03, place a jumper between pins 3 and 6 in connection J37 on the SFC board until the spare-part arrives.  
 Check the cabling WCS321 connecting the connection J17 (pins 10-20) on the SFC board (table C-N°4) with terminals A1 and A2 on remote switch KM02 (table B-N°17).  
 Check the cabling WCS323 connecting the connection J16 (pins 1-7) on the SFC board (table C-N°4) with terminals 21 and 22 on remote switch KM02 (table B-N°17).  
 Check that the contact between terminals 21 and 22 on remote switch KM02 is closed when the contactor isn't excited, and vice-versa is open when the contactor is excited.  
 Replace the contactor KM02 (table B-N°17).  
 Replace the SFC board (table C-N°4).

<b>19491</b>	<b>KM02 malfunction (closed)</b>
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*Description:*

This means that the SFC board (table C-N°4) is not piloting the 24V DC power supply at pin 10 in connection J17 on the SFC board in order to excite KM02 suction motor (table B-N°17), but it does not detects that there is 24V DC at pin 4 in connection J16 coming from the N.C. contact (terminals 21 and 22) in contactor KM02. In other words: the SFC has not piloted KM02 on the suction motor, but this is still excited.

*Remedies:*

Check that the remote switch KM02 (table B-N°17) is not mechanically blocked, replace if necessary.  
 Check the cabling WCS321 connecting the connection J17 on the SFC board (table C-N°4) with terminals A1 and A2 on remote switch KM02 (table B-N°17).  
 Check the cabling WCS323 connecting the connection J16 on the SFC board (table C-N°4) with terminals 21 and 22 on remote switch KM02 (table B-N°17).  
 Check that the contact between terminals 21 and 22 on remote switch KM02 is closed when the contactor isn't excited, and vice-versa is open when the contactor is excited.  
 Replace the contactor KM02 (table B-N°17).  
 Replace the SFC board (table C-N°4).

<b>19493</b>	<b>No Jacquardette OK</b>
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*Description:*

This means that the SFC board (table C-N°4) is sending the movement request to the Jacquardette via connection J21, but the Jacquardette fails to send its OK for movement to the loom via connection J21.

*Remedies:*

Check the cabling WLS387 connecting J21 on the SFC board (table C-N°4) with the connection XLS50 on the RH frame.  
 Check cable WLS388 used to connect connection XLS50 on the RH frame with the connection XDS02 on the let-off box.  
 Check the cable that runs from connection XDS02 on the main control box edge to the

Jacquardette.

Disconnect connection J21 on the SFC board and place a jumper between pins 1 and 2. If the alarm persists, replace the SFC board, otherwise contact the Jacquardette manufacturer.

<b>19494</b>	<b>HiDrive Run command incoherency</b>
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*Description:*

This means that the SFC board (table C-N°4) is piloting the transistor required to send the RUN signal to the drive, but the system fails to detect 24V DC at pin 12 in connection J19 on the SFC board.

*Remedies:*

Replace the SFC board (table C-N°4).

<b>19495</b>	<b>Run HiDrive command incoherency: replace SFC board</b>
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*Description:*

This means that the SFC board (table C-N°4) is not piloting the transistor needed to send the RUN signal to the drive, but the system has detected 24V DC at pin 12 in connection J19 on the SFC board. In other words, the signal is still present even if the SFC board had not enabled the RUN signal for the drive. This means that the RUN transistor on the SFC board has short-circuited.

*Remedies:*

Replace the SFC board (table C-N°4).

<b>19496</b>	<b>Restart lamp error, check lamps</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected abnormal current or no current for the orange warning lamps.

*Remedies:*

Make sure that the bulbs inside the lamps are working and installed at the right rating: 24V DC - 15 W.

Check the cabling WLS311 connecting the connection J25 on the SFC board (table C-N°4) with connection XLS04 near the LH re-start lamp.

Check the cabling WLS312 connecting the connection J25 on the SFC board (table C-N°4) with connection XLS02 near the RH re-start lamp.

Check the cables running from connection XLS04 near the lamp to the LH lamp.

Check the cables running from connection XLS02 near the lamp to the RH lamp.

Replace the SFC board (table C-N°4).

<b>19497</b>	<b>Boosted suction device excluded for more than two minutes in continuous running mode (check selector S03)</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected 24V DC at pin 8 on connection J16 for more than 2 minutes while the loom is moving in continuous mode. This alarm means that ON/OFF selector S03 for the suction motor (table A-N°6) has been switched off for more than 2 minutes and so the suction motor is switched off while the loom is weaving.

*Remedies:*

- Return selector S03 (table A-N°6) to position ON.
- Make sure that there's no 24V DC between pin 8 and the connection J16 earth on the SFC board (table C-N°4) when the loom is running and the suction device is on.
- If this alarm persists even when the suction motor is running properly, replace selector S03 (table A-N°6).
- Replace the SFC board (table C-N°4).

<b>19498</b>	<b>Excessive overvoltage on supply line</b>
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*Description:*

This means that the SFC board (table C-N°4) has measured the voltage at pins 1 and 3 in connector J18 on the SFC board: this should normally be roughly 24V AC. This alarm is generated when this value rises by more than 23.

*Remedies:*

- Check the actual line rating.
- If the detected voltage is really high, it's normal for the board to generate this alarm and so you need to check the line.
- If the mains voltage falls within the accepted limits:
- Check the rating on the 24V AC terminals on the main transformer.
- If this falls outside the accepted limits (> 23 replace transformer T01 (table D-N°11).
- Check the 24V AC input in connector J18 on the SFC board coming from transformer T01 (table D-N°11).
- If the 24V AC falls within the accepted limits (> 23
- Replace the SFC board (table C-N°4).

<b>19499</b>	<b>Power supply line overvoltage</b>
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*Description:*

This means that the SFC board (table C-N°4) has measured the voltage at pins 1 and 3 in connector J18 on the SFC board: this should normally be roughly 24V AC. This alarm is generated when this value rises by more than 15.

*Remedies:*

- Check the actual line rating.
- If the detected voltage is really high, it's normal for the board to generate this alarm and so you need to check the line.
- If the mains voltage falls within the accepted limits:
- Check the rating on the 24V AC terminals on the main transformer.

If this falls outside the accepted limits (> 15 replace transformer T01 (table D-N°11).  
 Check the 24V AC input in connector J18 on the SFC board coming from transformer T01 (table D-N°11).  
 If the 24V AC falls within the accepted limits (> 15  
 Replace the SFC board (table C-N°4).

<b>19500</b>	<b>Power supply line undervoltage</b>
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*Description:*

This means that the SFC board (table C-N°4) has measured the voltage at pins 1 and 3 in connector J18 on the SFC board: this should normally be roughly 24V AC.  
 This alarm appears when this value falls below 20

*Remedies:*

Check the actual line rating.  
 If the detected voltage is really high, it's normal for the board to generate this alarm and so you need to check the line.  
 If the mains voltage falls within:  
 Check the rating on the 24V AC terminals on the main transformer.  
 If this falls outside the accepted limits (< 20Vac) replace transformer T01 (table D-N°11).  
 Check the 24V AC input in connector J18 on the SFC board coming from transformer T01 (table D-N°11).  
 If the 24V AC falls within the accepted limits (< 20Vac).  
 Replace the SFC board (table C-N°4).

<b>19501</b>	<b>Coupling coil overcurrent</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected a sudden increase in the coupling coil current.

*Remedies:*

Switch the loom off and check the effective impedance of the coupling (this should normally be 21 Ohms).  
 Replace the coupling coil if the impedance found is more than 15higher or 15lower than the normal value.  
 Check the connections between transformer T01 (table D-N°11) and the SFC board (table C-N°4) and the coupling if the impedance found is within the accepted range. More specifically:  
 Check that there is 120V AC ( /- 10 leaving transformer T01, check also the fuse on the 120V AC output.  
 Check that the 120V AC output terminals on transformer T01 are tightened properly.  
 Check that pins 10-11 are properly inserted on connector J01 on the DPS board (table B-N°8).  
 Check that pins 5-6 are properly inserted on connector J04 on the DPS board (table B-N°8).  
 Check that pins 4-7 are properly inserted on connector J04 on the SFC board (table C-N°4).  
 Check that pins 1-2 are properly inserted on connector J03 on the SFC board (table C-N°4).  
 Check that connector on the coupling coil XLP100 is properly connected.  
 Replace the SFC board (table C-N°4) if the problem persists also after these controls.

<b>19502</b>	<b>Brake coil overvoltage</b>
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*Description:*

This means that the SFC board (table C-N°4) has detected a sudden current increase in the parking brake coil.

*Remedies:*

Switch the loom off and check the effective impedance of the coupling (this should normally be 100 Ohms).

Replace the brake coil if the impedance found is more than 15higher or 15lower than the normal value.

Check the connections between transformer T01 (table D-N°11) and the SFC board and the brake if the impedance found is within the accepted range. More specifically:

Check that there is 120V AC ( /- 10 leaving transformer T01, check also the fuse on the 120V AC output.

Check that the 120V AC output terminals on transformer T01 are tightened properly.

Check that pins 10-11 are properly inserted on connector J01 on the DPS board (table B-N°8).

Check that pins 5-6 are properly inserted on connector J04 on the DPS board (table B-N°8).

Check that pins 4-7 are properly inserted on connector J04 on the SFC board (table C-N°4).

Check that pins 4-5 are properly inserted on connector J03 on the SFC board (table C-N°4).

Check that connector on the coupling coil XLP102 is properly connected.

Replace the SFC board (table C-N°04) if the problem persists also after these controls.

<b>19503</b>	<b>No coupling coil current. Check connections</b>
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*Description:*

This means that the SFC board (table C-N°4) has found no current at the coupling and so the coil is either faulty or disconnected.

*Remedies:*

If this alarm appears, it means that the coupling is probably disconnected, so check that connector on the coupling coil XLP100 is properly connected.

If XLP100 (the connector near the coupling) is closed properly, measure the impedance of the coupling coil at pins 1 and 2.

The impedance of the coil (measured with the loom switched off) should normally be 21 Ohms.

If the value of your reading is very high, replace the coil.

Also check the connections between transformer T01 (table D-N°11), the SFC board and the coupling. More specifically:

Check that there is 120V AC ( /- 10 leaving transformer T01, check also the fuse on the 120V AC output.

Check that the 120V AC output terminals on transformer T01 are tightened properly.

Check that pins 10-11 are properly inserted on connector J01 on the DPS board (table B-N°8).

Check that pins 5-6 are properly inserted on connector J04 on the DPS board (table B-N°8).

Check that pins 4-7 are properly inserted on connector J04 on the SFC board (table C-N°4).

Check that pins 1-2 are properly inserted on connector J03 on the SFC board (table C-N°4).

Check that connector on the coupling coil XLP100 is properly connected.

Replace the SFC board (table C-N°04) if the problem persists also after these controls.

<b>19504</b>	<b>Pushbutton panel inconsistency</b>
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*Description:*

When the control box is powered up the SFC board (table C-N°4) checks the status of the push-button panels.

In other words, all the contacts on the following buttons: continuous running, slow motion, pick-finding and main motor. These should be opened, while those on the stop button should be closed.

*Remedies:*

Remove the push-button panels and use a tester to check all contacts.

You may find that a contact has bent slightly under the keys and so all you need to do is return it to its correct position.

Replace the push-button panel with the faulty contact.

Replace the SFC board (table C-N°4).

<b>19505</b>	<b>Incorrect coil parameters</b>
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*Description:*

The SFC board (table C-N°4) receives the parameters from the MLC board (table B-N°11) concerning the time and intensity of the currents of the coupling and the parking brake coils used during the initial stage and then those for normal operation (overpulse and maintenance).

*Remedies:*

Switch the control box off and reset the MLC board (table B-N°11) as follows:

Find the small battery on the MCU board.

-Find the switch next to this battery.

-Use the switch leaving it in the "off" position for about 3 minutes.

-Return the switch to "on".

-Switch the loom on and reload the loom data.

-Check the loom setup and reset if necessary.

Replace the MLC board (table B-N°11) if the problem persists.

See the reset and loom re-configuration procedures for further details.

See the reset and loom re-configuration section for further details.

<b>19506</b>	<b>Emergency line inconsistency</b>
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*Description:*

There are several points called "test points" that let you check the efficiency of the emergency circuit. These tell you up to what point the emergency circuit is OK.

This alarm warns you that the SFC board (table C-N°4) has found a discrepancy on the emergency line. In fact, a test point indicates "circuit OK", but one or more above this indicate "circuit not OK". This alarm may appear when someone tried to bypass one or more parts of the emergency circuit.

*Remedies:*

Check the emergency line; if all OK, replace the SFC board (table C-N°4).

<b>19529</b>	<b>Incoherent Power Fail detected: check connector J18 on SFC</b>
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*Description:*

The SFC board (table C-N°4) checks the level of the 24V AC coming from transformer T01 (table D-N°11). This alarm is generated if the level is not constant (normally when there is a false contact).

*Remedies:*

- Check that 24V AC terminals on transformer T01 are properly tightened.
- Check that connector J18 on the SFC board (table C-N°4) is properly inserted.
- Check that all wires are properly inserted in the connector.
- Replace the SFC board (table C-N°4).

<b>19530</b>	<b>Communication problems with MLC board</b>
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*Description:*

After you switch the control box on, the MLC board (table B-N°11) sends a message to all the boards telling them the loom is switched on. This message is "normally" sent just once. This alarm appears when the message is sent twice, meaning that the MLC board has been reset. The SFC board stops the loom.

*Remedies:*

- Replace relay K2 on the SFC board (table C-N°4).
- Replace the SFC board (table C-N°4).

<b>19531</b>	<b>Line IO_OC tripped</b>
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*Description:*

There is an extra emergency line connecting the MLC, SFC and MHD boards. If the MLC board (table B-N°11) or the SFC board (table C-N°4) detect an internal incompatibility (the MHD board may do so, but is temporarily disabled), they send this line down and so generate this alarm. This alarm means that the SFC board has sent the IO\_OC line (extra emergency line) down.

*Remedies:*

- Replace the MLC board (table B-N°11).
- Replace the SFC board (table C-N°4).

<b>19532</b>	<b>Unauthorised movement</b>
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*Description:*

TTThe loom is "READY IN STAND-BY", an unauthorised machine movement has been detected in this mode. The parking brake slips (Jacquard in the case of a pattern with heavy lifts) or the main encoder sends pulses that simulate the movement of the loom.

*Remedies:*

- Check the grip of the parking brake.
- Check for movements in the main encoder degrees in the Hi-Drive page when the loom is stopped.

Check the screening of the cables carrying the main encoder signals.

Replace the parking brake.

Replace the main encoder.

NB: whenever you replace an encoder, you need to carry out the encoder timing and calibration procedure, otherwise the loom could generate alarm signals. Press "W" and follow the steps shown in the relevant page on the console.

Replace the MLC board (table B-N°11).

<b>19533</b>	<b>Coupling overpulse too long</b>
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*Description:*

The SFC board (table C-N°4) checks the overpulse provided by the coupling coil. If this last for more than 6 seconds it means that the MLC board has sent the Can-Bus line times by mistake.

*Remedies:*

Reset the MLC board (table B-N°11): see the procedure by clicking on the button above "replacing components".

Replace the MLC board (table B-N°11).

Replace the SFC board (table C-N°4).

<b>19534</b>	<b>Check control box fan status</b>
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*Description:*

1 or 2 cooling fans may be fitted on the SFC 1C board (table C-N°4). This alarm indicates that one or both fans fail to turn.

*Remedies:*

1 or 2 cooling fans may be fitted on the SFC 1C board (table C-N°4).

This alarm indicates that one or both fans fail to turn.

Check the connection of the fans to the board.

Check the fan power supply.

Replace the faulty fans.

<b>19535</b>	<b>No SFC board DRV supply</b>
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*Description:*

The SFC 1C board (table C-N°4) has detected no 12V in the coupling/brake coil power circuit. This alarm only appears with the SFC 1C board

*Remedies:*

Replace the SFC 1C board (table C-N°4)

## HOW TO REPLACE COMPONENTS

### MLC board (TAB B-11)

**Replacing instructions:**

Switch the control box on.

Select MEMORY CARD in the Console main menu.

Save the data to the Memory Card by pressing BACKUP on the Console.

If you don't have a memory card available to save the data, make a note of all the loom data (settings, parameters, loom setup) before replacing the MLC board.

Switch the control box off.

Check that the control box is off.

Open the front panel on the box containing the MLC board to be replaced (table B-N°11).

Remove the board fastening screws.

Remove all connectors connected to the board.

Remove the board.

Fix the new MLC board to the control box.

Connect all the connectors to the new board.

Switch the control box on.

If the board in the control box is not programmed, load the SW from Memory Card (4 Mb).

Go to the Memory Card page, select the file (with \*.MLC extension) and run by pressing LOAD.

All the boards on the loom can be upgraded by simply opening one file (extension \*.ALL) on the console (software release PACK1.0 onwards).

On completing the board programming, you need to switch the control box off and back on again.

Reload all the data, selecting the file saved earlier and press LOAD in the Memory Card menu on the console.

After pressing "LOAD", the system asks for a code:

enter 357282111 and confirm by pressing ENTER on the Console.

Wait for the data loading procedure to finish.

If you don't have a Memory Card, open the "loom setup" page and then manually reset all the loom data.

Switch the control box off again.

Switch the control box on. The loom is now ready for weaving.

There may be some alarms due to data saved incorrectly to the RAM in the new board. In this case you need to clear the MLC memory (click on the button at the side for details of how to do this).

### A01-A02-A03 boards (TAB D-4-5-6)

**Replacing instructions:**

Check that the control box is off.

Open the front panel on the box containing the power supply boards for A01-A02-A03 neon lights (table D-N°4-5-6).

Open the fuse holder FA01 (table C-N°18), thus cutting the power supply to transformer T03 (table D-N°9).

Remove the wires coming from transformer T03 from the faulty board:

Cable WCP311/1 wires n°20-21 if A01 board.

Cable WCP311/1 wires n°22-23 if A02 board.

Cable WCP311/2 wires n°24-25 if A03 board.

Remove the wires going to the lamps from the faulty board:

Cable WLP320 wires n°BK1-BK2-BK3-BK4 if A01 board.  
Cable WLP321 wires n°BK1-BK2-BK3-BK4 if A02 board.  
Cable WLP322 wires n°BK1-BK2-BK3-BK4 if A03 board.  
Remove the board fastening screws.  
Replace the board  
Fix the new board in the control box.  
Make the connections.  
Close the fuse holder FA01 (table C-N°18).  
Close the control box door.  
Switch the control box on.  
There's no need to save any parameters to the Memory Card.

## DPS board (TAB B-8)

### Replacing instructions:

Check that the control box is off.  
Open the front panel on the box containing the DPS board (table B-N°8).  
Open the fuse holder FU03 (table B-N°24), thus cutting the power supply to transformer T01 (table D-N°11).  
Remove the connectors J01-J02-J03-J04 from the DPS board.  
Remove the fastening screws on the DPS board to be replaced.  
Remove the board from the control box.  
Insert the new DPS board and fix to the control box.  
Connect the connectors J01-J02-J03-J04 to the DPS board (table D-N°8).  
Close the fuse holder FU03 (table B-N°24).  
Close the front panel on the control box.  
Switch the control box on.  
There's no need to save any parameters to the Memory Card.

## DSR board (TAB B-10)

### Replacing instructions:

Check that the control box is off.  
Open the front panel on the box containing the DSR board (table B-N°10).  
Remove the connectors J06-J04 from the DSR board.  
Remove the fastening screws on the DSR board to be replaced.  
Remove the board from the control box.  
Insert the new DSR board and fix to the control box.  
Connect the connectors J06-J04 to the DSR board (table B-N°10).  
Close the front panel on the control box.  
Switch the control box on.  
If the board in the control box is not programmed, load the SW from Memory Card (4 Mb).  
Go to the Memory Card page, select the file (with \*.DSR extension) and run by pressing LOAD.  
All the boards on the loom can be upgraded by simply opening one file (extension \*.ALL) on the console (software release PACK1.0 onwards).  
On completing the board programming, you need to switch the control box off and back on again.  
There's no need to save any parameters to the Memory Card.

## EMC board (TAB B-3-9)

### Replacing instructions:

Check that the control box is off.

Open the front panel on the box containing the EMC2 board to be replaced (table B-N°3 - table B-N°9).

If EMC2.1 (table B-N°3) remove the connectors J04A, J04B, J01, J02, J03 from the board.

If EMC2.2 (table B-N°9) remove the connectors J04A, J01, J02, J03 from the board.

Remove the fastening screws on the EMC2 board to be replaced.

Remove the board from the control box.

Insert the new EMC2 board and fix to the control box.

Connect the connectors removed previously from the EMC2 board (table B-N°3 - table B-N°9).

Close the front panel on the control box.

## MHD board(TAB C-1)

### Replacing instructions:

Check that the control box is off.

Open the rear panel on the box containing the MHD board to be replaced (table B-N°1).

Remove all the connectors J01 - J02 -J03 - J05 -J25 -J24 from the board.

Remove the board fastening screws.

Remove the board from the control box.

Remove all the MHP boards above the MHD board.

Take the new MHD board and place the MHP boards in the slots on this, taking care to respect the positions.

Fix the board to the control box.

Connect the connectors removed previously from the board.

Close the rear control box door.

Switch the control box on.

If the board in the control box is not programmed, load the SW from Memory Card (4 Mb).

Go to the Memory Card page, select the file (with \*.MHD extension) and run by pressing LOAD.

All the boards on the loom can be upgraded by simply opening one file (extension \*.ALL) on the console (software release PACK1.0 onwards).

On completing the board programming, you need to switch the control box off and back on again.

There's no need to save any parameters to the Memory Card.

## MHP board (TAB C-1 on MHD board)

### Replacing instructions:

Check that the control box is off.

Open the rear panel on the box containing the MHP board to be replaced (table B-N°1).

Remove the support for the MHP boards from the MHD board.

Remove the board from the slot in the MHD board.

Take the new MHP board and position in the slot in the MHD.

Fix the support removed previously.

Close the rear control box door.

Switch the control box on.

After you switch the MHP module on, the MHP module you've just added will be updated

automatically by the MHD board. "MHP module upgrade in progress" appears on the Console.

## RIO board (TAB E-4)

### Replacing instructions:

Check that the control box is off.

Remove the safety cover from the let-off box containing the RIO board to be replaced (table E-N°4).

Remove the RIO board fastening screws.

Remove all the connectors on the board.

Replace the board taking note of the SET-UP SWITCHES that determine the loom type.

Fix the board to the box.

Connect all the connectors.

Mount the cover on the let-off box.

Switch the control box on.

If the board in the control box is not programmed, load the SW from Memory Card (4 Mb).

Go to the Memory Card page, select the file (with \*.RIO extension) and run by pressing LOAD.

All the boards on the loom can be upgraded by simply opening one file (extension \*.ALL) on the console (software release PACK1.0 onwards).

On completing the board programming, you need to switch the control box off and back on again.

There's no need to save any parameters to the Memory Card.

## SFC board (TAB C-4)

### Replacing instructions:

Check that the control box is off.

Open the rear panel on the box containing the SFC board to be replaced (table C-N°4).

Remove the connectors from the SPH board (table C-N°3) mounted at the top of the SFC board.

Remove the SPH board from the SFC board.

Remove all the connectors on the SFC board.

Remove the SFC board fastening screws.

Fix the SPH board on the new SFC board.

Fix the new SFC board in the control box.

Connect all the SPH board connectors.

Connect all the SFC board connectors.

Switch the control box on.

If the board in the control box is not programmed, load the SW from Memory Card (4 Mb).

Go to the Memory Card page, select the file (with \*.SFC extension) and run by pressing LOAD.

All the boards on the loom can be upgraded by simply opening one file (extension \*.ALL) on the console (software release PACK1.0 onwards).

On completing the board programming, you need to switch the control box off and back on again.

There's no need to save any parameters to the Memory Card.

## SPH board (TAB C-3)

### Replacing instructions:

- Check that the control box is off.
- Open the rear panel on the box containing the SPH board to be replaced (table C-N°3).
- Remove the connectors J01 - J02 - J03 from the SPH board fitted at the top of the SFC board (table C-N°4).
- Remove the SPH board fastening screws.
- Remove the SPH board from the SFC board.
- Fit the new SPH board on the SFC board.
- Connect the connectors J01 - J02 - J03 to the SPH board.

## Eutron drive(TAB E-1)

### Replacing instructions:

- Check that the control box is off
- if the take-up drive, remember to make a note of the piece data (metres done and beam diameter) before the replacing.
- Remove the connectors from the Eutron drive.
- Loosen the two fastening screws.
- Extract the drive.
- Insert the new drive.
- Connect the drive connectors (table E-N°1 table E-N°2).
- Set configuration switches as they were on the drive you've just replaced. All the possible configurations are listed below.
- Switch the control box on.
- Insert the parameters you recorded previously.

P.S.

We assume that the drives already contain a software (installed by PROMATECH), preferably the same as that on the replaced board.

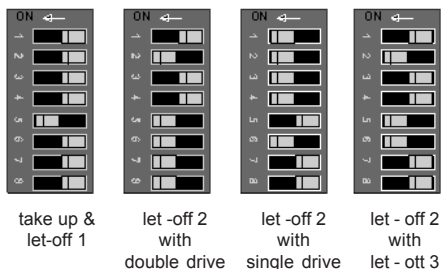
The following error messages appear if you install a drive without software:

1037, 1038, 1039, 1040 communication problems with ...

In which case, press the button "?" to view all the SW versions on the loom; if "0.000" appears next to the device in alarm mode, this means that the board hasn't been programmed.

For info on the latest software versions: contact Promatech Customer Service.

### EUTRON drive setting



## HD drive(TAB B-7)

### Replacing instructions:

Check that the control box is off.

Open the front panel on the box containing the Hi-Drive device (table B-N°7).

Open fuse holder FU08 (table B-N°20), thus cutting the power supply to the drive.

Remove the safety cover above the Hi-Drive device.

Remove the wires in cable WCP307 (coming from FU08) from the "LINE" terminal board on the drive.

Remove the wires in cable WLP301 (running to the motor) from the "MOTOR" terminal board on the drive.

Remove connectors J18-J20-J12 on the logic board in the Hi-Drive device.

Remove the screws fixing the drive to the control box (4 inside the box and 1 on the dissipator at the rear of the control box).

Remove the faulty drive.

Position the new drive.

Fix the drive with the screws you removed previously.

Re-do connections J18-J20-J12 on the drive logic board.

Connect all the wires on the power cables WCP307 to "LINE" terminal board.

Connect all the wires on the WLP301 power cables to "MOTOR" terminal board.

Fix the safety cover on the drive.

Close the fuse holder FU08 (table B-N°20).

Close the control box.

Switch the control box on.

There's no need to save any parameters to the Memory Card.

## Positive cutter drive(TAB B-5)

### Replacing instructions:

Check that the control box is off.

Open the front panel on the box containing the positive cutter drive (table B-N°5).

Open the fuse holder FU05 (table B-N°23) used to cut the drive power supply.

Remove connectors ENC-A, ENC-B, MOT.ENC and J01 from the positive cutter drive U01.

Remove the power cable WCP312 connection wires from the drive "POWER IN" terminal board coming from transformer T05.

Remove the power cable WCP313 connection wires from the drive "POWER OUT" terminal board, going to the positive cutter motor (RESPECT THE PHASE ORDER).

Losen the screws fixing the drive to the control box.

Remove the faulty drive.

Insert the new cutter drive.

Fix the drive to the control box.

Re-do the power cable WCP312 connections to the drive "POWER IN" terminal board.

Re-do the power cable WCP313 connections to the drive "POWER OUT" terminal board (RESPECT THE PHASE ORDER).

Insert the connectors ENC-A, ENC-B, MOT.ENC, J01 on the positive cutter drive U01.

Close the fuse holder FU05 (table B-N°5).

Open the front panel on the control box.

Switch the control box on.

If the cutter drive is not programmed, you need to install the SW using a program (boot164) also used to program the ELSY drives.

There's no need to save any parameters to the Memory Card.

## Trafo (TAV D-8-9-10-11)

### Replacing instructions:

Check that the control box is off.  
Open the front panel on the control box.  
Open the fuse holder FU03 (table B-N°24) if replacing T01 (table D-N°11).  
Open the fuse holder FU07 (table B-N°21) if replacing T11 (for power rating other than 380-400 V AC).  
Open the fuse holder FU05 (table B-N°23) if replacing T05 (table D-N°10).  
Open the fuse holder FA01 (table B-N°18) if replacing T03 (table D-N°9).  
Release magnetothermal switch QF02 (table C-N°17) if replacing T04 (table D-N°8).  
Disconnect all the wires entering the transformer.  
Loosen the screws fixing the transformer.  
Remove the faulty transformer and insert the new one.  
Fix the new transformer.  
If the transformer is fitted with fuses, make sure that these are all present in the fuse holders (see the LED and FUSES section to check the rating of the fuses).  
Connect all the wires removed previously from the transformer.  
Close the fuse holder (FU03, FU05, FU07 or FA01) you opened previously.  
Fasten the magnetothermal QF02.  
Switch the control box on.  
There's no need to save any parameters to the Memory Card.

## Contactors

### Replacing instructions:

Check that the control box is off.  
Open the front panel on the control box containing the remote switch to be replaced.  
Disconnect all the wires connected to the remote switch.  
Remove the remote switch from the control box.  
Insert the new remote switch in the control box.  
Connect all the wires connected previously **MAKING SURE YOU RESPECT THE ORDER** of the wires (the connected motor could turn in the wrong direction).  
If the remote switch is fitted with an auxiliary contact unit:  
Leave the block wires connected and disconnect the unit itself from the remote switch you want to replace.  
Restore the remote switch connections and then secure the auxiliary contact unit.

## loom configuration

### LOOM CONFIGURATION instructions:

The loom setup procedure is required during loom start-up or after replacing a MLC board without the aid of a Memory Card to save the back up (complete data saving).  
When you carry out this procedure you change the loom parameters. These may be:  
Loom type (Alpha, Leonardo)  
Device installed (Hi-drive, leno device/IES, shedding machine, VRT, positive cutter etc.)  
Loom width  
Mechanical ratios  
Procedure:  
Switch the control box on.  
Go to the **LOOM CONFIGURATION** page:  
Enter the following codes in each field:  
Loom serial number:357282111

Loom number:39

Switch the control box off.

Switch the control box on again.

The page that appears when you switch the control box on lets you change the set parameters.

On completion of the loom setup, confirm by pressing the OK button (at the bottom of the display).

Switch the control box off and then back on again.

There's no need to save any parameters to the Memory Card.

## Reset MLC board (TAB B-11)

### DELETE MLC MEMORY instructions:

The procedure that lets you clear the memory is only used in special cases, e.g.:

- SW upgrading, when you don't have a Memory Card to load the backup.

- When there are abnormal alarms.

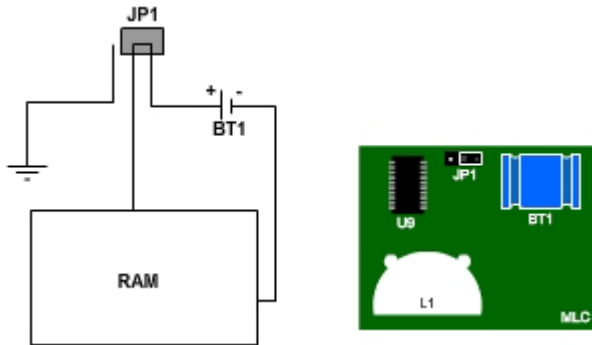
To reset the memory of the MLC board (table B-N°11), you need to:

Switch the control box off.

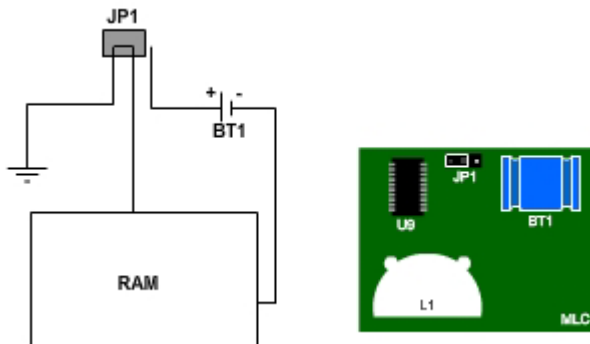
Move jumper JP1 as shown in the figure below and leave it in the "clear memory" position for 3 minutes (click on JP1 to see the 2 modes).

Return the JP1 to "normal mode".

Switch the control box on.



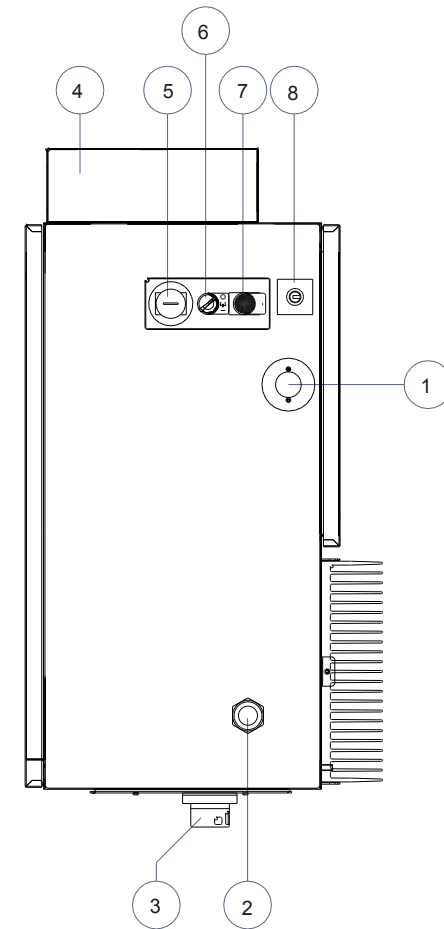
picture 1 "normal"



picture 2 "delete memory"

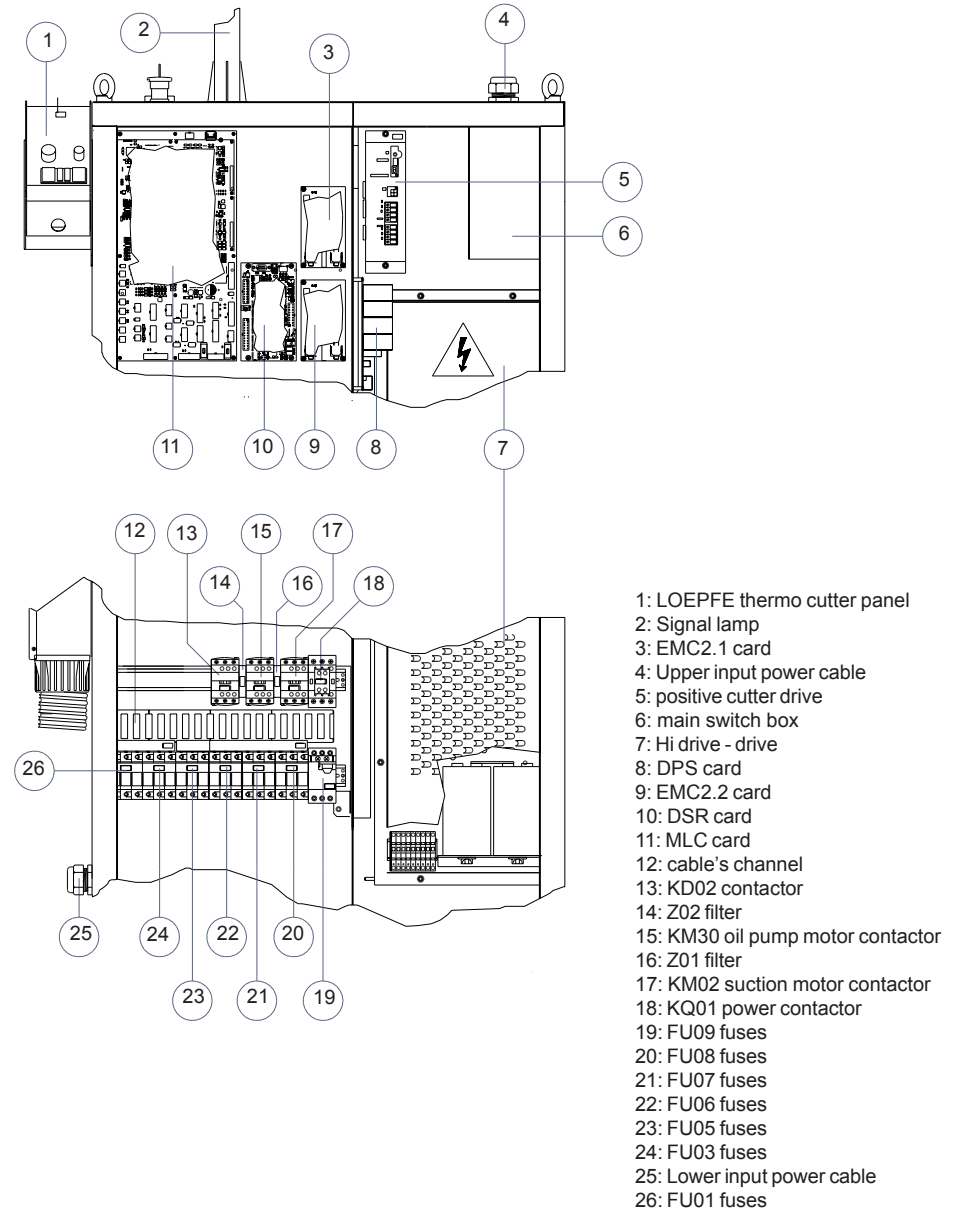
## TAB. A

Main box upper view

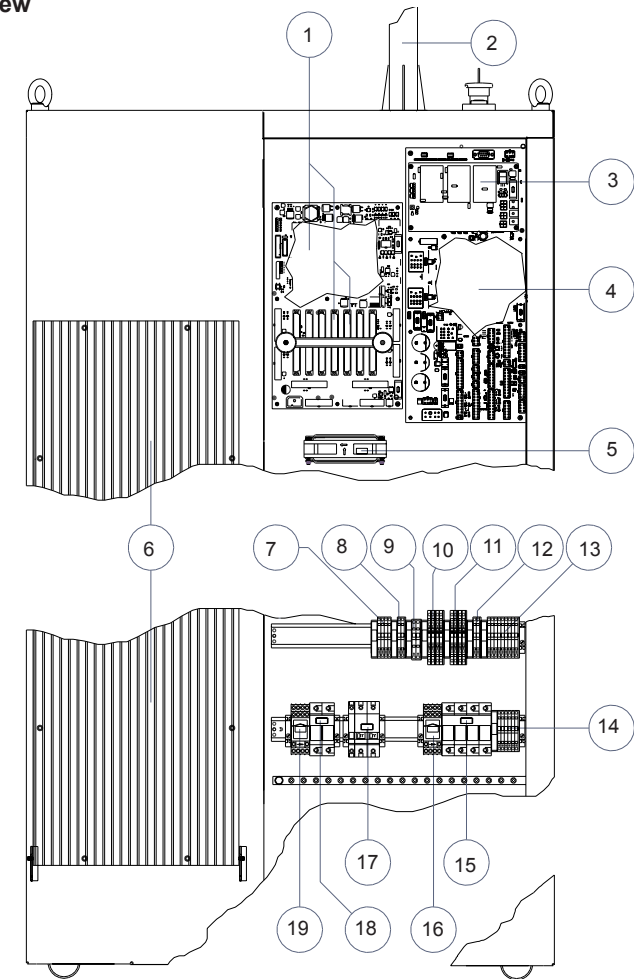


- 1: Hole for signal lamp (only for dobby looms).
- 2: Input power cable from upper side.
- 3: Main switch control lever.
- 4: LOEPFE thermo cutter panel.
- 5: S01 emergency push-button.
- 6: S03 Suction motor enabling (only for powered motor).
- 7: H01 green light (power activation) KQ01(power ON).
- 8: Temperature selector for PROMATECH thermo cutter.

**TAB. B**  
Main box front view



**TAB. C**  
Main box back view

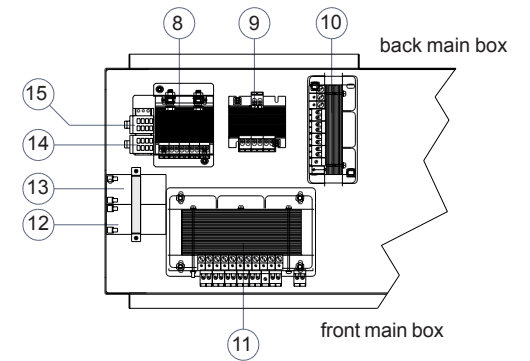
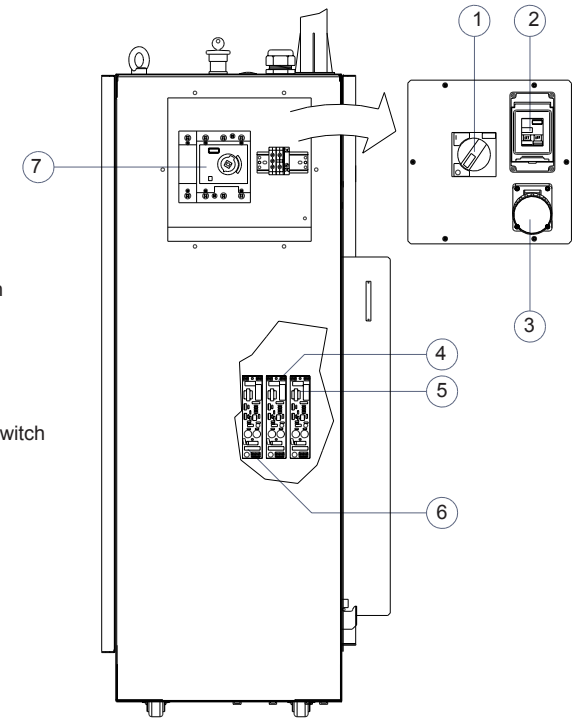


- |                             |                                  |
|-----------------------------|----------------------------------|
| 1: MHD card with MHP cards  | 11: X24DC clamps                 |
| 2: Hole for signal lamp     | 12: XM02 clamps                  |
| 3: SPH card                 | 13: XM01 clamps                  |
| 4: SFC card                 | 14: XA04 clamps                  |
| 5: cooling fan for MHD card | 15: FA02 fuses                   |
| 6: HD drive waster          | 16: KA03 relay                   |
| 7: XA05 clamps              | 17: QF02 magnetic thermal switch |
| 8: XA02 clamps              | 18: FA01 fuses                   |
| 9: XA01 clamps              | 19: KA01 relay                   |
| 10: X24AC clamps            |                                  |

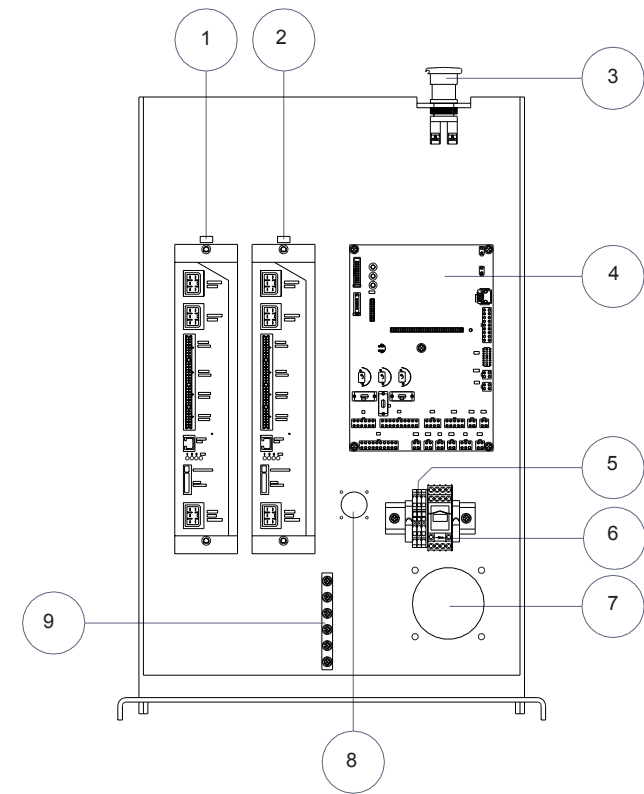
## TAB. D

### Main box lateral and bottom view

- 1: Main switch control lever.
- 2: QS02 magnetothermal switch socket 220V
- 3: socket 220V
- 4: A02 card
- 5: A03 card
- 6: A01 card
- 7: QS01 Main magnetothermal switch
- 8: T04 transformer
- 9: T03 transformer
- 10: T05 transformer
- 11: T01 transformer
- 12: GB1 battery
- 13: GB2 battery
- 14: KT01 relay
- 15: KT02 relay

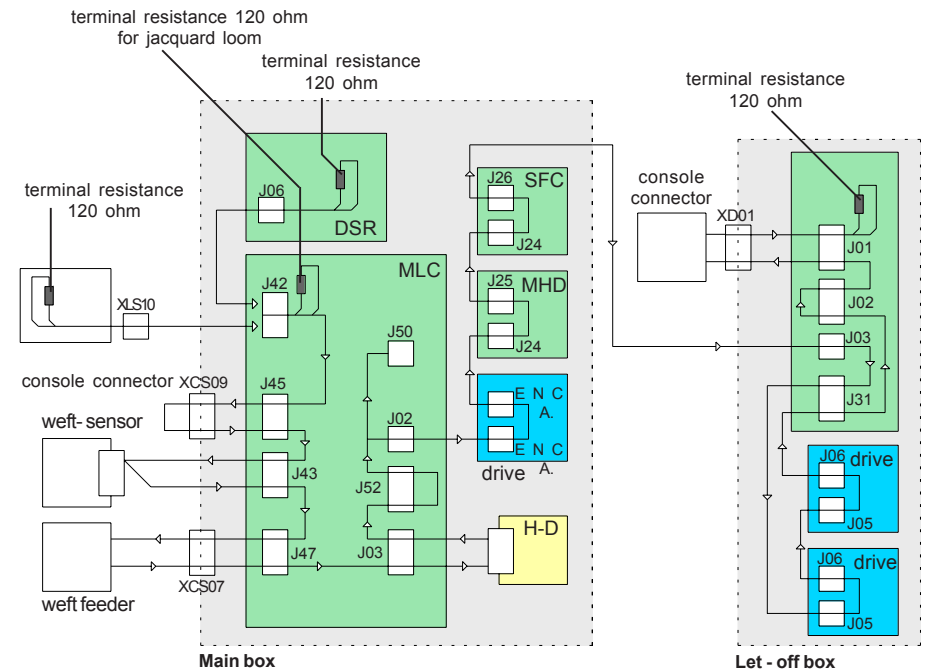


**TAB. E**  
let-off box



- 1: EWC2-EWC3 drive
- 2: ETD-EWC1 drive
- 3: S10 emergency push-button
- 4: RIO card
- 5: XD01 clamp
- 6: KEV relay
- 7: cables input hole
- 8: XDS01 connection for console
- 9: Earth bar

**TAB. I**  
**CAN-BUS circuit**



**Can-bus check procedure**

Switch off the main box.

Disconnect cable WCS386 of connector J26 of card SFC and insert the multimeter's metal tips, (Ohm) in pin 8 and 9 (white and brown wires). The resistance value must be 120 Ohm +/-10%, and this mean that the can-bus circuit in the right side of loom is correctly connected.

If the resistance value is so much different from 120 Ohm check all the connetion in right side (RIO card, motor drive 1, motor drive 2, XD01 console connection).

Disconnect cable WC343 of connector J24 of card SFC and insert the multimeter's metal tips, (Ohm) in pin 14 and 15 (white and brown wires). The resistance value must be 120 Ohm +/-10%, and this mean that the can-bus circuit in the left side of loom is correctly connected.

If the resistance value is so much different from 120 Ohm check all the connetion in left side (MLC card , MHD card, DSR card, HD drive, positive cutter drive).