

DFD6361 Maintenance 2 (Half-cut Specification) (Rev. 5.00)

Trainee	
Company	

Period	
Trainer	

<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.

<DFD6361 Maintenance 2 (Rev. 7.00)>

Item	Date	Trainee	Trainer
..... Day 1			
1. Machine Structure			
1.1. Verify the Safety Interlock Circuit and Functions	_____	_____	_____
1.2. Identify the Electrical Connection	_____	_____	_____
1.3. Identify the Locations for Electric Components	_____	_____	_____
1.4. Identify the PC Board Function and Setting	_____	_____	_____
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 the Stepping Motor and Spindle Driver Setting	_____	_____	_____
1.9. Interpret the Water and Pneumatic Piping	_____	_____	_____
1.10. Interpret the Chuck Table Setup Principle	_____	_____	_____
2. Inspection and Adjustment			
2.1. Inspect and Adjust the Air/Water Curtain Pipe Height/Angle	_____	_____	_____
2.2. Adjust the Cutting Room Partition Height	_____	_____	_____
2.3. Identify How to Properly Use the Dial Gauge	_____	_____	_____
2.4. Inspect the X-axis Straightness Accuracy	_____	_____	_____
* 2.5. Inspect the X-Spindle Axis Perpendicularity	_____	_____	_____
* 2.6. Adjust the X-Spindle Axis Perpendicularity	_____	_____	_____
..... Day 2			
2.7. Inspect the Chuck Table Leveling Accuracy	_____	_____	_____
* 2.8. Adjust the Theta-axis (Chuck Table) Leveling Accuracy	_____	_____	_____
* 2.9. Inspect the Workpiece Transfer Position	_____	_____	_____
* 2.10. Adjust the Workpiece Transfer Position	_____	_____	_____

2.11. Adjust the Wheel Cover Nozzle Position _____

2.12. Perform the Pixel Size Measure Operation _____

3. Machine Parts Replacement

3.1. Replace the Microscope LED Light _____

3.2. Replace the PC Board after Setting Jumper and DIP Switches _____

3.3. Replace the Motor Driver after Setting Jumper and DIP Switches _____

3.4. Replace the Axis End Sensor _____

3.5. Replace the NCS Sensor _____

3.6. Replace the Blade Breakage Detector (BBD) Sensor _____

* 3.7. Replace the Microscope Unit _____

4. Appendix

4.1. (Appendix) DFD6361 Accuracy Certificate _____

4.2. (Appendix) Water and Air Piping Diagram [Standard Specification] _____

4.3. (Appendix) Electrical Circuit Diagram [Standard Specification] _____

..... Day 3

<DFD6361 Maintenance 2 (Half-cut Specification) (Rev. 2.00)>

Item	Date	Trainee	Trainer
1. Inspection and Adjustment [Half-cut Specification]			
1.1. Adjust the Non-contact Surface Detector (NSD) Air Pressure	_____	_____	_____
1.2. Adjust the Sub-chuck Table Leveling Accuracy	_____	_____	_____
2. Machine Parts Replacement [Half-cut Specification]			
2.1. Replace the Waterproof Cover / O-ring / V-ring for θ -axis	_____	_____	_____
* 2.2. Replace the Non-contact Surface Detector (NSD) Sensor Unit	_____	_____	_____
3. Appendix [Half-cut Specification]			
3.1. (Appendix) Water and Air Piping Diagram [Half-cut Specification]	_____	_____	_____
3.2. (Appendix) Electrical Circuit Diagram [Half-cut Specification]	_____	_____	_____

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Training Sign-off Sheet

Course composition, intended trainees and course objective

Course Name	Intended Trainees	Course Objective
Operation	<ul style="list-style-type: none">- who has no experience of operating the machine- who conducts data and function settings of the machine	<ul style="list-style-type: none">- 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- To enable trainees to create the data and set the data and functions for operating the machine
Maintenance 1	<ul style="list-style-type: none">- who has already completed the "Operation" course (or has equivalent operation skills)- who conducts periodic maintenance of the machine	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">- who has already completed the "Maintenance 1" course (or has equivalent maintenance skills)- who conducts maintenance works which are not described in the Maintenance Manual of the machine	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

Among the dicing saws shipped after January 1, 2012, equipment with the Machine Directive^{*1} (CE Marking^{*2}) 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	Applicable	N/A
3000 Series ^{*3}	N/A	Applicable	N/A
6000 Series ^{*3}	N/A	Applicable	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

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

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"> ● Microscope replacement ● Accuracy adjustment ● Spindle replacement
6000 Series	<ul style="list-style-type: none"> ● Microscope replacement ● Transfer adjustment ● Accuracy adjustment ● Spindle replacement ● Spinner seal replacement

Countermeasure

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

Inquiries

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