Service Utility (Only for Reference)

Service utility is software for servicing Printer through use of a PC. It provides Printer with functions performed in the service mode as well as functions for displaying and performing various additional features.

> NOTE:
> Service utility may be updated to enhance and improve its functionality.

■ Operation

● PC Operating Environment

This utility can be used on PC in the following operating environment:
- OS: Windows XP, Windows Vista, Windows 7 (32-bit,64-bit)
- Interface: Hi-Speed USB 1000BASE-T/100BASE-TX/10BASE-T

● Setup Procedure

This utility does not require any particular installation work. Set up PC following the procedure described below.
1) Copy the service utility to HD of PC to be used.

● Start Procedure

1) Connect PC and Printer using USB cable.
2) Turn on Printer.
3) After starting up PC, double-click the service utility icon.

● Printer Information

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No.	Item		Description
[1]	Model		• The product name of connected Printer is displayed.
[2]	Serial Number (Administration Mode Only)		• The serial number assigned to Printer is displayed. • If the old data cannot be read/sent at the time of Printer Controller PCB replacement, set the serial number of Printer manually
[3]	ROM Version		• The version of the firmware incorporated in Printer is displayed.
[4]	RTC	Send the current standard time	• Set the time on which service utility is running for Printer.
		Set the current standard time	• Set the same time as that of the PC on which service utility is running.
		Set the time entered	• Set the input time for Printer.
[5]	Total Print Count		• The number of print by Printer is displayed (3 inch feed = 1 print).
[6]	Temperature, Humidity	Device Humidity	• Temperature is read from Printer and displayed.
		Device Humidity	• Humidity is read from Printer and displayed.
[7]	Parts Counter	Blade Cleaner	• The extent of the parts deterioration is displayed. • When Print Count or Dot Count whichever reaches 100%, error message displays on [Status Monitor] of [Printer Driver]. *1. When Blade Cleaner and/or Purge Unit are replaced using [Consumable Parts Replacement] menu on the [Parts Replacement] tab, parts counters are cleared automatically.
		Purge Unit	
[8]	Read from the Printer *1. Common to other sheets		• The information displayed are read from Printer.
[9]	Utility Version		• The version of the running service utility is displayed.
[10]	Printer Status *1. Common to other sheets		• The status of Printer is displayed.

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● Head Information (Administration Mode Only)

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No.	Item		Description
[1]	Head Information	Serial Number	Serial number of each Printhead
		Lifetime Counter	The extent of the parts deterioration is displayed.
		Detail	Displays a graph showing the extent of Printhead deterioration in detail.
		Date of Printhead Installation	Date of installation of each Printhead.
[2]	Head Temperature		Temperature of each Printhead.

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● Cleaning

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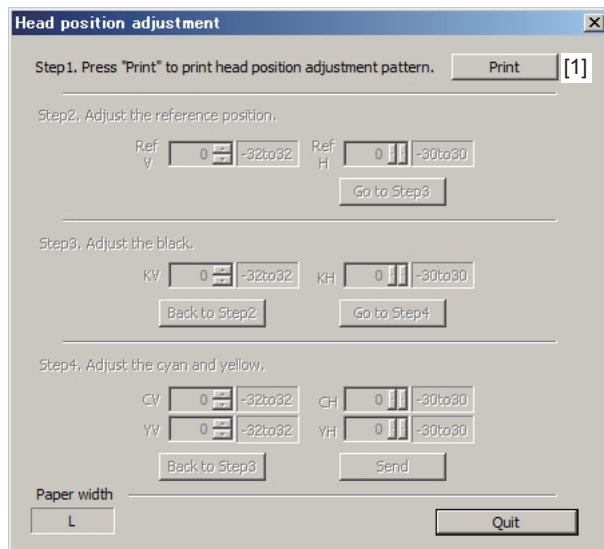| No.	Item		Description
[1]	Cleaning	Light Cleaning	• Carry out this cleaning first when non-discharge occurs.
		Medium Cleaning	• Carry out this cleaning when non-discharge still occurs after Light Cleaning. • This cleaning is slightly stronger than Light Cleaning.
		Strong Cleaning	• Carry out this cleaning when non-discharge still occurs after Medium Cleaning • This cleaning is slightly stronger than Medium Cleaning
[2]	Preparation before transportation	Shipping the printer	• Before long-distance transportation, drain ink from Printer according to the instructions shown on the screen of service utility.
		Moving the printer	• Before moving Printer within the same floor or building, drain ink from Purge Unit according to the instructions shown on the screen of service utility.
[2]	Ink Refresh		• Ink to flow in the print head and ink path to maintain the ink quality.

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● Test Print / Adjustment

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No.	Item		Description
[1]	Test Print	Paper width	• Set the horizontal size of paper used for test printing.
		Paper length	• Set the vertical size of paper used for test printing
		Copies	• Set the number of copies to print for test printing.
		Gap length	• Set the gap length of paper used for test printing.
		TOF mark length	• Set the mark length of paper used for test printing.
		Left margin	• Set the left margin of test print image.
		Right margin	• Set the right margin of test print image.
		Left gap	• Set the left gap of test print image.
		Right gap	• Set the right gap of test print image.
		Feed speed	• Set the transport speed for test printing.
		Paper form	• Set the type of paper used for test printing.
		Nozzle Check pattern	• Pattern for checking discharge state of nozzles.
		Setting parameters	• Pattern for checking the settings values such as a registration adjustment value.
		Paper width	• Horizontal sizes (widths) of paper is classified as follows and the currently set horizontal size of paper is displayed. • S-size: Paper width = 25.4 mm to 35.0 mm • M-size: Paper width =35.1mm to 73.0mm • L-size: Paper width =73.1mm to 120.0mm
[2]	Head position adjustment	Head position adjustment	• Perform test printing and adjust registration.
		Copy L setting to S and M	• Reflect the result of registration adjustment made using L-size (horizontal size) paper into S-size and M-size. *1. This operation is not required when registration adjustment is performed for S-size and M-size separately.
[3]	Other setting	Vertical scale adjustment	• Perform test printing and adjust vertical scale.
		TK-GAP (Transparent)	• The TK-GAP is displayed. It can be set here.

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● Test Print / Adjustment > Head Position Adjustment

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No.	Item	Description
[1]	Print	• Print a registration adjustment pattern. Check the printout and carry out registration adjustment. • For more details, refer to "Adjustment > Registration Adjustment".

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● Test Print / Adjustment > Vertical Scale Adjustment

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No.	Item	Description
[1]	Print	• Print a vertical scale adjustment pattern. Check the printout and carry out vertical scale adjustment. • For more details, refer to "Adjustment > Vertical Scale Adjustment".

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● Send the Update File

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No.	Item		Description
[1]	Firmware Updata	Select a File	Select the firmware file to be loaded into Printer.
		Send	Send the firmware file to be loaded into Printer.
[2]	Send Print Data	Select a File	Select the print file to be loaded into Printer.
		Send	Send the print file to be loaded into Printer

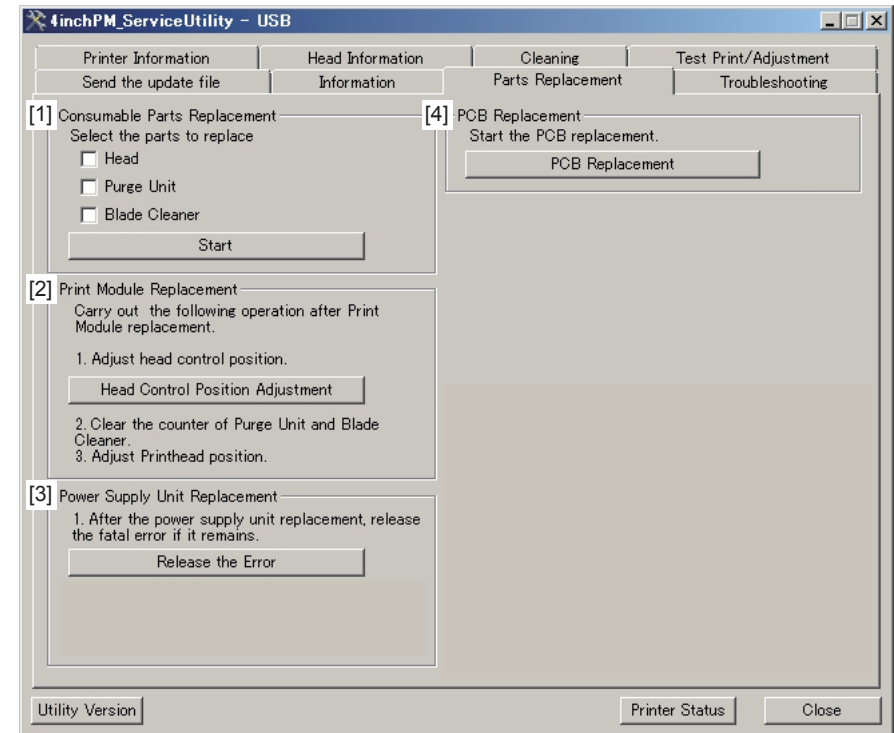T-5-24

● Information

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No.	Item	Description
[1]	History	Error codes and description of errors are displayed.
[2]	Save the history in a file	Save the error log recorded in Printer.
[3]	User settings	Set various user mode.
[4]	RS232C Communication	Change various setting RS232C.
[5]	Network settings	This function is used to initialize all network settings such as IP address, MAC address file, and password. Note that these settings can be initialized only when the PC and Printer are connected together with a USB cable.

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● Parts Replacement

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No.	Item	Description
[1]	Consumable Parts Replacement	Replace Printhead, Purge Unit, and Blade Cleaner.
[2]	Print Module (Print Unit) Replacement	After replacement of Print Module (Print Unit), enter the values for adjusting Printhead control positions.
[3]	Power Supply Unit Replacement	If a power supply error (0211 to 0215) occurs after Power Supply Unit replacement, clear the error.
[4]	PCB Replacement	Replace Printer Controller PCB.

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● Parts Replacement > PCB Replacement,Serial Setting

● Parts Replacement > Head Control Position Adjustment
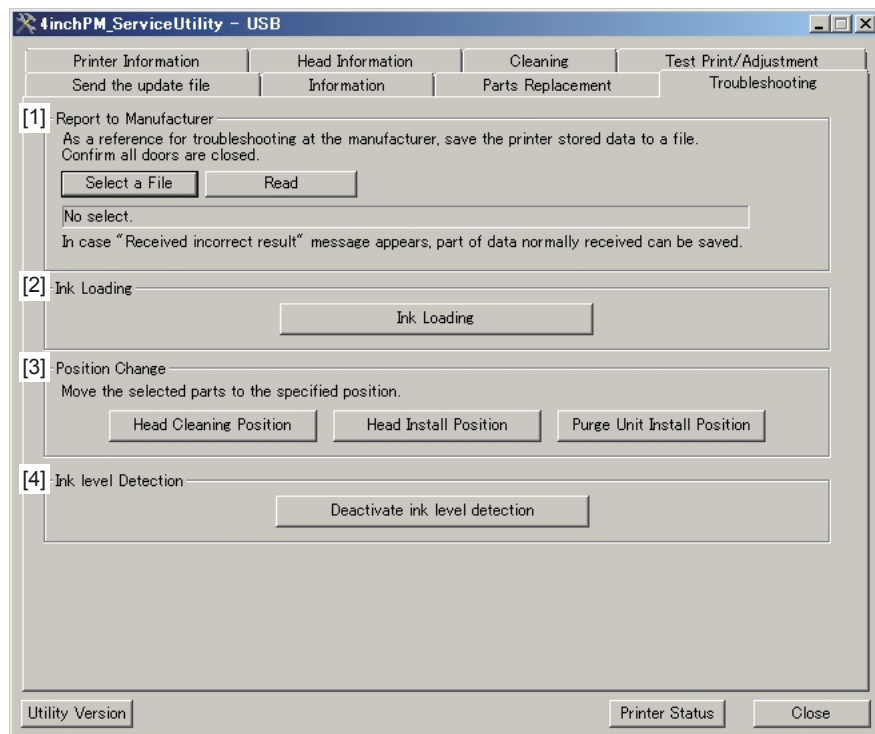

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No.	Item		Description
[1]	Printer data saving (before PCB replacement)	Create a File	Specify the file to which the data stored in Printer is to be written.
		Save	Write the data stored in Printer to the selected file.
	Saved Printer data sending (after PCB replacement)	Select a File	Specify the file to send to Printer.
		Send	Send the selected file to Printer.

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No.	Item		Description
[1]	Head control Adjustment	Head Wipe Position	• Enter the value indicated on the adjustment value label provided at Printhead insertion slot of Print Module.
		Head Cap Position	
		Head Print Position	• For more details, refer to "Adjustment > Printhead Control Position Adjustment".
		Purge Unit Wipe Position	• Enter the value indicated on the adjustment value label provided on the side surface of Purge Unit. • For more details, refer to "Adjustment > Printhead Control Position Adjustment".

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● Troubleshooting

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No.	Item		Description
[1]	Report to Manufacturer	Select a File	• Specify the file used to write the data saved in Printer.
		Read	• Write the data stored in Printer to the selected file.
[2]	Ink Loading		• When the ink flow passage is not filled with ink for some reason, carry out ink loading.
[3]	Position Change	Head Cleaning Position	• Move Printhead to Printhead cleaning position. • In the case, Strong Cleaning can not recover white streak, perform this operation.
		Head Install Position	• Move Printhead when reconnecting it. *1. Since Printhead contains ink, be extremely careful to dripping ink in case Printhead is removed.
		Purge Unit Install Position	• Move Purge Unit in the case forgetting to read Purge Unit wipe position adjustment value at replacement of it.

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