Fuse Replacement
Contents

1. Preface .............................................................................................................................................................................. 3

2. Change record .................................................................................................................................................................. 4

3. Fuse Replacement ........................................................................................................................................................... 5
   3.1 MPU fuses ................................................................................................................................................................. 5
   3.2 X1 fuses ................................................................................................................................................................. 6
   3.3 X2 fuses ................................................................................................................................................................. 7
   3.4 Y/Z fuses ............................................................................................................................................................... 8
   3.5 Tool Rotation/Reciprocating knife fuses .................................................................................................................. 9
   3.6 Chiller fuse ............................................................................................................................................................. 9
   3.7 Heater for Chiller Fuse .............................................................................................................................................. 11
1. Preface

Fuse Replacement Manual
for
Kongsberg XN

Note: We remind you that only the Esko Staff, or persons having received appropriate training, are allowed to handle, manipulate or do repairs on the system.

Note: Information about fuse replacement is available also from the User Manual for XN.

©Copyright 2014, Esko-Graphics Kongsberg AS, Norway
All Rights Reserved.

This copyright does not indicate that this work has been published.

This material, information and instructions for use contained herein are the property of Esko-Graphics Kongsberg AS. There are no warranties granted or extended by this document.

Furthermore, Esko-Graphics Kongsberg AS does not warrant, guarantee or make any representations regarding the use, or the results of the use of the system or the information contained herein.

Esko-Graphics Kongsberg AS shall not be liable for any direct, indirect, consequential or incidental damages arising out of the use or inability to use the system or the information contained herein.

The information contained herein is subject to change without notice. Revisions may be issued from time to time to advise of such changes and/or additions.

No part of this system may be reproduced, stored in a data base or retrieval system, or published, in any form or in any way, electronically, mechanically, by print, photoprint, microfilm or any other means without prior written permission from Esko-Graphics Kongsberg AS.

This document supersedes all previous dated versions.

Correspondence regarding this publication should be forwarded to:

Global support
Esko-Graphics Kongsberg AS

Document no: D3350

Esko-Graphics Kongsberg AS
www.esko.com
P.O.Box 1016, N-3601 Kongsberg, Norway
Tel: +47 32 28 99 00 Fax: +47 32 28 85 15 / 32 28 67 63
## 2. Change record

<table>
<thead>
<tr>
<th>Date</th>
<th>By</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>29-11-2013</td>
<td>jhbe</td>
<td>Version 1</td>
</tr>
</tbody>
</table>
3. Fuse Replacement

Before starting the Fuse Replacement procedure:

- Switch Power Off using the Main Power Switch
- Remove the Main Power plug from the wall socket

Note: Some of the equipment described here is optional.

3.1 MPU fuses

Note: MPU location is model dependent.

All fuses are located on the rear side of the Main Power Unit (MPU).
Procedure

1. Remove frame cover in front of MPU
2. Remove the metal shield covering F1/F2, F24/F48.
3. Remove one fuse, check with ohm – meter. If blown, replace with a new, identical fuse.
4. Repeat for each fuse.
5. Replace base cover.
6. Insert main power cable into the wall socket and turn main power ON

Fuse Details

<table>
<thead>
<tr>
<th>Fuse location</th>
<th>115V</th>
<th>230V</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 and F2, line fuses</td>
<td>T 10A 250V (5x20 mm)</td>
<td>T 5A 250V (5x20 mm)</td>
</tr>
<tr>
<td>F24, +24V fuse</td>
<td>T 6,3A 250V (5x20 mm)</td>
<td>T 6,3A 250V (5x20 mm)</td>
</tr>
<tr>
<td>F48, 48V Servo power fuse</td>
<td>T 15A 250V (5x20 mm)</td>
<td>T 15A 250V (5x20 mm)</td>
</tr>
</tbody>
</table>

3.2 X1 fuses

X1 Amplifier Location

Fuse Location

1 – SCU unit
2 – 6/12A amplifier X1
**Procedure**

1. Remove X1 cover.
2. Check the X1 fuse with ohm-meter. If blown, replace with a new, identical fuse.
3. Replace covers.
4. Insert main power cable into the wall socket and turn main power ON.

**Fuse Details**

T 8A 250V 1 1/4 x 1/4 in. (6.3 x 32 mm)

---

### 3.3 X2 fuses

**X2 Amplifier Location**

![Diagram of X2 Amplifier Location]

**Fuse Location**

1 – 6/12A amplifier X2.

**Procedure**

1. Remove X2 cover.
2. Check the X2 fuse with ohm-meter. If blown, replace with a new, identical fuse.
3. Replace covers.
4. Insert main power cable into the wall socket and turn main power ON.

**Fuse Details**
T 8A 250V 1 1/4 x 1/4 in. (6,3 x 32 mm)

3.4 Y/Z fuses

**Y Amplifier Location**

**Fuse Location**

1 – Y-amplifier unit
2 – TCU
3 – Z-axis motor

**Procedure**
1. Remove Y cover.
2. Check the Y and Z fuse with ohm-meter. If blown, replace with a new, identical fuse.
3. Replace covers.
4. Insert main power cable into the wall socket and turn main power ON.
Fuse Details

<table>
<thead>
<tr>
<th>Letter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y:</td>
<td>T 8A 250V 1 1/4 x 1/4 in. (6.3 x 32 mm)</td>
</tr>
<tr>
<td>Z:</td>
<td>T 4A 250V 1 1/4 x 1/4 in. (6.3 x 32 mm)</td>
</tr>
</tbody>
</table>

3.5 Tool Rotation/Reciprocating knife fuses

Fuse Location

![Fuse Location Image]

Procedure
1. Fuses are available from beneath the Toolhead cover.
2. Remove fuse F9 or F10 and check with ohm-meter. If blown, replace with a new identical fuse.
3. Insert main power cable into the wall socket and turn main power ON.

Fuse Details

<table>
<thead>
<tr>
<th>Fuse</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>F9:</td>
<td>T 2A 250V 1 1/4 x 1/4 in (6.3 x 32 mm)</td>
</tr>
<tr>
<td>F10:</td>
<td>T 2A 250V 1 1/4 x 1/4 in (6.3 x 32 mm)</td>
</tr>
</tbody>
</table>

3.6 Chiller fuse
Remove the on/off button

Remove cover (4 screws)

Fuse location

Pull out the fuse holder

Turn the fuse holder 90 deg.

Now you have easy access to the fuse.

1 - Spare fuse

2 - Fuse in action

Fuse: T 1A 250V (5x20 mm)
3.7 Heater for Chiller Fuse

Heater Fuse Location

The Fuse is available inside the connector cover.

Fuse details

F - 4A 250V T 5x20mm Slow Blow (42448944)