

### **Any-001 Service Manual**

#### TROUBLE SHOOTING

Ver 1.0.6 (02-Jan-2013)



Valloy Incorporation

#### Table of Contents

1.	Product Composition	6
	1.1 Product Specification	6
	1.2Name and Function of Each Part	8
	1.2.1 Press station	8
	1.2.2 Digital printer	10
2.	Unpacking and Installation	11
	2.1 Unpacking	11
	2.1.1 How to unpack	11
	2.1.2 Packing list	14
	2.2 Installation	17
	2.2.1 Connection between the printer and the press station	17
	2.2.2 Sensor setup	21
	2.2.2.1 Black mark sensor setup	21
	2.2.2.2 Gap sensor setup	22
	2.2.3 IP address setup	23
	2.2.3.1 How to check IP address	26
	2.3 S/W installation	28
	2.3.1 Printer driver installation	28
	2.3.1.1 Installation using USB port	28
	2.3.1.2 Installation using LAN port	32
	2.3.1.3 Configuration of the roll (continuous paper) driver	36

3.Maintenance and Troubleshooting	40
3.1 WEB61 Troubleshooting	40
3.1.1 Occurrence of paper jam	40
3.1.2 Data transmission failure	41
3.1.3 Paper feeding failure	43
3.1.4 Error code table	44
3.2 Station Troubleshooting	49
3.2.1 Power supply problem	49
3.2.2 Unwinder/Rewinder malfunction	50
3.2.3 Left and right tension bar malfunction	52
3.2.4 Cutter malfunction	53
3.2.5 Feeding unit malfunction	55
3.2.6 Sensor malfunction	57
3.2.7 Front panel malfunction	58
4. Disassembly and Replacement	59
4.1 Disassembly and Assembly of the Unwinder and the Rewinder	59
4.1.1 How to disassemble the unwinder	59
4.1.2 How to assemble the unwinder	64
4.1.3 How to disassemble the rewinder	64
4.1.4 How to assemble the rewinder	64
4.2 Disassembly and Assembly of the Potentiometer	65
4.2.1 How to disassemble the potentiometer	65
4.2.2 How to assemble the potentiometer	69
	3

4.2.3 How to set up the potentiometer	69
4.3 Assembly and Disassembly of the Front Panel	71
4.3.1 How to disassemble the front panel	72
4.3.2 How to assemble the front panel	73
4.4 Disassembly and Assembly of the Feeding Unit	74
4.4.1 How to disassemble the feeding unit	74
4.4.2 How to assemble the feeding unit	78
4.5 Disassembly and Assembly of the Cutter	79
4.5.1 How to disassemble the cutter	79
4.5.2 How to assemble the cutter	82
4.6 How to Replace the Motors	83
4.6.1 How to replace the unwinder motor	83
4.6.2 How to replace the rewinder motor	85
4.6.3 How to replace the feed motor	86
4.6.4 How to replace the cutter motor	88
4.7 How to Replace the Sensors	90
4.7.1 How to replace the black mark sensor	90
4.7.2 How to replace the gap sensor	92
4.8 How to Replace the Fuses	94
4.8.1 How to replace the fuse of the power part	94
4.8.2 How to replace the control PBA fuse	95
4.9 How to Replace the SMPS	96
5. Printer ↔ Press Station Interface	98

4

6.	Parts List	100
	5.3 Purpose of Signal Lines	99
	5.2 DC Power supply provided from printer unit	98
	5.1 Interface connect signal	98

# onutron

#### **1.** Product Composition

#### 1.1 Product Specification

Digital Press			
Print speeds	Plain paper 210mm x 297mm(8.26 x 11.7 inches)	(Max)up to 9m/m	
Operating Environment	Temperature	50°F - 89.6°F / 10℃ - 32℃	
(cut paper)	Humidity	20 – 80% RH	
Operating Environment	Temperature	62.6°F − 80.6°F / 17°C - 27°C	
(continuous)	Humidity	40 - 60% RH	
	Media weight	64 – 250 gsm	
	Warm-up time	35 sec	
First	Page printing Time	9 sec	
	Resolution	600x600dpi / 600x1200dpi	
	Print length	656feet / 200meter	
	Min.	76.2 x 127mm(3 x 5inches)	
Paper size	Max.	215mm x 121.92m(8.5 x 4800inches)	
	Continuous Papers width	215mm (8.5inches)	
	Cut sheet	± 0.4mm (±0.016inches)	
	Continuous paper	Beginning 3M ±0.8mm (±0.031inches)	
Margin of error	– No adjustment	After 3M ±0.2mm (±0.008inches)	
	Continuous paper	Beginning 3M ±0.7mm(±0.027inches)	
	- Adjustable	After 3M ±0.4mm (±0.016inches)	
Standard	Memory Configuration	256MB	
	HDD	160GB	
	RFID lock-out for toner	Yes	
Aftermarket supplies	Image drum with unique lockouts	Yes	
P	rinter Language	PCL5c	
	Size (LxWxH)	55 x44 x39 (21.5x17.3x15.3 inches)	
	Weight	28kg (61.7lbs) -supplies included	
	Interface	High-speed USB/Ethernet	
Po	wer Requirement	AC 100~240, 50/60Hz	
SUPPLIES(8.26 x 11.7inch)			
Toper Cartridge Life	Mono	11,000 pages	
	Color	11,500 pages	
Ir	nage Drum Life	Continuous printing :28,000 pages	
	Transfer belt	60,000 pages	
	Fuser unit	60,000 pages	

PRESS STATION		
Dimensions(LxWxH) 38x162x58cm(15 x 64 x 23 inc		es)
Maximum	20  cm (11.8  inches)	
Roll Diameter	30 cm (11.8 inches)	
Recommended	21.5cm (8.5 inches)	
Roll width		
Weight	84kg (185lbs)	
Power Requirement	AC 100~240, 50/60Hz	
	Temperature	10°C-32°C (50°F-89.6°F)
Operating Environment	Humidity	20 – 80% RH
Characterization of the second second second	Temperature	-20°C- 65°C (-4°F - 149 °F)
storage and movement Environment	Humidity	10 ~ 90% RH
Feeder and Rewinder system	core inside diameter: 76.2mm ( Maximum input roll weight: 10	3"). ‹g (22lbs)
Auto cut	Automatically cut after printing job. Also manually cut.	
sheet feeding	sheet feeding and printing are	available
Pre-cut label	printing on pre-cut label and p	re-printed label is available
s/w	Anytron RIP S/W for Windo interface (in Korea)	ws, easy to use graphic use
Network&Protocol	For Installation and manageme Network card, supporting th Internal web server and Etherne	ent of HTTP(B411dn) Printer and e main network protocol with et card
Operating Systems	Windows 2000 / XP Home / XP Server 2003(32 bit & 64 bit) /Server 2008 R2(64 bit) /Vista(3 & 64 bit); Mac OS 10.3.9~10.6.2	Professional(32 bit & 64 bit) / / Server 2008(32 bit & 64 bit 32 bit & 64 bit) /Windows7(32 bi 2
Network and Security	IPv6, 802.1x certificated, SNMPv Secure Erase3, Data code3, MA	/3, SSL/TLS, HTTPS code, C filtering, IP filtering , IPSec
Certifications	KCC,FCC Part15 subpart B Class	A, CE (EMC, LVD)

#### 1.2 Name and Function of Each Part

#### 1.2.1 Press station



No.	Name	Description	
1	Proce Station	Equipment to control the process of hanging, feeding roll paper and	
1	Press Station	winding it back after printing.	
1_1	Unwinder	Part to mount roll paper. Unwinder releases paper to feed the printer,	
T_T	Unwinder	and allows the paper to keep constant tension.	
		Sensor bar for feeding paper. When paper is fed to the printer, the	
1_2	Unwinder Tension Bar	tension bar moves up by tension. At this time, the sensor works to	
1-2		rotate the unwinder and release the roll to maintain the paper's	
		tension.	
1-3	Shaft No.1	Shaft (axis) for feeding paper	
1-4	Sensor	Sensor to support precut labels	
1 5	Fooding Pollor	Roller to insert paper into the printer while printing and retaining after	
1-5	reeding Koller	printing for subsequent refeeding.	
1-6	Cutter	Cuts continuous paper upon completion of printing	
17	Fooding Cuido	Guide for paper moving from the feeding roller to the printer.	
1-/	Feeding Guide	Evenlyaligns paper horizontally during printing.	
1-8	Button Panel	Front panel with 2 LEDs and 4 buttons	
	1. POWER LED	LED to check on/off status of the station	
	2. MARK LED	LED to check whether the sensor detects the marks in the sensing	

		mode	
	3. Cut Button	Button for operating the cutter 6	
	4. Rew Button	Button for operating the rewinder 11	
5. Feed(<) Button Button for operating the feeding roller 5 (moving paper backward		Button for operating the feeding roller 5 (moving paper backward)	
6. Feed(>) Button Button for operating the feeding roller 5 (moving paper forward		Button for operating the feeding roller 5 (moving paper forward)	
1-9	Shaft No.2	Shaft (axis) for feeding paper to be printed	
1-10 Rewinder Tension bar time the r		Sensor bar for rewinding. When paper connected to the rotating rewinder is wound up, the tension bar moves up by the tension, at this time the rewinder's rotating speed is reduced to allow paper to keep a constant tension.	
1-11	Rewinder	Part to rewind printed paper	
1-12	Rewinder guide	Guide to uniformly wind paper on the rewinder	
1-13	Power Button	On/off button for the station	





No	Name	Description	
2	Digital Printer	Printing device	
2-1	Top Cover Release Button	The top cover is opened by pressing the button.	
2-2	Top Cover	The cover is opened by pressing the button 1.	
2-3	Operator Panel	Menu-based control and LCD panel	
2-4	Multi-purpose Tray	Tray for using continuous media	
2-5	Front Cover Release Lever	The front cover is opened by pulling the lever.	
2-6	PowerSwitch (On/Off Switch)	Printer power switch	
2-7	AC Power Socket	Connection for printer power cable	
2-8	Rear stacker	Tray that accepts and stacks printed continuous media as it is released.	
2-9	USB interface	Interface that directly connects a PC with the printer	
2-10	Network Interface	Interface to use the printer via a network	
2-11	ACC interface		
2-12	Parallel interface		

#### 2. Unpacking and Installation

#### 2.1 Unpacking

#### 2.1.1How to unpack







#### 2.1.2Packing list

No.	Photograph	Item	Q'ty(EA)
1.		Press Station	1
2.		Digital Printer	1
3.		Power Cable	2
4.		USB Cable	1
5.		Ethernet Cable (Direct Cable)	1





*※ The actual product may differ from the image.* 

#### 2.2 Installation

#### 2.2.1Connection between the printer and the press station









#### 2.2.2 Sensor setup

2.2.2.1Black mark sensor setup



- ① When the button is given a long, two-second press the LED flickers.
- ② Press the button once on the black mark and once on the white paper as shown in the photograph, then the setting of the sensor is completed.



③ To check whether the setting is correctlycompleted, move the paper forward and backward so that the black mark can be sensed.

#### 2.2.2.2 Gap sensor setup



- ① Press the gap sensor on the part of the paper where there is no gap.
- ② When the LED of the gap sensor flickers, press the button once on the part where there is no gap.
- ③ After putting the gap sensor over the part of the paper where there is a gap, press the button once.
- ④ To check whether the setting is correctly completed, move the paper forward and backward so that the black mark can be sensed.



At this time, if the LED light of the sensor comes on above the black mark or a gap, it means that the setting has been normally completed, which can be also checked by the MARK LED light on the panel at the front of the equipment.



#### 2.2.3 IP addresssetup











## onutron

#### 2.3 S/W installation

2.3.1 Printer driver installation

#### 2.3.1.1 Installation using USB port

![](_page_27_Picture_3.jpeg)

![](_page_28_Picture_0.jpeg)

![](_page_29_Picture_0.jpeg)

	Add Printer	
12.	Printer Sharing         If you want to share this printer, you must provide a share name. You can use the suggested name or type a new one. The share name will be visible to other network users.         If you want to share this printer         If you are this printer so that others on your network can find and use it         Share name:         Location:         Comment:	After selecting [Do not share this printer], click [Next].
13.	Add Printer Vou've successfully added anytron To check if your printer is working properly, or to see troubleshooting information for the printer, print a text page. Print a text page Fint a text page Fints Cancel	After selecting [Set as the Default Printer], click [Print a Test Page] for checking the connection. (There should be A4 paper in the tray 1.)
14.	anytron A test page has been sent to your printer This test page briefly demonstrates the printer's ability to print graphics and text, and it provides technical information about the printer. Use the printer troubleshooter if the test page does not print correctly. Get help with printing Close	The installation will be completed when pressing [Close] and [End] after checking the printed test page.

#### 2.3.1.2 Installation using LAN port

![](_page_31_Figure_1.jpeg)

![](_page_32_Picture_0.jpeg)

![](_page_33_Picture_0.jpeg)

12.	Compared Add Printer  Type a printer name  Printer name  Printer name  Intro printer will be installed with the OKI WEB61 driver.  Next Cancel	After entering printer name, click [Next].
13.	Add Printer	After selecting [Do not share this printer], click [Next].
14.	Add Printer  Vou've successfully added anytron  To check if your printer is working properly, or to see troubleshooting information for the printer, print a test page  Print a test page  Entish Cancel	After selecting [Set as the Default Printer], click [Print a Test Page] to check the connection. (There should be A4 paper in the tray 1.)
15.	anytron A test page has been sent to your printer This test page briefly demonstrates the printer's ability to print graphics and text, and it provides technical information about the printer. Use the printer troubleshooter if the test page does not print correctly. Get help with printing Close	The installation will be completed after when pressing [Close] and [End], and after checking the printed test page.

2.3.1.3Configuration of the roll (continuous paper) driver

1. After right clicking the Anytron driver in the [Devices and Printers], click [Set as default printer] in See what's printingdrop down menu.

	Add a device Add a p	inter See what's printing	Print server properties	Remove device		
	Devices (5)					
	BITEKRND-PC Cr	uzer Blade SyncMaster	USB Composite	USB Optical		
	Printers and Faxes (1)	2)	Device	Mouse		
	- Thinkers and Taxes (1.	-)	2	~		
	209 GTM					
	DirectCut on Direct 192.168.0.182	Cut on LAN	✓         Set as default printer           Printing preferences         Printer properties			
			Create shortcut Troubleshoot			
	OKI C9600(PCL) OKI	C9600(PS) anygrim	Remove device			
			Properties			
the message box tha	at pops up, click	[OK] to change	the paper sou	rce.		
any-001 Printing Preferences		×				
Setup Job Options Color						
Media Size: A4 210 x 297mm	•					
A3 297 x 420mm Source: A4 210 x 297mm		7				
A5 148 x 210mm Weight: A6 105 x 148mm B4 257 x 364mm	-					
B5 182 x 257mm Letter 8.5 x 11in						
Einishing Legal 13.5 x 14in Einishing Legal 13.5 x 13.5in Country Legal 13 8.5 x 13in						
Executive 7.25 x 10.5in Super Long Paper						
2-Sided FCOM-10 4.125 x 9.5in		Warning	- internal lines			×
(None) COM-9 3.8/5 x 8.8/5in Monarch 3.875 x 7.5in 3 x 5in			This Paper Size settin	a conflicts with other	r setting	
Default 5x 7in			It is necessary to cha	nge setting as follows	s to avoid the cor	nflict.
Add	A4 210 x 297mm					
		Raper St	ource	Automatically Select	New Setting	Trav
		i aper su		, atomatically beleat	mail r urpose	, nuy
	About Defa	ault				
				(		
ОК	ancel Apply	Help				Cancel
#### Print size 1 Edit size X Super Long Paper Width: 210 [ 64.0 -215.9 ] 297 12.7 - 1320.8 ] Length: [ Unit: Footer Margin: 0.0 🔘 mm Options () inch Enable Cut Start: 50.50 Adjust Mode 0.00 Cut: Normal -OK Cancel Default

## 4. Enter a desired printing edit size into the Width, Length. (Ex- A4 size print: 210x297)

5. Footer Margin is a space between printed units, Start is a beginning point of images, and Cut is a cutting point after finishing all works.



<u>W</u> idth:	210	] [	64.0 -	215.9 ]
Length:	297	] [	12.7 -	1320.8 ]
Eooter Margin: Options	0.0	<u>U</u> ni ©	t: mm inch	
<u>Start:</u>	0	Adj	ust Mode	
<u>C</u> ut:	0.00	No	mal	•

- 6. Set the Adjust Mode as the No Adjustment when using regular roll media.
- 7. Set the Weight as the Labels 2 when using regular matt papers(art papers).

			Size: Super Long Paper
			Source: Multi Purpose Tray
			Weight: Printer Setting
Sugar Lana Dan		X_	Medium Light Einishing Medium
Super Long Pap	er		Standard Ultra Heavy1 Ultra Heavy2
<u>W</u> idth:	210	[ 64.0 - 215.9 ]	Utra Heavy3 Labels1
Length:	297	[ 12.7 - 1320.8 ]	(None) Films User Type 1
Footer Margin	0.0	Unit:	Driver Se User Type 2 User Type 3 Untitled User Type 4
Options	0.0	() mm	User Type 5 Add <u>Remove</u> Super Long Paper
Enable Cut		) inch	
<u>S</u> tart:	0	Adjust Mode	
<u>C</u> ut:	0.00	Normal 👻	
		Normal	About Default

8.Description of the Printing Mode

- There are three printing modes for the Any-001 as show the photograph.

<u>W</u> idth:	210	[ 64.0 - 215.9 ]
<u>L</u> ength:	297	[ 12.7 - 1320.8 ]
<u>F</u> ooter Margin: Options	0.0	Unit: mm
Enable Cut		) inch
<u>S</u> tart:	0	Adjust Mode
<u>C</u> ut:	0.00	Normal
		Normal

Adjust Mode	Sensing	Description		
Normal	0	Print continuously after sensing the black mark once at the beginning		
No Adjustment	X	Print continuously without using the sensor (Default)		
Adjustable	Ο	Print consecutively by sensing every image unit's black mark continuously Mode to support pre-cut papers (A value for <b>in how many intervals of black marks the location</b> <b>should be adjusted</b> varies according to the label size.)		

9. Adjustable Mode / Multiple of printing according to Image Length



- Multiples of images to be printed in Any-001 vary according to label size.For example, Length 100mm image is printed as multiples of five.Thus, 10(5\*2) images are printed if you enter the number of output as '9'. This is equally applied in Adjustable mode. When printing 100mm image, adjust location at every 5<sup>th</sup>sensing.

# **3.Maintenance and Troubleshooting**

- 3.1 WEB61 Troubleshooting
- 3.1.1 Occurrence of paper jam
  - Phenomenon: A Paper Jam message is displayed on the LCD window.

준비 전고 전고 I I I I I I I I I I I I I I I I I I I	
Cause	
D The paper is stuck in the printer.	
A problem whichoccursbecause the paper is too close to the printer paper inlet.	

- Solution
  - ① Open the top cover by pressing the button on the top part of the printer, and then remove the remaining paper.



② Close the top cover.

#### 3.1.2 Data transmission failure

Phenomenon:The phenomenon wherein, though a printing order has been sent by the PC, no printing has been done by the printer.

#### Cause

- 1 The printer is set to offline;
- 2 The printer is connected to the wrong port, or
- ③ An external cause (a defect in the LAN cable or in the USB cable, or a defectiverouter).

#### Solution

1 Check whether the printer is set to online.



② Check whether the port is normally set.*\*How to check the printer port:* 





- 3 Check the state of the external factors.
  - LAN cable, USB cable and router (in the case where a LAN cable is used for the connection), etc.

#### 3.1.3 Paper feeding failure

- Problem
  - ① The printer does not feed the printer;
  - ② The paper was not fed as the feeding unit did not operate after a print order was sent.

Cause

- ① A printer defect (paper feeding part, roller, etc.);
- ② A defect of Station Feeding Unit; or
- 3 A defect of the interface cable between the printer and the station.

Solution

- ① If the printer is incapable of feeding the paper, please contact our After-sale Service Center.
- ② If the feeding unit does not operate after sending a print order, please check 3.2.5 Feeding unit malfunction menu below.
- ③ If there is no problem with the Feeding Unit, please check the interface cable between the printer and the station.
  - ※ For details, refer to 6. Printer ↔ Station Interfacemenu.

## 3.1.4 Error code table

Message	Cause	Error details		Action to take
Restart the printer. 002: Error~ 007: Error 009: Error~ 011: Error	CPUException	Does the error display recur?	Yes No	If the RAM DIMM installed, remov eit and turn off thepower of the printerand back on. Replace the CU/PUboard. Re-install the RAMDIMM. Replace the RAMDIMM.
Service call 020: Error	CU ROMHash Check Error	Does the error display recur?	Yes	Turn off the power of the printer andback on. Replace the CU/PUboard.
Service call 030: Error	CU RAMCheck Error	Does the error display recur?	Yes	Turn off the power of the printer andback on. Replace the CU/PUboard.
Service call 031: Error	CU OptionalRAM CheckError	Is installation of the RAM DIMM normal? Does the printer recover from the error when the RAM DIMM is replaced?	No Yes No	Re-install the RAMDIMM. Replace the RAMDIMM. Replace the CU/PUboard.
Service call 040: Error	CU EEPROMError	Does the error display recur?	Yes	Turn off the power of the printer andback on.
Service call 041: Error	CU FlashError. Flash ROMError on TheCU board	Does the error display recur?	Yes	Turn off the powerof the printer andback on. Replace the CU/PUboard.
Service call 042: Error~ 043: Error 045: Error	Flash FileSystem Erro r	Failed to access to the Flash ROM that is directly soldered to the CU/PU board.		Turn off the powerof the printer andback on. Replace the CU/PUboard.
Restart the printer. 072: Error. Xx	Engine I/FError. I/F errorbetween PU and CU	Is the CU/PU assembly installed normally?	No Yes	Re-install the CU/PU assemblynormally.
		Does the printer recover from the error when the CU/PU board is replaced?	No	Replace the CU/PU board.
Restart the printer. 073: Error xxxxxxx	Video Error Error is detected whenexpanding the video data. (Illegal data is received.)	Is the CU/PU assembly installed normally? Does this error recur?	No Yes Yes	Re-install theCU/PU assembly normally. Change the PCwith another PC having highspecifications, or alternately reduceresolution powe rand execute the print again.
				Replace the CU/PU board. Replace theinterface cable.
		Is the CU/PU assembly installed normally? Does this error recur? Does the error depend on print	No Yes Yes No	Re-install the PCprinter driver. Re-install theCU/PU assembly normally. Execute the printagain. Print any otherdata. Replace the CU/PU board.
Restart the printer. 074: Error xxxxxxx	Video Error Error isdetected Whenexpanding the	data? Is the CU/PU assembly installed normally?	Yes No Yes	Send the data to design division andrequest analysis of the data. Re-install theCU/PU assembly normally. Replace the CU/PU board.
Service call 081: Error	video data. Parameterintegrity check	Either EEPROM or Flash ROM cannot read/write normally.		Turn the printerpower off and thenback on. If the error symptom remains unchanged, replace the CU/PU

				board.
Service call 104: Error	Read/writeerror of the engine EEPROM is detected	Does this error recur?	Yes	Turn off the powerof the printer andback on.
Our incorell	Eer Normadeleeled.			Replace the CU/PU board.
106: Error	Engine control logic has an error.	Does this error recur?	Yes	andback on. Replace the CU/PU board.
Service call 111: Error	Duplex unit for other model isdetected.	Is the Duplex unit for that specific model installed?	No	Install the correctduplex unit.
Service call 112: Error	2nd tray forother model isdetected.	Is the 2nd tray for that specific model installed?	No	Install the correct2nd tray.
Service call 113: Error	3rd tray forother model isdetected.	Is the 3rd tray for that specific model installed?	No	Install the correct3rd tray.
Service call	High voltagepower	Is the cable connecting the CU/	No	Re-connect themnormally.
121: Error	supplyinterface error.	PU board to the high voltage unit connected normally? Have you checked defective	Yes	Check for defectivecontact of the highvoltage system.
		contact of contactor points?	No	Replace the highvoltage power supply.
Service call 122: Error	Low voltagepower supplyfan error	Is the fan (bottom right of the front) of the low voltage power	No	Check for sureconnection of the fan connector.
		supply block working?	Yes	Replace the CU/PU board.
		Is the fan connector connected normally?	No	Replace the fanmotor.
			Yes	
Service call 123: Error	Environment humidity is abnormal./Humidity sensor is notconnecte d.	Does this error recur?	Yes	Turn off the powerof the printer andback on. Replace the control
Sonvice cell	Environment			Turp off the power of the printer
124: Error	temperature is abnormal.	Does this error recur?	Yes	andback on. Replace the controlpanel board.
Service call 126: Error	Dewcondensation of the printer is detected.	This error can easily occur when a printer is brought in to indoor from outdoor. Leave the printer for 2 hours or half day under room temperature, and turn on the power again. Does this error recur?	Yes	After leaving aprinter under room temperature, turnon the power again. Replace the control panel board.
Service call	Fuser exhaustfan erro	Is the fan connector connected	No	Re-connect itnormally.
127: Error	r	normally?	Yes	Replace the fanmotor.
		Does this error recur?	No	Replace the CU/PU board.
Service call 128: Error	ID cooling fanerror	Is the fan connector connected normally?	No	Re-connect itnormally.
		Does this error recur?	Yes	Replace the fanmotor.
Sanvias coll	LED booddatastian	In the LED hand connected	No	Replace the CU/PU board.
131: Error~ 134: Error	Error (131=Y,132=M, 133=C 134=K)	normally?	Yes	After checking fuseTurn on the po weragain
	100-0,104-10	Is the LED HEAD fuse brown?	Yes	For the method of checking the LE
		Does this error recur?	No Yes	b head unit fuse,refer to section 7.6.
Service call	ID Up/Downposition	Is the ID unit caught by anything	Yes	Re-install the IDunit.
142: Error	Detectionerror	when it is removed and re- installed?	No	Turn on the poweragain. Replace the IDUP/DOWN sensor.

		Does this error recur?	Yes	
Service call 150: Error~ 153: Error	The ID unitfuse has blown out. (150=Y,151=M, 152=C,153=K)	Is the ID unit installed normally? Does this error recur? Does the printer recover from the error when the PU/PRZ board is replaced?	No Yes Yes No	Re-install the IDunit. Turn on the poweragain. After checkingfor the sure connection of thecable between PRZ board andCU/PU board, replace the PRZboard. Replace the CU/PU board.
Service call 154: Error	The belt unitfuse has blown out.	Is the belt unit connected normally?	No Yes	Re-install the beltunit. Turn on the poweragain.
		Does this error recur?	Yes	After checkingfor the sure cable connection,replace the CU/PU board.
Service call 155: Error	The fuserunit fuse hasblown out.	Is the fuser unit installed normally?	No	After cleaningthe connecting connector of thefuser unit, re-installthe fuser unit.
		Does this error recur?	Yes	Turn on the poweragain. After checkingfor the sure cable connection,
			res	Replace the CU/PU board.
Service call	Toner sensor	Is the toner cartridge installed?	No	Install the tonercartridge.
163: Error	error. (160=Y,161=M, 162=C,163=K)	Is the lock lever of the toner set?	No	Rotate the locklever of toner to the lock position. Turn on the poweragain.
	Thiserror does not occur withthe defa ultsettings.	Does this error recur?	Yes	Replace the tonersensor assembly.
Service call 167: Error	Thermistor Slope Error	Is the error message displayed? Does this error recur?	Yes	Turn on the poweragain. After leaving aprinter for 30 minutes, turn onthe power again.
Service call 168: Error Note)	Compensation Thermistor Error	Is the error message displayed? Does this error recur?	Yes	Turn on the poweragain. After leaving aprinter for 30 minutes, turn onthe power again.
Service call 170: Error 171: Error Note)	Short-circuit or open-circuit of fuser thermistor is detected.	Does this error recur?	Yes	Turn on the poweragain. Replace the fuserunit.
Service call 172: Error 173: Error	The fuserthermistor has detected	Does this error recur?	Yes	Turn on the poweragain.
TTO. EITOF	temperature (hightemperature or lowtemperature.)	Does this error recur?	Yes	Replace the fuserunit. Replace the lowvoltage power supply unit.
Service call 174: Error	The backuproller thermistor isdetected of its short-circuit. (At hightemperature)	Does this error recur?	Yes	Turn on the poweragain. Replace the fuserunit.
Service call 175: Error Note)	The backuproller Thermistoris detected of its open-circuit. (At lowtemperature)	Does this error recur?	Yes	Turn on the poweragain. Replace the fuserunit.
Service call 176: Error 177: Error	The backuproller Thermistorhas detecte dan abnormal	Does this error recur?	Yes	Turn on the poweragain.
	temperature (hightemperature or lowtemperature.)	Does this error recur?	Yes	Replace the lowvoltage power supply unit.
Service call 181: Error 182: Error	Option unitl/F error (181=DuplexUnit,	Does this error recur?	Yes	Turn on the poweragain.
183: Error	182=2nd Tray, 183=3rd Tray)	Does this error recur?	Yes	Check for sureconnection of the connectors. Replace the optionunit.

Re-start the printer. 190: Error	Systemmemory overflow	Does this error recur?	Yes	Turn on the poweragain. Increase the add-on RAM DIMM.
Service call 200: Error~ 202: Error	PU Firmware Download Error	Error has occurred during re- writing of the PU firmware.		After turningon the power again, performdownloading again. (This errordoes not occur during the normaloperation, becausethis processing is not carried out.)
Re-start the printer. 209: Download Error	Custom Media Type table downloading has failed.	Custom Media Type table downloading has failed.		After turning on the power again, perform downloading again. (This error does not occur during the normal operation because this processing is not carried out.)
Re-start the printer. 203: Error 204: Error 207: Error 208: Error 214: Error FOC: Error FFF: Error	CU programerror (The errornumbers 203 through214 do not occur underthe normaloperation.)	Illegal processing is executed by the CU program.		After turning offthe power, check for the normalconnection CU/PU board. Then, turnon the power again.
Service call	RFID Reader	RFID read device error	Yes	Check for normalconnection
230: Error	not Installed	Does this error recur?	Yes	of theRFID R/W board. Replace the RFIDR/W. Replace theCU/PU board.
Service call 231: Error	RFID readerI/F error	Interface error with the RFID reader is detected. 01: Communication error between the RFID reader and the engine circuit boards.		01: Same as theerror no. 230
		<ul> <li>02: Error in the wireless circuit of the RFID reader</li> <li>03: Communication error between the RFID reader and the toner cartridge.</li> <li>04: Error is detected in the RFID toner cartridge. (In more than 4)</li> </ul>		<ul> <li>02: Replace theRFID R/W board.</li> <li>03: Check fornormal connection of the antenna cable.</li> <li>04: Check if quantity of the toner cartridge is correct or not.</li> </ul>
Re-start the printer.	Abnormaltemperature	Is the cable from belt thermistor	No	Re-connect thecables normally.
901: Error~ 904: Error	901: Short-circuit	connected normally?	Yes	Turn on the poweragain.
Note)	902: Open-circuit 903: Hightemperature 904: Lowtemperature	Does this error recur?	No	Replace the beltthermistsor.
Re-start the printer. 918: Error	DuplexFAN Alarm Caution	Fan error inside the Duplex unit.	Yes	Check if the Duplexunit is Installednormally or not. Check if the fansare installed
		power is turned off once and		Replace the fan
		back on?	Yes	
		Does the error recur when the power is turned off once and back on?		
Re-start the printer. 923: Error	Black imagedrum lock error	The K ID does not rotate normally.	Yes	Check if the K ID is installed normallyor not. Replace the K IDunit.
		Does the error display recur when the power is turned off once and back on?	Yes	Replace the K IDmotor.

Service call 928: Error	Fuser motorlock error	Fuser does not rotate normally. Does this error recur?	Yes Yes	Check if the fuser is installed normally or not. Replace the fuser. Replace the fuser motor.
Service call 980: Error	Mediawrapped around thefuser error	Media has wrapped around the fuser.		Turn off the power. Replace the fuser.
Service call 982: Error	4th traydetection error	The 4th tray is installed.		Remove the 4 <sup>th</sup> tray.
Service call 983: Error	Error dueto detection of the tonercartridges of the samecolor	Two or more toner cartridges of the same color are detected.		Install the cartridgeof the specifiedin the specified position.
Service call 984: Error~ 987: Error	Detectionof an Unsupportedtoner cartridge	An unsupported toner cartridge has been detected. 984:Black toner cartridge position 985:Yellow toner cartridge position 986:Magenta toner cartridge position 987:Cyan toner cartridge position		Replace it with anappropriate tone rcartridge.
WDT ERROR R14=xxxxxxxx	PU firmwarerunaway	Does this error recur?	Yes	Turn on the poweragain. Replace the CU/PU board.
COMMUNICATION ERROR	I/F errorbetween PU and CU	Does this error recur?	Yes	Replace the CU/PU board.
ASIC ERROR	DCON accesserror	Does this error recur?	Yes	Replace the CU/PU board.
U	IL			



### 3.2 Station Troubleshooting

### 3.2.1 Power supply problem

Issue:The problem wherein the power LED fails to light and the press station does not operate when the power switch is turned on.



**※ SMPS Output Voltage: DC24V** 

#### 3.2.2 Unwinder/Rewindermalfunction

Issue:Malfunction of the Unwinder or Rewinder when the power is turned on or the media is printed.





<Figure 1> Potentiometer Connection<Figure 2>Unwinder(Rewinder) Motor

Belt Installation

### 3.2.3 Left and right tension bar malfunction

Issue:The tension bar does not work resulting in unwinder (rewinder) failure.

\*Be sure to turn off the power before replacing the Part.



#### 3.2.4 Cutter malfunction





Reference: <Figure 3>Refer to the circuit diagram of the cutter part.



<Figure 3> Cutter part circuit diagram

### 3.2.5 Feeding unit malfunction





Reference: <Figure 4>Refer to the Feeder Part Circuit Diagram.



<Figure 4> Feeder Part Circuit Diagram

### 3.2.6 Sensor malfunction



### 3.2.7 Front panel malfunction

Issue: The front panel switch does not work.





## 4. Disassembly and Replacement

4.1 Disassembly and Assembly of the Unwinderand theRewinder

※ Please be sure that turn off the press station power and printer power before starting the operation.
 If the machineturns on during the operation, the precise parts which are Control Board, Fuse,
 Potentiometer and Motor get damaged.

4.1.1 How to disassemble the unwinder













4.1.2 How to assemble the unwinder

The unwinder can be assembled by following the procedures of **4.1.1 How to disassemble the unwinder**in reverse order.

#### 4.1.3 How to disassemble the rewinder

The rewinder is assembled in the same way as the unwinder.

Accordingly, it can be disassembled in the same way as 4.1.1How to disassemble the unwinder.

4.1.4 How to assemble the rewinder

The rewinder is assembled in the same way as the unwinder.

Accordingly, it can be assembled referring to **4.1.1How to disassemble the unwinder**.

### 4.2Disassembly and Assembly of the Potentiometer

※ Please be sure that turn off the press station power and printer power before starting the operation.
 If the machineturns on during the operation, the precise parts which are Control Board, Fuse,
 Potentiometer and Motor get damaged.

### 4.2.1 How to disassemble the potentiometer











The potentiometer can be assembled by taking the procedures of **4.2.1 How to disassemble the potentiometer**in reverse order.

4.2.3 How to set up the potentiometer

One potentiometer is installed on the left and right tension bar in order to control the rotating speed of the unwinder and rewinder respectively. The method to set up the potentiometer is as follows:





4.3 Assembly and Disassembly of the Front Panel

※ Please be sure that turn off the press station power and printer power before starting the operation.
 If the machineturns on during the operation, the precise parts which are Control Board, Fuse,
 Potentiometer and Motor get damaged.

4.3.1 How to disassemble the front panel




The photograph shows the panel assembly andthe membrane panel separated from each other.

4.3.2 How to assemble the front panel

The front panel can be assembled by following the procedures of **4.3.1 How to disassemble the front panel** in reverse order.



# 4.4 Disassembly and Assembly of the Feeding Unit

Please be sure that turn off the press station power and printer power before starting the operation.
 If the machineturns on during the operation, the precise parts which are Control Board, Fuse,
 Potentiometer and Motor get damaged.

# 1. Whenthe front panel is removed referring to 4.3.1 How to disassemble the front panel, only the part shown in the figure is left. Unfasten the 4 screws using a hexagonal wrench (hexagonal wrench: 2.5", 5"). 2. 2.

# 4.4.1 How to disassemble the feeding unit









The figure shows the feeding rollerafter it is removed.

4.4.2 How to assemble the feeding unit

The feeding unit can be assembled by following the procedures of **4.4.1 How to disassemble the feeding unit** in reverse order.



# 4.5 Disassembly and Assembly of the Cutter

※ Please be sure that turn off the press station power and printer power before starting the operation.
 If the machineturns on during the operation, the precise parts which are Control Board, Fuse,
 Potentiometer and Motor get damaged.



### 4.5.1 How to disassemble the cutter







4.5.2 How to assemble the cutter

The cutter can be assembled by following the procedures of **4.5.1 How to disassemble the cutter** in reverse order.

4.6 How to Replace the Motors

※ Please be sure that turn off the press station power and printer power before starting the operation.
 If the machineturns on during the operation, the precise parts which are Control Board, Fuse,
 Potentiometer and Motor get damaged.

4.6.1 How to replace the unwindermotor



To remove the top cover and rear cover, follow the same procedure as in **4.1.1 How to disassemble the unwinderfrom no.1 to no.6** 





4.6.2How to replace the rewindermotor

The rewindermotor is assembled in the same way as that of theunwindermotor.

Accordingly, the rewinder can be disassembled in the same way as **4.6.1 How to disassemble the unwindermotor.** 

# 4.6.3 How to replace the feed motor





# 4.6.4 How to replace the cutter motor





Disassembly of thecutter motor is completed.

# onytron

# 4.7 How to Replace the Sensors

※ Please be sure that turn off the press station power and printer power before starting the operation.
 If the machineturns on during the operation, the precise parts which are Control Board, Fuse,
 Potentiometer and Motor get damaged.

# 4.7.1 How to replace the black mark sensor





### 4.7.2 How to replace the gap sensor





Disassembly of the gap sensor is completed.

# onytron

4.8 How to Replace the Fuses

※ Please be sure that turn off the press station power and printer power before starting the operation.
If the machineturnson during the operation, the precise parts which are Control Board, Fuse,
Potentiometer and Motor get damaged.

4.8.1 How to replace the fuse of the power part





The fuse can be replaced in the way shown above (Fuse: 3A).

# 4.8.2 How to replace the control PBA fuse



# 4.9 How to Replace the SMPS

※ Please be sure that turn off the press station power and printer power before starting the operation.If the machineturns on during the operation, the precise parts which are Control Board, Fuse,Potentiometer and Motor get damaged.





# 5. Printer ↔ Press Station Interface

5.1 Interface connect signal

Pin-No	Signal name	Function	Input/output	Remarks
J1	CUT	Cut direction signal	In	
			(Printer⇒press station)	
J2	M-DETECT	Cue Mark derection / cut end signal	Out	
			(press station⇒ Printer)	
J3	FEED	Feed direction signal	In	
			(Printer⇒press station)	
J4	ERR-N	Error indication signal from option unit to	Out	N.A
		printer	(press station⇒ Printer)	
J5	0VL	Logic GND		
J6	24V	DC +24V		N.A
J7	MODE	Signal to notify option unit of information or	In	N.A
	(Reserved)	status from printer	(Printer⇒press station)	
J8	5V	DC +5V		
J9	NC	-		N.A
J10	0VL	Logic GND		N.A
J11	0VP	Power GND		N.A
J12	24V	DC+24V		N.A

5.2 DC Power supply provided from printer unit

Specifications of DC power supply provide from printer unit are below;

+5V DC power is supplied from J8 Pin.

Max current:0.2A

Voltage fluctuation range: 5V±5%

Return of +5V must connect to J5 and J10 as logic ground.

+24V DC power is supplied from J6 Pin and J12 Pin.

Max current:0.9A

Voltage fluctuation range: 24V±4V

Return of +24V must connect to J11 as power ground.

# 5.3 Purpose of Signal Lines

# (1)M-DETECT

This is an output signal line from the option unit to printer. This indicates that the unit detects CUE mark(particular position of fan-fold paper), or the unit has finished cutting paper.

# (2) CUT

This is and input signal line from the printer to the option unit. This is used to direct the option unit to cut paper.

### (3) FEED

This is an input signal line from the option unit. This is used to direct the option unit to feed paper.

### (4) ERR-N

This is an output signal line from the option unit the printer. This is used to notify the printer of an error condition (jam,no paper,etc.).

### (5) MODE (Reserved)

This is an input signal line from the printer to the option unit. This is used to notify the option unit of some information or status from the printer. Actual purpose of this signal is to be determined.



# 6. Parts List

Assy	Part Name	SCREW	Parts no	Q'ty
			01010000	
	Bobbin Body		01010100	1
	Bobbin Shaft		01010200	1
	Bobbin Shaft Front Sleeve		01010300	1
	Bobbin Shaft Rear Sleeve		01010400	1
	Bobbin Front Cap		01010500	1
	Bobbin Rear Cap		01010600	1
	Bobbin Front Washer		01010700	1
	Bobbin Front Wedge		01010800	3
	Bobbin Middle Wedge		01010900	3
	Bobbin Rear Wedge		01011000	3
	Bobbin Rear Align		01011100	1
	Cover_Unwinder			
	Bobbin Bearing Housing		01011200	1
	Bobbin Bearing Unit_6202ZZNR		01011300	1
Bobbin	Nobe_NKSM12-30		01011400	1
	Bobbin Shaft Pulley_Unwinder		01011500	1
	Unwinder DC Geared Motor		01011600	1
	Unwinder Motor Pulley		01011700	1
	Unwinder Motor Belt		01011800	1
		SET SCREW M5x5		8
		SET SCREW M5x10		2
		SHCS M5x12		1
		STWN15		2
		SHCS M4x12		8
		SFHS M5x15		6
		SHCS M3x6		6
		SFHS M5x10		2
		M5 Spring Washer		2
		M5 Flat Washer		2
		SET SCREW M4x6		2
			01020000	
	Guide Bar		01020100	1
	Guide Bar Set Collar		01020200	2
Guide Roller	Guide Bar Slide Stopper		01020300	2
	AI Frame_HFS6-3060-137-SC		01020400	1
		SHCS M5x15		2
		SHCS M5x10		6

		Plastic screw_PPSB4x20		2
			01030000	
	Sensor Guide Bar		01030100	1
	Sensor Guide Bar Set Collar		01030200	2
	BM Sensor		01030300	1
	BM Sensor Holder		01030400	1
	BM Sensor Bracket		01030500	1
	BM Sensor Bracket Ring		01030600	1
	BM Sensor Bracket Washer		01030700	1
Sensor Unit	СНОВ06-20		01030800	1
	Gap Sensor		01030900	1
	Gap Sensor Bracket		01031000	1
		SHCS M5x10		6
		SHCS M5x15		2
		SHCS M4x25		2
		M4 Spring Washer		2
		M4 Flat Washer		2
		HEX NUT M4x08d		1
			01040000	
	TensionRoller Roller Shaft		01040100	1
	TensionRoller Roller Sleeve		01040200	1
	TensionRoller Hinge Shaft		01040300	1
	TensionRoller Roller Crank Arm		01040400	1
	TensionRoller Roller Tension Arm		01040500	1
	TensionRoller Shaft Bearing-		01040600	2
Tension bar	F688AZZ			
	Tension Spring Bar_Top		01040700	1
	Tension Spring Bar_Bottom		01040800	1
		STWN08		2
		SHCS M5x20		1
		SFHS M4x10		2
		SET SCREW M4x6		4
		HEX NUT M4x08d		1
			01050000	
	Potionmeter Unit		01050100	1
	Potionmeter Mounting Bracket		01050200	1
Potentiometer	Potionmeter Sleeve		01050300	1
i otentiometer		SET SCREW M3x5		2
		SHCS M3x6		2
		M3 Spring Washer		2
		M3 Flat Washer		2

			02010000	
	Cutter Cover		02010100	1
	Cutter Guide_Front Top		02010200	2
	Cutter Guide_Front Bottom		02010300	1
	Cutter Guide_Rear Bottom		02010400	1
	Cutter		02010500	1
	Cutter DC Geared Motor		02010600	1
	AI Frame_HFS6-3060-410-TPW		02010700	1
Castler	AI Bracket Slot_HBLFSNK6-SET		02010800	2
Cutter	HNTT6-3		02010900	1
	HNTT6-4		02011000	10
	Cutter Frame Block		02011100	1
		SHCS M4x6		12
		M4 Spring Washer		12
		M4 Flat Washer		12
		SFHS M5x20		2
		SBHCS M8x15		5
		SHCS M8x18		2
			02020000	
	Paper Feed Roller		02020100	1
	Paper Pressure Roller		02020200	1
	Slide Square Shaft		02020300	1
	Slide Guide		02020400	4
	Slide Top		02020500	2
	Slide Bottom		02020600	2
	Slide Bearing		02020700	2
	Slide Cam Roller		02020800	2
	Slide CoilSpring WH8-20		02020900	4
			02021000	
Feeding unit	F688AZZ		02021100	4
	FixedGrip Lever		02021200	1
	Feeder Bracket		02021300	1
	Feed DC Geared Motor		02021400	1
	Feed Motor Bracket		02021500	1
	Feed Motor Pulley		02021600	1
	Feed Roller Pulley		02021700	1
	Feed Motor Belt		02021800	1
	Feed Roller Clutch Bushing		02021900	1
	Feed Roller Clutch Cap		02022000	1
	Tray Bottom		02022100	1
	Tray Guide		02022200	1

		STWN08		4
		SET SCREW M3x5		3
		SFHS M3x6		3
		SHCS M3x8		9
		M3 Spring Washer		1
		SHCS M4x10		4
		M4 Spring Washer		4
		M4 Flat Washer		4
			02030000	
	Panel Assembly		02030100	1
	Membrane Panel		02030200	1
Panel		SBHCS M4x6		4
		SFHS M4x20		4
		SBHCS M8x15		2
		SFHS M5x12		2
			03010000	
	Bobbin Body		03010100	1
	Bobbin Shaft		03010200	1
	Bobbin Shaft Front Sleeve		03010300	1
	Bobbin Shaft Rear Sleeve		03010400	1
Bobbin	Bobbin Front Cap		03010500	1
	Bobbin Rear Cap		03010600	1
	Bobbin Front Washer		03010700	1
	Bobbin Front Wedge		03010800	3
	Bobbin Middle Wedge		03010900	3
	Bobbin Rear Wedge		03011000	3
	Bobbin Front Align		03011100	1
	Cover_Rewinder			
	Bobbin Rear Align		03011200	
	Cover_Rewinder			
	Bobbin Bearing Housing		03011300	1
	Bobbin Bearing Unit_6202ZZNR		03011400	1
	Nobe_NKSM12-30		03011500	1
	Bobbin Shaft Pulley		03011600	1
	Rewinder DC Geared Motor		03011700	1
	Rewinder Motor Pulley_Rewinder		03011800	1
	Rewinder Motor Belt		03011900	1
		SET SCREW M5x5		8
		SET SCREW M5x10		2
		SET SCREW M4x6		2
		SHCS M5x12		1

		STWN15		2
		SHCS M4x12		8
		SFHS M5x15		6
		SHCS M3x6		6
		SFHS M5x10		2
		M5 Spring Washer		2
		M5 Flat Washer		2
			03020000	
	Guide Bar		03020100	1
	Guide Bar Set Collar		03020200	2
	Guide Bar Slide Stopper		03020300	2
Guide Roller	AI Frame_HFS6-3060-137-SC		03020400	1
		SHCS M5x15		2
		SHCS M5x10		6
		Plastic screw_PPSB4x20		2
			03030000	
	TensionRoller Roller Shaft		03030100	1
	TensionRoller Roller Sleeve		03030200	1
	TensionRoller Hinge Shaft		03030300	1
	TensionRoller Roller Crank Arm		03030400	1
	TensionRoller Roller Tension Arm		03030500	1
	TensionRoller Shaft Bearing-		03030600	2
Tension bar	F688AZZ			
	Tension Spring Bar_Top		03030700	1
	Tension Spring Bar_Bottom		03030800	1
		STWN08		2
		SHCS M5x20		1
		SFHS M4x10		2
		SET SCREW M4x6		4
		HEX NUT M4x08d		1
			03040000	
	Potionmeter Unit		03040100	1
	Potionmeter Mounting Bracket		03040200	1
Potentiometer	Potionmeter Sleeve		03040300	1
rotentionieter		SET SCREW M3x5		2
		SHCS M3x6		2
		M3 Spring Washer		2
		M3 Flat Washer		2
Control				
Control	Control Board		04010100	1
Power				

	DC Power Supply(24V)	04020100	1
	Power Block	04020200	1
	FUSE 3A	04020300	1



**VALLOY Incorporation** 

Room 403, Haeju Bldg., #639-5, Ilwon-dong, Kangnam-gu, Seoul, Korea 135-231 Tel : +82-2-6082-5022 Fax : +82-2-445-5441 e-mail : <u>support@valloy.net</u>

company URL : www.valloy.com

product URL : <u>www.topazrip.com</u>

www.facebook.com/valloyinc www.facebook.com/topazrip valloy.trustpass.alibaba.com www.linkedin.com/company/valloy-inc www.youtube.com/user/juankimvalloy www.twitter.com/Valloy\_Inc