### Technical Note

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<th>Product</th>
<th>Scitex XLjet</th>
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Overview

This technical note describes the procedure of replacing Y coupling of the old model with a new model. The new coupling is more reliable and allows working with the heavy loads applied to the machine.

All the coupling assembling part numbers are provided according to the “Module Y Sub ASSY” drawings No 507D3D863 (See Appendix No 1).

The numbers marked as <#> represent the balloon numbers on the linked drawing.

Two people should perform the procedure.

Required tools

- Open adapted wrench 10mm for dismantling
- Torque meter wrench 5 – 54 N/m
- Allen keys set
- Plastic hammer
- Sand Paper

Catalog numbers

<table>
<thead>
<tr>
<th>Description</th>
<th>Part number</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Y Coupling Kit</td>
<td>FCO 510KX3054</td>
<td>1</td>
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Dismantling the Old Coupling

1. Press the Emergency Stop button.
2. Shut down the Y circuit breaker.
3. Disconnect the power and the data cables from the Y motor.
4. Using the 10mm open or ring adapted wrench release all the hexagonal screws of the clampex.

**Note:** If the Clampex is still hardly to be moved, remove the screws.
5. Using 8mm Allen key unscrew the four M10 screws holding the module to the chassis and slowly pull out the whole module.

*Note:* It is strongly recommended to use a helping hand for this specific action.

6. Using 5mm Allen key unscrew and release the coupling and the inner clampex (mounted on the Y shaft).

*Note:* It is recommended to remove the screws.

7. Using Allen key #5 unscrew and release the gear shaft from the gear.

8. Inspect the metal shaft surface. If it is not smooth, work it with the very delicate sand paper and the aid tool supplied.

*Note:* It is strongly recommended to move the Y shaft manually during this procedure.
Preparing the Self Centering Clamping

1. Disassemble the self-centering clamping and apply some grease on the angular internal surfaces between the two parts.

2. Reassemble the self-centering clamping adding three M6X30 temporary Allen screws in the open thread holes. The temporary screws keep the clamping in the open position.

   Note: The assembled six M6X25mm screws should be released up to 4mm space in order to fix the self-centering clamping width to approx. 32-33mm.
Installing the New Coupling on the Y Shaft

*Note: The numbers marked as <#> represent the balloon numbers on the linked “Module Y Sub Assy” drawing.*

1. Mount the 2mm spacer on the shaft.

2. Insert the self-centering clampex into module Y coupling all the way to the blocking edge <18>.
   
   *Note: You May use a plastic Hummer and a piece of Wood.*

3. Mount the module Y coupling plate connector <11> on the chassis and fasten with the four-spring washer <13> and M10X30mm Allen screws <12>.

4. Mount the coupling on the Y shaft all the way until stopped on the spacer (2mm) <14>. 

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5. If the coupling and the connector plate are flush (allow up to 0.2 mm difference), Release the three M6X30mm temporary screws and fasten the M6X25mm screws – **crosswise and using the torque meter wrench up to 10Nm**. If the two parts are not flush check the gap with the supplied spacers:
   - If the coupling is sunk inside – remove it and add according to the need 0.5mm spacers <15>. 
   - If the difference is opposite - remove the coupling and replace the 2mm **one** spacer with a few (not more than three) 0.5mm spacers accordingly.

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**Preparing the Gear to the installation**

1. Insert the 6X30mm-locating pin <8> into the dedicated hole in the gear flange.

   **Note:** It is strongly recommended to hold the motor on the knees when inserting the pin.

   **Note:** It is possible to use a plastic hammer when inserting the pin.
2. Connect the module Y coupling gear adapter <7> to the gearbox using the eight spring washers <6> and M5X20 Allen screws <5>.

3. Mount the new gear shaft <9> on the gear flange <4> (position according to the locating pin).

4. Fasten the gear shaft and the gear flange with the seven M6X16mm Allen screws <10> using the torque wrench adjusted to 10 Nm.

   **Note:** Apply Loctite 222 on the screws before closing.
5. Connect the cone (part of the coupling) \(<18>\) to the gear shaft:
   - Position correctly the notch on the Ø6X30 locating pin.
   - Fasten with the M8X16mm Allen screws (apply some Loctite) with the torque wrench adjusted to 25Nm.

Installing the Module on the Coupling

1. Gently insert the cones (mounted on the gear) into the coupling (mounted on the Y shaft).

   Notes:
   - Verify that the motor cable ports are positioned in the bottom.
   - The body of the coupling is a spring and must be pressed at the final assembling.
   - Make sure not to apply pressure on the first assembly
   - A gap of 0.5–1.5 mm should be maintained between the two assembly parts.
2. Fasten the two assembly parts using the thirteen spring washers <3> and M6X16mm Allen screws <10>.

3. Reconnect the power and data cables.

4. Restore the power to the driver.

5. Release the Emergency Stop button.

6. Perform the machine INIT.