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1 SAFETY INSTRUCTIONS

1.1 INTRODUCTION

⚠ Important ⚠

BE SURE TO READ THE TERMS IN THE NEXT CHAPTER THOROUGHLY BEFORE INSTALLING AND OPERATING THE SYSTEM FOR YOUR OWN SAFETY.

All safety related terms are bundled and categorized in three types.

<table>
<thead>
<tr>
<th>Safety terms</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚠ Important ⚠</td>
<td>Must be followed carefully to avoid death or serious bodily injury</td>
</tr>
<tr>
<td>⚠ Caution ⚠</td>
<td>Must be observed to avoid bodily injury (moderate or light) or damage to your equipment</td>
</tr>
<tr>
<td>⚠ Notes ⚠</td>
<td>Contains important information and useful tips on the operation of your printer</td>
</tr>
</tbody>
</table>

1.2 IMPORTANT SAFETY INSTRUCTIONS

General safety instructions that must be observed to use the equipment safely are explained below.

- Do not stand on or place heavy objects on the unit. Doing so may result in the unit tipping or falling over and causing injury.
- Do not attempt to plug in electrical plugs with wet hands. Doing so may result in electrical shock.
- Do not use thinner, benzene, alcohol or other active agents. Doing so may result in damage or paint peeling from the casing.
- Be careful not to spill water inside the winder. Doing so may result in a short-circuit.
- Never open the covers fixed with screws. Doing so may result in electrical shock or a malfunctioning in the unit.
- When setting roll media, place it on top of a desk or other flat surface.
1.3 OPERATION LABELS

The operation labels mentioned below are attached to areas to which attention should be paid.

⚠️ Notes ⚠️

- Make sure that all labels can be recognized. If text or illustrations are invisible, clean the label.
- When cleaning labels, use a cloth with water or neutral detergent. Do not use a solvent or gasoline.
- If an operation label has been damaged, lost or cannot be recognized, replace the label.

- Foot switch label
- Roll unit handle label
- Front tensioning label
- Rear tensioning label
- PCB box label
1.4 WEEE REGULATIONS

WEEE regulations
Environmental information
Disposal of your old product

Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.

When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.

Please inform yourself about the local separate collection system for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.
This page is intentionally left blank.
# 2 PRODUCT OVERVIEW

## 2.1 PART NAMES AND FUNCTIONS

### 2.1.1 Front / Winder (*)

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Front tensioning system</td>
<td>Adjust the tension between the print platform and the winding system.</td>
</tr>
<tr>
<td>2</td>
<td>Operation panel</td>
<td>To control the unwinder winder 100 manually or automatically</td>
</tr>
<tr>
<td>3</td>
<td>PCB Box</td>
<td>Contains the boards to control the UW/W 100</td>
</tr>
<tr>
<td>4</td>
<td>Motorized roll unit</td>
<td>Supports and winds up the roll media.</td>
</tr>
<tr>
<td>5</td>
<td>Roll unit bar</td>
<td>Supports the roll units.</td>
</tr>
<tr>
<td>6</td>
<td>Roll unit</td>
<td>Supports the roll media.</td>
</tr>
</tbody>
</table>

On the picture above, the winding system is installed on a Spitfire 65. The position of some parts shall be different when installing the winding system on a Spitfire 90”, Rockhopper 3, Viper or a ValueJet 1604.

### 2.1.2 Rear / Unwinder (*)

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rear tensioning system</td>
<td>Adjust the tension between the print platform and the unwinding system.</td>
</tr>
<tr>
<td>2</td>
<td>Roll unit</td>
<td>Supports the roll media.</td>
</tr>
<tr>
<td>3</td>
<td>Motorized roll unit</td>
<td>Supports and unwinds the roll media.</td>
</tr>
<tr>
<td>4</td>
<td>Roll unit bar</td>
<td>Supports the roll units.</td>
</tr>
</tbody>
</table>

* On the picture above, the winding system is installed on a Spitfire 65. The position of some parts shall be different when installing the winding system on a Spitfire 90”, Rockhopper 3, Viper or a ValueJet 1604.
### 2.1.3 Operation Panel

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>/</td>
<td>Part of the operation panel controlling the unwinder 100.</td>
</tr>
<tr>
<td>B</td>
<td>/</td>
<td>Part of the operation panel controlling the winder 100.</td>
</tr>
<tr>
<td>1</td>
<td>Print Side Selector</td>
<td>In case you loaded media with printed side on the outside select ‘OUT’, otherwise select ‘IN’.</td>
</tr>
<tr>
<td>2</td>
<td>Unwinder 100 switch</td>
<td>Toggle between Manual (“0”) and Automatic (“1”) mode.</td>
</tr>
<tr>
<td>3</td>
<td>Unwinder 100 LED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manual</td>
<td>LED lights up when pushing one of the buttons</td>
</tr>
<tr>
<td></td>
<td>Automatic</td>
<td>Motor turns: LED flashes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Motor is off: LED is out.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Motor accelerates: LED burns continuously.</td>
</tr>
<tr>
<td>4</td>
<td>Backwards button</td>
<td>Roll-off unwinder</td>
</tr>
<tr>
<td>5</td>
<td>Forwards button</td>
<td>Roll-up unwinder</td>
</tr>
<tr>
<td>6</td>
<td>Winder 100 switch</td>
<td>Toggle between Manual (“0”) and Automatic (“1”) mode.</td>
</tr>
<tr>
<td>7</td>
<td>Winder 100 LED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manual</td>
<td>LED lights up when pushing one of the buttons</td>
</tr>
<tr>
<td></td>
<td>Automatic</td>
<td>Motor turns: LED flashes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Motor is off: LED is out.</td>
</tr>
<tr>
<td>8</td>
<td>Backwards button</td>
<td>Roll-off winder</td>
</tr>
<tr>
<td>9</td>
<td>Forwards button</td>
<td>Roll-up winder</td>
</tr>
<tr>
<td>10</td>
<td>Power LED</td>
<td>Lightens up if the system is powered ON.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Outside printing</th>
<th>Inside printing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backwards button</td>
<td>Roll-off unwinder</td>
<td>Roll-up unwinder</td>
</tr>
<tr>
<td>Forwards button</td>
<td>Roll-up unwinder</td>
<td>Roll-off unwinder</td>
</tr>
<tr>
<td>Winder 100 switch</td>
<td>Toggle between Manual (“0”) and Automatic (“1”) mode.</td>
<td></td>
</tr>
</tbody>
</table>
2.2 VERIFYING THE PACKAGED ITEMS

Inspect the unit for damage and check that all necessary parts are present.

⚠️ Notes ⚠️
- The parts which are not described are buffers to hold the parts in their position and to protect them.

2.2.1 For Rockhopper 3, Spitfire and Viper.

2.2.1.1 Packaging box

<table>
<thead>
<tr>
<th>No</th>
<th>Part Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Box 1: Bracket arms</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Left bracket</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Keyboard bracket</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Box 2 : PCB box</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Box 3 : Winder kit †</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Roll unit bar</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Rear tensioning bar</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Front tensioning bar</td>
<td>1</td>
</tr>
</tbody>
</table>

† Please refer to the next page for the contents of this box
### 2.2.1.2 Winder kit

<table>
<thead>
<tr>
<th>No</th>
<th>Part Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PET adjusting strip</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Hexagon key 2.5 mm</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Hexagon key 3 mm</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Hexagon key 4 mm</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Hexagon key 5 mm</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Hexagon key 6 mm</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Philips screwdriver p2</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Spacer</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>Foot switch</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Motor twist cable</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Adjustment plate</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>D-lock shafts</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>Keyboard cable</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Screw set</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>Screw M4x10</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>Screw M3x5</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>Screw M5x8</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>Screw M6x16</td>
<td>16</td>
</tr>
<tr>
<td>19</td>
<td>Washer M5</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>Spring washer M6</td>
<td>16</td>
</tr>
<tr>
<td>21</td>
<td>Washer M6</td>
<td>16</td>
</tr>
<tr>
<td>22</td>
<td>Lock washer M6</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>User's Guide</td>
<td>1</td>
</tr>
</tbody>
</table>
2.2.2 For ValueJet 1604 series.

2.2.2.1 Packaging box

<table>
<thead>
<tr>
<th>No</th>
<th>Part Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Box 1: Bracket arms</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Left bracket</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Keyboard bracket</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Box 2 : PCB box</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Box 3 : Winder kit ‡</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Roll unit bar</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Rear tensioning bar</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Front tensioning bar</td>
<td>1</td>
</tr>
</tbody>
</table>

‡ Please refer to the next page for the contents of this box
### 2.2.2.2 Winder kit

<table>
<thead>
<tr>
<th>No</th>
<th>Part Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PET adjusting strip</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Hexagon key 2.5 mm</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Hexagon key 3 mm</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Hexagon key 4 mm</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Hexagon key 5 mm</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Hexagon key 6 mm</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Philips screwdriver p2</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Spacer</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>Foot switch</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Motor twist cable</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Adjustment plate</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Lock shafts</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>Keyboard cable</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Power cable (EU + UK)</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>Screw set</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>Screw M4x10</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>Screw M3x5</td>
<td>4</td>
</tr>
<tr>
<td>18</td>
<td>Screw M5x8</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>Screw M6x16</td>
<td>8</td>
</tr>
<tr>
<td>20</td>
<td>Self locking screws M6x16</td>
<td>8</td>
</tr>
<tr>
<td>21</td>
<td>Synthetic Washer M5</td>
<td>4</td>
</tr>
<tr>
<td>22</td>
<td>Spring washer M6</td>
<td>8</td>
</tr>
<tr>
<td>23</td>
<td>Washer M6</td>
<td>8</td>
</tr>
<tr>
<td>24</td>
<td>Lock washer M6</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>User’s Guide</td>
<td>1</td>
</tr>
</tbody>
</table>
3 INSTALLING THE UNIT

3.1 GENERAL SEQUENCE

UNPACK ALL ITEMS
▼
MOUNT THE ROLL UNIT BARS
▼
MOUNT THE BRACKETS FOR THE TENSIONING BARS
▼
INSTALL THE TENSIONING BARS
▼
CALIBRATE THE UNWINDER / WINDER 100
▼
ADJUST THE WEIGHT SUPPORTS UNDER THE ROLL UNIT BARS
3.2 INSTALL ALL PARTS

3.2.1 Mounting the roll unit bars

Parts and Tools needed

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Quantity needed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RH3 – SPFR</td>
</tr>
<tr>
<td>1</td>
<td>Roll unit bar</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Hexagon bolt M6x16</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Plain washer M6</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Tooth lock washer M6</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Hexagon wrench 5 mm</td>
<td>1</td>
</tr>
</tbody>
</table>

Procedure

Step 1: Position the roll unit bars (1) on the printer stand as shown on the image below.
Step 2: Mount the left side of the bars with the mounting supports to the printer’s stand as indicated on the image below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Plain washer M6</td>
</tr>
<tr>
<td>2</td>
<td>Tooth lock washer M6</td>
</tr>
<tr>
<td>3</td>
<td>Hexagon bolt M6x12</td>
</tr>
</tbody>
</table>

Step 3: Check the gap (s) between the adjustable mounting support (1) on the right hand side and the printer stand and perform the correct action. This has to be done for both roll unit bars. See below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adjustable mounting support</td>
</tr>
<tr>
<td>2</td>
<td>Left mounting support</td>
</tr>
<tr>
<td>3</td>
<td>Gap between support and printer foot</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IF ...</th>
<th>THEN ...</th>
</tr>
</thead>
</table>
| s = 1 or s > 1 mm | • loosen the 4 screws holding the support on the roll unit bar,  
|                | • slide the support against the right side of the printer’s stand,  
|                | • mount the support to the printer’s stand and fix the 4 screws holding the support on the roll unit bar. |
| s < 1 mm    | • mount the support to the printer’s stand without adjusting. |
3.2.2 Mounting the brackets for the tensioning bars

3.2.2.1 On a Spitfire, Rockhopper 3 and Viper

Parts and Tools needed

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Right bracket</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Left bracket</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Hexagon bolt M6x16</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Plain washer M6</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Spring washer M6</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Tooth lock washer M6</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Hexagon wrench 5 mm</td>
<td>1</td>
</tr>
</tbody>
</table>

Instructions

**Step 1:** Mount the left and right bracket to the bottom of the X-rail.

Note that the positioning of the left and right bracket is different depending on the size of the machine.

**Step 2:** Fix the screws of the right bracket.

On the Left Bracket, install 4 screws on the right side and 2 screws on the left side in the center. Do NOT fix the screws of the left (adjustable) bracket yet.
3.2.2.2 On a ValueJet 1604

**Parts and Tools needed**

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Right bracket</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Left bracket</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Self locking bolt M6x16</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Tooth lock washer M6</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Hexagon wrench 5 mm</td>
<td>1</td>
</tr>
</tbody>
</table>

**Instructions**

⚠️ **Notes** ⚠️

Before installing the winding system on a ValueJet, it is recommended to loosen screws fixing the printer from its stand and push it to the rear and tighten the bolts again. This to be sure that the machine is well positioned.

**Step 1:** Screw the self locking bolts half way in.

**Step 2:** Hook the left and right bracket over the four screws and pull.

**Step 3:** Tighten the bolts of the right bracket.
3.2.3 **Installing the tensioning bars**

## Parts and Tools needed

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>RH3 &amp; SPFR</th>
<th>ValueJet 1604</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Front tensioning bar</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Rear tensioning bar</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>D-lock type shaft</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Pivot shaft</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Pan head screw flat M4x10</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Philips screwdriver</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Hexagon wrench 5 mm</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

## Procedure

**Step 1:** Insert the two shafts (1) in the left (adjustable) bracket at the front and rear.

![Diagram showing front and rear of the tensioning bars](image)

⚠️ **Caution** ⚠️

Use care when lifting the tensioning bars to avoid bending the bars.

**Step 2:** Position the front tensioning bar (1) between the D-lock shafts of the left and right bracket in such a way that it fits the corresponding D hole in the plates (2) of the tensioning bars.

⚠️ **Notes** ⚠️

While installing the tensioning bar, push the adjustable shaft in the left bracket, to make insertion of the front tensioning bar possible.
Step 3: Fix the front and rear tensioning bar with 4 times an M4x10 screw.

⚠️ Caution ⚠️
Be sure to lock the front tensioning bar at both sides with 2 pan head screws. These screws have to be fixed before installing the front tensioning system!

⚠️ Caution ⚠️
Be sure to calibrate the complete system before using it. Please refer to the next chapter for this issue.

⚠️ Notes ⚠️
Install the remaining screws on the left bracket. Tighten all screws.
3.2.4 Mounting the PCB Box

Parts and Tools needed

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PCB Box</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Screw M5x8</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Washer M5</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Hexagon wrench 3 mm</td>
<td>1</td>
</tr>
</tbody>
</table>

Procedure

Step 1: Mount the two screws with each two spacers to the stand.

Step 2: Place the PCB Box (2) against the stand and slide it with the holes over the screws (1) and push it downwards until it is fixed.
3.2.5 **Connecting the cables.**

⚠️ *Caution* ⚠️

- Use a power cable that is suitable to the local power specifications when connecting the UW/W 100 to the power grid.
- If the kit is separately ordered from a printer as an optional item, then a power cable is included in the UW/W 100 kit.
- If the UW/W 100 kit has been delivered with a new printer as a standard in the box item, then the power cable is located in the printer's packaging box, not in UW/W 100 packaging box.

**Step 1:** Connect the power cable to the power supply connector.

![Power cable connection](image)

**Step 2:** Check if the all cables of the UW/W are connected to the correct connector (1 to 6). See image below for the location of the connectors.

<table>
<thead>
<tr>
<th>Nr</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power supply connector</td>
</tr>
<tr>
<td>2</td>
<td>Front motorized unit connector</td>
</tr>
<tr>
<td>3</td>
<td>Rear motorized unit connector</td>
</tr>
<tr>
<td>4</td>
<td>Foot switch connector</td>
</tr>
<tr>
<td>5</td>
<td>Not used</td>
</tr>
<tr>
<td>6</td>
<td>Operation panel connector</td>
</tr>
</tbody>
</table>

⚠️ *Notes* ⚠️

With a small intervention it is possible to reverse your winding direction.
Mount the Motor twist cable between the control box and the front motorized unit cable.

⚠️ *Notes* ⚠️

Check if the cable to the operation panel is connected properly on both sides.
3.3 CALIBRATING THE UW/W 100

3.3.1 Calibrating the rear tensioning system

Parts and Tools needed

<table>
<thead>
<tr>
<th>Included in kit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Description</td>
</tr>
<tr>
<td>1</td>
<td>Synthetic paper strip</td>
</tr>
<tr>
<td>2</td>
<td>Hexagon wrench 2.5 mm</td>
</tr>
<tr>
<td>3</td>
<td>Hexagon wrench 3 mm</td>
</tr>
<tr>
<td>4</td>
<td>Hexagon wrench 4 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOT included in kit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Description</td>
</tr>
<tr>
<td>1</td>
<td>Tape</td>
</tr>
<tr>
<td>2</td>
<td>Pencil</td>
</tr>
</tbody>
</table>

3.3.1.1 Checking the calibration

The procedure below describes the calibration check of the rear tensioning system. The method to check the front tensioning system is the same. However, the front and rear tensioning bars use different bars to complete the calibration.

Procedure :

**PART 1 : Preparing the synthetic paper strip**

**Step 1** : Put the pressure rollers in the up position.

**Step 2** : Go to the back of the machine.

**Step 3** : Create a loop with the synthetic paper strip around the upper bar of the rear tension system at the left side when standing at the back of the printer.
**Step 4:** Check if the edges of the loop are aligned on each other.

![Diagram showing the alignment of loop edges](image)

**Step 5:** Raise the pressure rollers. Slide the end of the strip (1) under the pressure rollers (4) and move it to position 1 as shown on the picture below. Lower the pressure rollers.

![Diagram of printer unit](image)

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Synthetic paper strip</td>
</tr>
<tr>
<td>2</td>
<td>Paper loop</td>
</tr>
<tr>
<td>3</td>
<td>Tensioning bars</td>
</tr>
<tr>
<td>4</td>
<td>Pressure rollers</td>
</tr>
</tbody>
</table>

**Step 6:** Go to the FRONT SIDE of the printer.

**Step 7:** Carefully pull the strip to create some tension.

⚠️ **Caution**
- Don’t pull too hard on the strip. This will loosen the tape, resulting in the fact that the loop becomes longer, leading to a bad calibration check.
- Make sure that you have an equal tension on the left and right of the strip.
PART 2: DRAWING THE CONTROL LINES

**Step 1:** Place the adjustment plate onto the strip and slide it against the pressure rollers.

**Step 2:** Draw a line on the strip.

**Step 3:** Slide the strip (1) to position 2 as indicated on the image below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Synthetic paper strip</td>
</tr>
<tr>
<td>2</td>
<td>Paper loop</td>
</tr>
<tr>
<td>3</td>
<td>Tensioning bars</td>
</tr>
<tr>
<td>4</td>
<td>Pressure rollers</td>
</tr>
</tbody>
</table>
Step 4: Carefully pull the strip to create some tension.

⚠️ Caution ⚠️
- Don’t pull too hard on the strip. This will loosen the tape, resulting in the fact that the loop becomes longer, leading to a bad calibration check.
- Make sure that you have an equal tension on the left and right of the strip.

Step 5: Place the adjustment plate onto the strip and slide it against the pressure rollers. See image below.

Step 6: Draw a line for the second time. The following two situations can be obtained.

- Line overlap each other ▶ well adjusted
- Line does NOT overlap each other ▶ perform the adjustment procedure as described in the next chapter
3.3.1.2 Adjusting the tensioning systems

Introduction

The present topic describes the adjustment of the REAR tensioning system. The procedure to adjust the front tensioning system is the same.

Procedure

Step 1: Standing at the REAR SIDE of the unit, remove the cover (1) of the adjustable bracket (3).

Tool: Hexagon wrench 2,5 mm

Step 2: Loosen (don’t remove) the 4 screws on the side of the adjustable bracket.

Tool: Hexagon wrench 4 mm

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cover</td>
</tr>
<tr>
<td>2</td>
<td>Screws</td>
</tr>
<tr>
<td>3</td>
<td>Adjustable bracket</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Screws</td>
</tr>
<tr>
<td>2</td>
<td>Adjustable bracket</td>
</tr>
</tbody>
</table>
**Step 3:** Use the 2 screws (1) in the tension bar bracket to adjust the tension system. Referencing the figures below Line 1 is drawn in Position 1 and Line 2 in drawn in Position 2.

*Tool:* Hexagon wrench 3 mm

<table>
<thead>
<tr>
<th>IF Line 2 lays…</th>
<th>THEN turn the adjustment screws as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEFORE line 1 (Case A on image above)</td>
<td><img src="image" alt="Diagram" /></td>
</tr>
<tr>
<td>BEHIND line 1 (Case B on image above)</td>
<td><img src="image" alt="Diagram" /></td>
</tr>
</tbody>
</table>

⚠️ **Caution** ⚠️
- Make sure to turn both adjustment screws an equal amount of turns.

**Step 4:** Check the calibration again and repeat the adjustment until the lines overlap each other.
3.3.2 Calibrating the front and rear roll unit bars.

3.3.2.1 Introduction

The heights (h_L and h_R) on both sides of the roll unit bar (2) in relation to the printer stand (1) have to be adjust with spacers (3) to calibrate a roll unit bar (2).

FRONT VIEW

3.3.2.2 Checking the calibration of the roll units

The procedure below describes the calibration check of the FRONT roll unit. The procedure to check the rear roll unit is the same. In the procedure, line 1 is drawn at the RIGHT side of the printer, line 2 at its LEFT side.

Procedure

PART 1: PREPARING THE SYNTHETIC PAPER STRIP

Step 1: Put the pressure rollers in the ‘up’ position.

Step 2: Install an empty core between the roll unit and the motorized roll unit at the front side of the printer.

Step 3: Standing in front of the printer, use some tape to create a loop around the core with the synthetic paper strip.

Step 4: Check if the edges of the loop (indicated on the images below) are aligned on each other.
Step 5: Slide the end of the synthetic paper strip (1) under the pressure rollers (4) in position 1 of the printer until the synthetic paper strip (1) is a little tensioned.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Synthetic paper strip</td>
</tr>
<tr>
<td>2</td>
<td>Loop</td>
</tr>
<tr>
<td>3</td>
<td>Core</td>
</tr>
<tr>
<td>4</td>
<td>Pressure rollers</td>
</tr>
</tbody>
</table>

⚠️ Caution  ⚠️
- Don't pull too hard on the strip. This will loosen the tape, resulting in the fact that the loop becomes longer, leading to a bad calibration check.
- Make sure that you have an equal tension on the left and right of the strip.
**PART 2: DRAWING THE CONTROL LINES**

**Step 1:** Standing at the front side of the unit, place the adjustment plate onto the strip and position it against the pressure rollers as indicated on the image below.

**Step 2:** Draw a line. See image below.

**Step 3:** Slide the strip (1) to position 2 as indicated on the image below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Synthetic paper strip</td>
</tr>
<tr>
<td>2</td>
<td>Loop</td>
</tr>
<tr>
<td>3</td>
<td>Core</td>
</tr>
<tr>
<td>4</td>
<td>Pressure rollers</td>
</tr>
</tbody>
</table>
**Step 4:** Place the adjustment plate onto the strip and slide it against the pressure rollers.

![Diagram](image)

**Step 5:** Pull the strip so there is an equal tension.

⚠️ **Caution** ⚠️
- Don’t pull too hard on the strip. This will loosen the tape, resulting in the fact that the loop becomes longer, leading to a bad calibration check.
- Make sure that you have an equal tension on the left and right of the strip.

**Step 6:** Draw a line for the second time. The following two situations can be obtained.

- Line overlap each other
  - well adjusted
- Line does NOT overlap each other
  - perform the adjustment procedure as described in the next chapter
3.3.2.3 Adjusting the roll units

Procedure

Step 1: Use the correct amount of spacers (2) to cover the space between the drawn lines (1).

Step 2: Determine the deviation of the roll unit using the image and table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Drawn lines</td>
</tr>
<tr>
<td>2</td>
<td>Spacer</td>
</tr>
</tbody>
</table>

Adjusting the FRONT Units

<table>
<thead>
<tr>
<th>Line lay position</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEFORE line 1</td>
<td>Remove spacers on the left front unit or add spacers on the right front unit.</td>
</tr>
<tr>
<td>BEHIND line 1</td>
<td>Add spacers on the left front unit or remove spacers on the right front unit.</td>
</tr>
</tbody>
</table>

Adjusting the REAR Units

<table>
<thead>
<tr>
<th>Line lay position</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEFORE line 1</td>
<td>Add spacers on the left rear unit or remove spacers on the right rear unit.</td>
</tr>
<tr>
<td>BEHIND line 1</td>
<td>Remove spacers on the left rear unit or add spacers on the right rear unit.</td>
</tr>
</tbody>
</table>
Step 3: Insert these spacers (1) at the left or right side (depending on the deviation determined in the previous step) BETWEEN the roll unit bar (3) and the printer’s stand (2). (See images below)

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Spacer</td>
</tr>
<tr>
<td>2</td>
<td>Printer’s stand</td>
</tr>
<tr>
<td>3</td>
<td>Roll unit bar</td>
</tr>
</tbody>
</table>

Step 4: Check the calibration of the roll system again and do an adjustment again if necessary.

Step 5: Now fix the screws of the roll unit bar so the bar doesn’t move anymore.
3.3.3 Adjusting the weight supports under the UW/W 100

Parts and Tools needed

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hexagon wrench 3 mm</td>
<td>1</td>
</tr>
</tbody>
</table>

3.3.3.1 Location of the weight supports on a 65” printer

There are 2 weight supports on the UW/W 100 system for a 65” machine, see the images below for their positions.

![Front View of 65" Printer](image)

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Weight support</td>
</tr>
</tbody>
</table>

3.3.3.2 Location of the weight supports on a 90” printer

There are 4 weight supports on the UW/W 100 system for a 90” machine, see the images below for their positions.

![Front View of 90" Printer](image)

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Weight support</td>
</tr>
</tbody>
</table>
3.3.3.3 *Adjusting the weight supports*

**Caution**
- Don't turn the weight supports with force when they reach the floor!

**Instructions**

Lower the weight supports of the UW/W 100 till they reach the floor. A hexagon wrench 6 mm can be used as indicated below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hexagon wrench 6 mm</td>
</tr>
<tr>
<td>2</td>
<td>Turning direction to lower the support</td>
</tr>
</tbody>
</table>
This page is intentionally left blank.
4 OPERATING THE SYSTEM

4.1 TURNING THE POWER ON / OFF

The switch is located on the power supply box. Its status is marked with “O” and “I”.

“I” Switched ON  Power LED on control panel of winding system will light up

“O” Switched OFF  Power LED on control panel of winding system will not be lit.
4.2 LOADING ROLL MEDIA

Please follow the procedure below to install and load roll media.

**Step 1:** Make sure the printer and Unwinder/Winder 100 are switched ON.

**Step 2:** Raise the pressure rollers of the printer.

**Step 3:** Open the front cover.

**Step 4:** Make sure both unwinder (REAR) and winder (FRONT) unit are set to MANUAL mode.

**Step 5:** Consider the specifications of the printer before loading media:

<table>
<thead>
<tr>
<th>Maximum loading capacity</th>
<th>Metrical</th>
<th>Imperial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum media width</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For ValueJet 1604</td>
<td>1625 mm</td>
<td>63.98 in</td>
</tr>
<tr>
<td>For Spitfire 65&quot;, Rockhopper 3 65&quot; and Viper 65&quot;</td>
<td>1653 mm</td>
<td>65.07 in</td>
</tr>
<tr>
<td>For Spitfire 90&quot;, Rockhopper 3 90&quot; and Viper 90&quot;</td>
<td>2280 mm</td>
<td>89.76 in</td>
</tr>
</tbody>
</table>

| Minimum media width        |          |          |
| For ValueJet 1604          | 1000 mm  | 39.37 in |
| For Spitfire 65", Rockhopper 3 65" and Viper 65" | 210 mm   | 8.27 in  |
| For Spitfire 90", Rockhopper 3 90" and Viper 90" | 210 mm   | 8.27 in  |

| Inner core diameter        |          |          |
| 50.8 mm or 76.2 mm         | 2 in or 3 in |

**Step 6:** Remove the packaging of the media roll.

**Step 7:** Check whether the media is inside or outside printable. This affects the installation method on the unwinder at the rear of the machine.

**Step 8:** Install the media between the two roll units at the back of the machine. Loosen the handles to move the roll units left and right.
Step 9: Be sure that the media is loaded centrally. This to be sure that the media is wound up straight. This can be easily checked by the yellow labels on the winding rails. Be sure to mount the left and right roll unit on the same distance from the 010 label.

Step 10: Install an empty core between the front roll units.
   a. Make sure the core is longer than the media width.
   b. Load it centrally as described in previous step

Step 11: Use the foot-switch to release some media at the rear.

Step 12: Load media through the rear tensioning bar, over the print platform, under the pressure rollers as pictured below.
Step 13: Take the media on the front of the printer and pull until the rear tensioning system gently hits the back of the machine. This to become an equal tension.

Step 14: Lower the pressure rollers

Step 15: Set the unwinder (REAR) unit to AUTOMATIC. The rear tensioning system will go to its initial position.

⚠️ Notes ⚠️
Be sure to make the correct settings on the control panel of the winding system. OUTSIDE or INSIDE

Step 16: Forward the media until you can stick it to the core installed between the front roll units. Make sure to have an equal tension on both sides of the media.

⚠️ HINT ⚠️
To ease the winding up of the media on the front core, it is permitted to cut the media in a V-shape.

Step 17: Tighten the media straight to the core with tape.

Step 18: After closing the front cover, the media initialize will start.

Step 19: Set the winder (FRONT) unit to ACTIVE. The front tensioning system will be activated.

Step 20: Installation of the media is completed.

⚠️ Notes ⚠️
With a small intervention it is possible to reverse your winding direction. Mount the twist cable between the control box and the front motorized unit cable.