

**DFD6340 Maintenance 2 (Rev. 5.00)**

<b>Trainee</b>	
<b>Company</b>	

<b>Period</b>	
<b>Trainer</b>	

<Important Notice>

The modules indicated with an asterisk (\*) below may not be available depending on the specification of customer's equipment. For details, please see Technical Newsletter (#tnl2016-0021e) attached at the end of this sign-off sheet.

Item	Date	Trainee	Trainer
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..... Day 1 .....

**1. Machine Structure**

- 1.1. Verify the Safety Interlock Circuit and Functions \_\_\_\_\_
- 1.2. Identify Electrical Block Diagram \_\_\_\_\_
- 1.3. Identify the Locations for Electric Components \_\_\_\_\_
- 1.4. Identify the Function of Each PC Board \_\_\_\_\_
- 1.5. Identify the Axes Zero Point Position \_\_\_\_\_
- 1.6. Identify the Servo Motor Driver Error Code \_\_\_\_\_
- 1.7. Identify the Spindle Motor Driver Error Code \_\_\_\_\_
- 1.8. Identify Stepping Motor and Spindle Motor Driver Setting \_\_\_\_\_
- 1.9. Interpret the Water and Pneumatic Piping \_\_\_\_\_
- 1.10. Interpret the Chuck Table Setup Principle \_\_\_\_\_

**2. Inspection and Adjustment**

- 2.1. Identify How to Properly Use the Dial Gauge \_\_\_\_\_
- 2.2. Inspect X-axis Straightness Accuracy \_\_\_\_\_
- \* 2.3. Inspect the X-Spindle Axis Perpendicularity \_\_\_\_\_
- \* 2.4. Adjust the X-Spindle Axis Perpendicularity \_\_\_\_\_

..... Day 2 .....

- 2.5. Inspect the Chuck Table Leveling Accuracy \_\_\_\_\_
- \* 2.6. Adjust the Theta-axis (Chuck Table) Leveling Accuracy \_\_\_\_\_
- \* 2.7. Inspect Workpiece Transport Positions \_\_\_\_\_
- \* 2.8. Adjust the Workpiece Transport Positions \_\_\_\_\_
- 2.9. Adjust the Wheel Cover Nozzle Position \_\_\_\_\_
- 2.10. Perform the Pixel Size Measure Operation \_\_\_\_\_

**3. Machine Parts Replacement**

- 3.1. Replace the PC Board after Setting Jumper and DIP Switches \_\_\_\_\_
- 3.2. Replace the Axis End Sensor \_\_\_\_\_
- 3.3. Replace the NCS Sensor \_\_\_\_\_
- 3.4. Replace the Blade Breakage Detector (BBD) Sensor \_\_\_\_\_
- \* 3.5. Replace the Microscope Unit \_\_\_\_\_

**4. Appendix**

- 4.1. (Appendix) DFD6340 Accuracy Certificate Form \_\_\_\_\_
- 4.2. (Appendix) Water and Air Piping Diagram [Standard Specification] \_\_\_\_\_
- 4.3. (Appendix) Electrical Circuit Diagram [Standard Specification] \_\_\_\_\_

**Course composition, intended trainees and course objective**

Course Name	Intended Trainees	Course Objective
Operation	<ul style="list-style-type: none"> <li>- who has no experience of operating the machine</li> <li>- who conducts data and function settings of the machine</li> </ul>	<ul style="list-style-type: none"> <li>- To enable trainees to understand the terms necessary for operating the machine and to process products by calling up the data set in the machine</li> <li>- To enable trainees to create the data and set the data and functions for operating the machine</li> </ul>
Maintenance 1	<ul style="list-style-type: none"> <li>- who has already completed the "Operation" course (or has equivalent operation skills)</li> <li>- who conducts periodic maintenance of the machine</li> </ul>	To enable trainees to safely and precisely perform the periodic maintenance and consumable parts replacement described in the Maintenance Manual of the machine
Maintenance 2	<ul style="list-style-type: none"> <li>- who has already completed the "Maintenance 1" course (or has equivalent maintenance skills)</li> <li>- who conducts maintenance works which are not described in the Maintenance Manual of the machine</li> </ul>	To enable trainees to conduct maintenance works which are not described in the machine Maintenance Manual (only the items that can be executed without any special tools or access to the internal Maker Data)

# Technical Newsletter

#tnl2016-0021e

## To customers who attended our dicing saw training course “Tier 3 (or Maintenance 2)”

### Introduction

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Among the dicing saws shipped after January 1, 2012, equipment with the Machine Directive<sup>\*1</sup> (CE Marking<sup>\*2</sup>) specification have been modified for safer design. This technical newsletter has been sent to inform you that some of the maintenance work taught in our training cannot be performed by customers.

<Equipment this notification applies to>

Customer's equipment	Shipped BEFORE Jan. 1, 2012	Shipped AFTER Jan. 1, 2012	
		Conforms to Machine Directive	Does not conform to Machine Directive
DAD322	N/A	<b>Applicable</b>	N/A
3000 Series <sup>*3</sup>	N/A	<b>Applicable</b>	N/A
6000 Series <sup>*3</sup>	N/A	<b>Applicable</b>	N/A

\*1 Machine Directive integrates the “Essential safety requirements” for equipment.

\*2 CE Marking is a mark which certifies that a machine conforms to “Essential safety requirements.”

The shipper is obliged to apply the CE Mark when shipping their products to the EU region.

\*3 DAD3650, DFD6341, and DFD6560 with the standard specifications all conform to the Machine Directive.

Therefore, this notification applies to all of these units, regardless of the shipping date.

### How to Identify Applicable Equipment

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The following label is attached near the safety switch on the outer cover of the applicable equipment. Refer to the appendix for the detailed label position of each equipment model.



## Applicable Maintenance Work

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If any of the following maintenance work is performed on applicable equipment, the safety mechanism (interlock) activates and the axes power shuts down. Therefore, customers are unable to perform any of the applicable maintenance work.

Equipment	Applicable Maintenance Work
DAD322 3000 Series	<ul style="list-style-type: none"> <li>● Microscope replacement</li> <li>● Accuracy adjustment</li> <li>● Spindle replacement</li> </ul>
6000 Series	<ul style="list-style-type: none"> <li>● Microscope replacement</li> <li>● Transfer adjustment</li> <li>● Accuracy adjustment</li> <li>● Spindle replacement</li> <li>● Spinner seal replacement</li> </ul>

## Countermeasure

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If any of the maintenance work mentioned above is required, please contact your DISCO customer engineer and request maintenance.

## Inquiries

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Please contact the DISCO Training Center ([trainctr@disco.co.jp](mailto:trainctr@disco.co.jp)) or your local sales representative if you have any questions regarding this matter.