

Decurl Unit
Machine Code: D741
Field Service Manual

V1.1

March 2015

Revision History

This is the Revision History for the Decurl Unit DU5030 service manual.

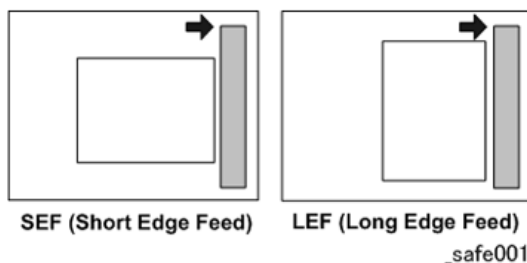
Version	Date	Changes
Ver. 1.1	31 Mar 2015	Text, Illustrations. In procedures the order of the text and illustrations has been reversed. For each step, the text description (action) is followed by the relevant illustration. The callouts [A], [B], [C] in text refer to the illustration below, not above.

Symbols, Abbreviations and Trademarks

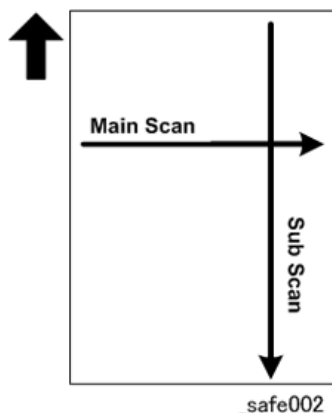
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver
	Shoulder screw

Symbol	What it means
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)* ¹
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)* ¹
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)* ¹
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)* ¹
ITB	Image Transfer Belt
JG	Junction Gate

Terms	Meaning
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)* ¹
LD	Laser Diode (Laser Unit)
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)* ¹
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)* ¹
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)* ¹
TRM	Trimmer Unit 5040 (D520)* ¹
VTU	Vertical Transport Unit
* ¹ Optional peripheral devices.	

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1. Replacement and Adjustment

Decurler Unit and Electrical Components

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Decurl Unit

Removal Procedure

CAUTION

- Most parts in the decurl unit have been precisely adjusted at the factory. Do not remove the parts for which replacement procedures are not mentioned in this manual. Otherwise, adjustment for the decurl unit requires special tools.

Only the following parts can be replaced without decurl unit adjustment.

- DDRB (Decurl Drive Board)
- Decurl Unit Motor
- Decurl Feed Motor
- Decurl Unit HP and Limit Sensor
- Decurl Unit Fan

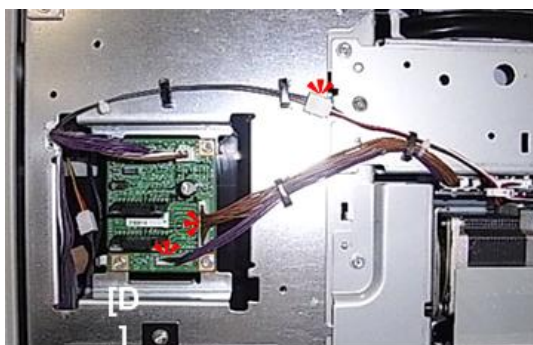
1. Remove the left cover of the main machine ( x7)



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2. Disconnect the DDRB ( x3).

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3. Remove lower bracket (🔧 x2).



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4. Remove the decurl unit (🔧 x4).

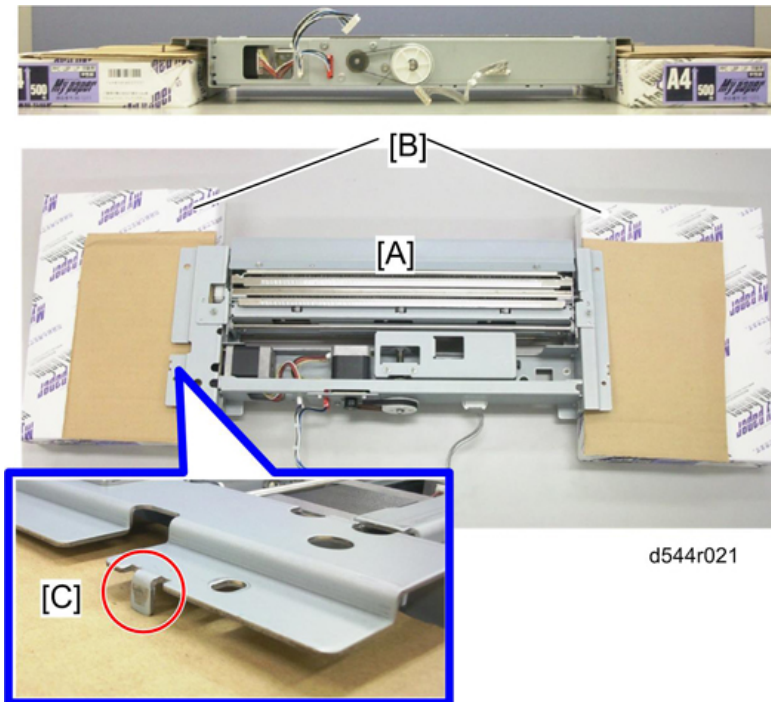


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Maintenance Position

Lay the Decurl Unit [A] on temporary supports [B].

- The entrance guide of the decurl unit must not touch the floor or any object. Otherwise, the mylars on the entrance gate may be bent or folded.
- Keep this position during maintenance.
- Place an object like a sheet of cardboard on the supports so that the frame projection [C] does not damage the supports.



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SP Settings After Installing a New Decurl Unit

1. Switch on the machine and enter the SP mode.
2. Refer to the accessory sheet and enter the settings for SP1927 and SP1928.

Decurl Vertical Path Default Adj	2010/05/13
S/N: K20SJ0050038%	
D -07-11	
 * 0 - 0 7 - 1 1 8 *	
SP1 927	0 mm
SP1 928	-1.1 mm

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3. Exit SP mode and turn off the main machine.

DDRB

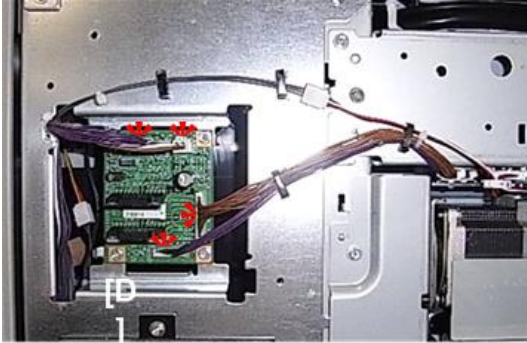
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1. Remove the left cover of the machine (⚙️ x7).



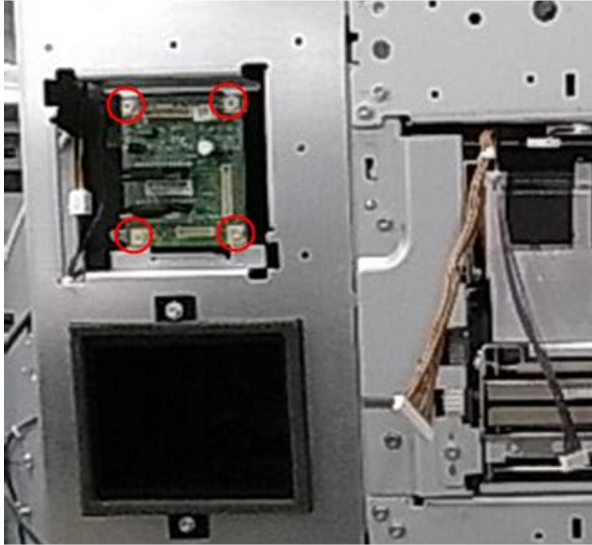
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2. Disconnect the DDRB (🔌 x4).



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3. Remove the DDRB (⚙️ x4).



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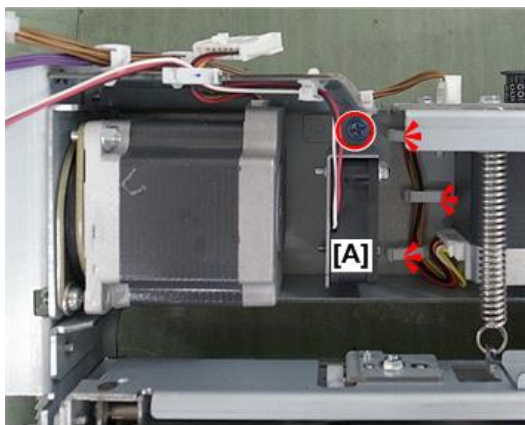
Decurl Unit Motor

1. Remove the decurl unit (page 9)
2. Remove decurl unit cover bracket (🔩 x2)



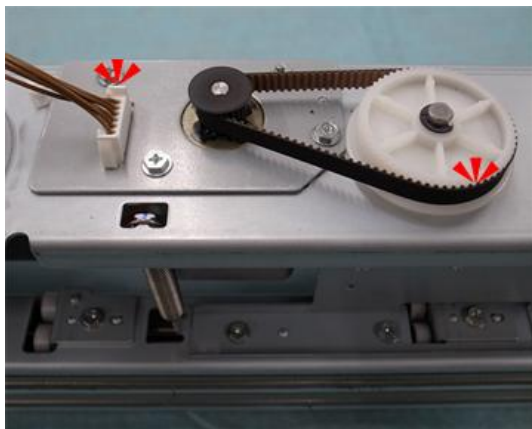
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3. Disconnect the fan bracket [A] and free the harness so you can move it to access the motor (🔩 x1, 🛠️ x3).



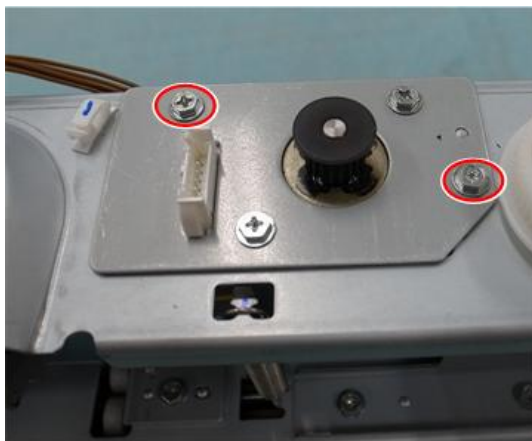
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4. Disconnect the connector and remove the belt (🔧 x1, 🌀 x1).



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5. Remove the motor bracket (with motor attached) (🔧 x2).



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6. Separate the motor and bracket (🔧 x1, 🔩 x2).



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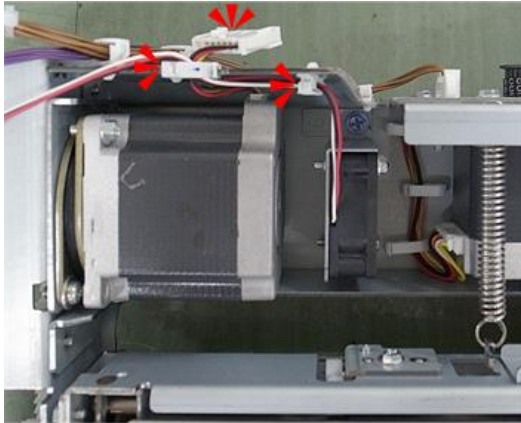
Decurl Unit Fan

1. Remove the decurl unit. (page 9)
2. Remove decurl unit cover bracket (🔩 x2)



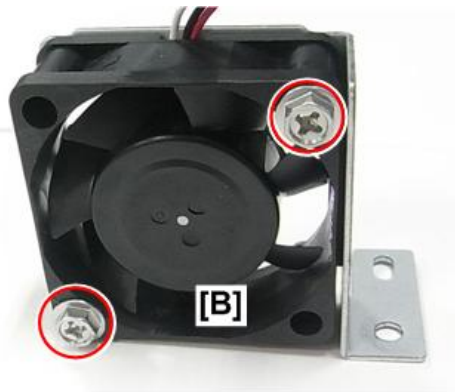
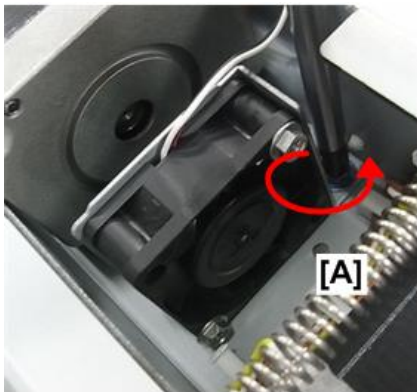
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3. Disconnect fan harness (🔧 x2, 🔧 x1).



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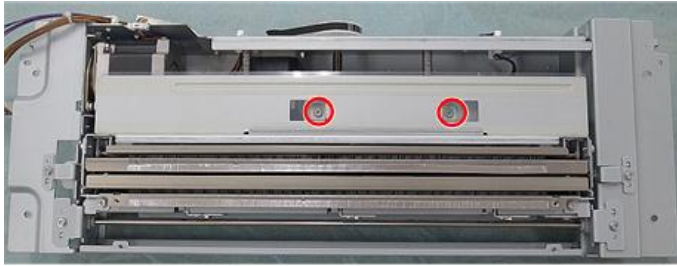
4. Remove the fan bracket [A] (with fan attached) ( x1).
5. Separate the fan [B] and bracket ( x2).



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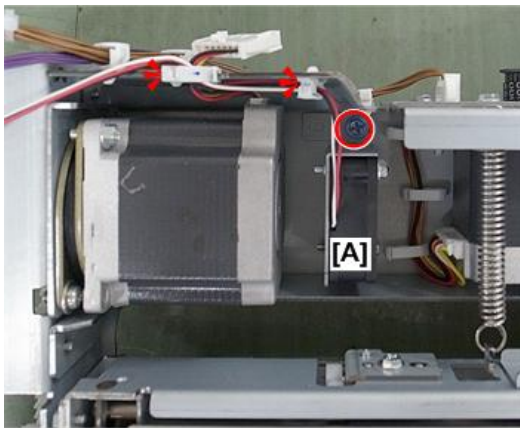
Decurl Feed Motor

1. Remove the decurl unit. (page 9)
2. Remove decurl unit cover bracket ( x2)



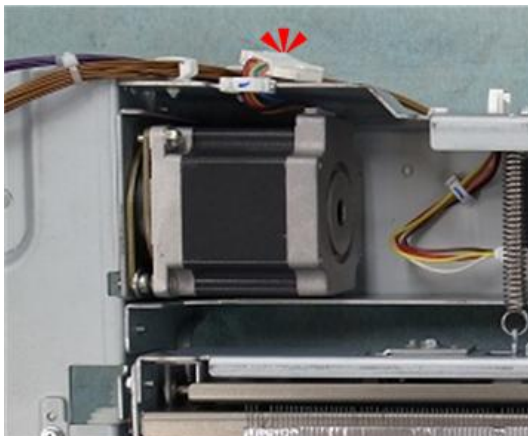
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3. Disconnect the fan bracket [A] and free the harness so you can move it to access the motor ( x1,  x2).



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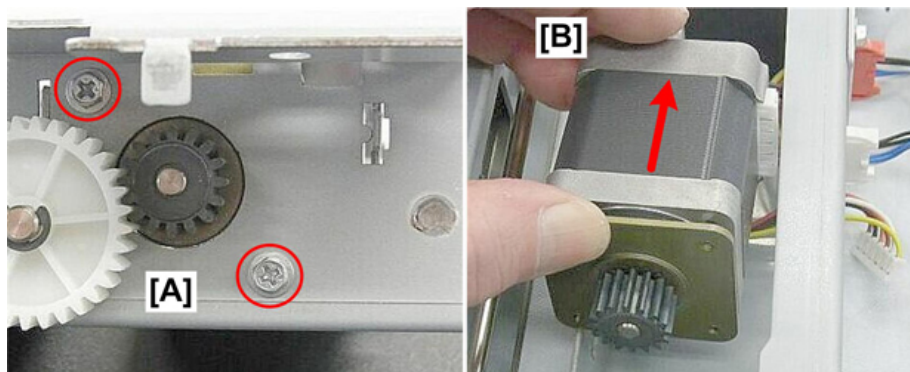
4. Disconnect the motor harness ( x1).



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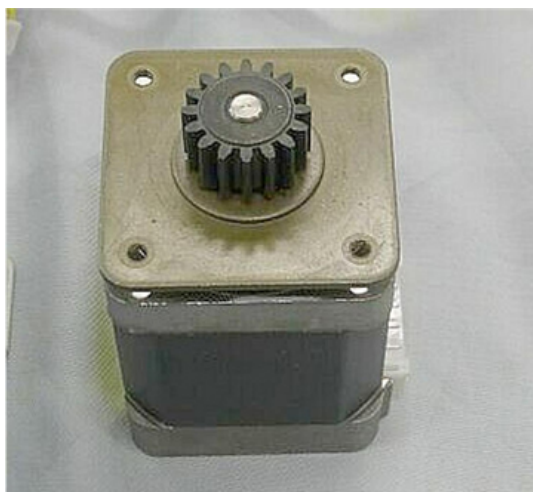
5. At the rear side of the unit [A], disconnect the motor ( x2).
6. Pull the motor [B] out from rear to front.

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7. Remove the motor.



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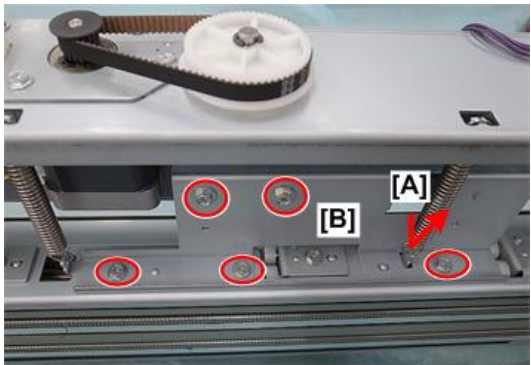
Decurl Unit HP and Limit Sensor

1. Remove the decurl unit. (page 9)
2. Remove decurl unit cover bracket (⌀ x2)



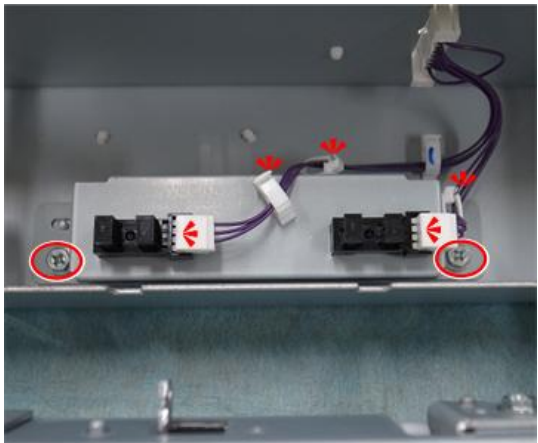
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- 3. Remove right spring [A] (🌀x1).
- 4. Remove cover bracket [B] (🔩x5).



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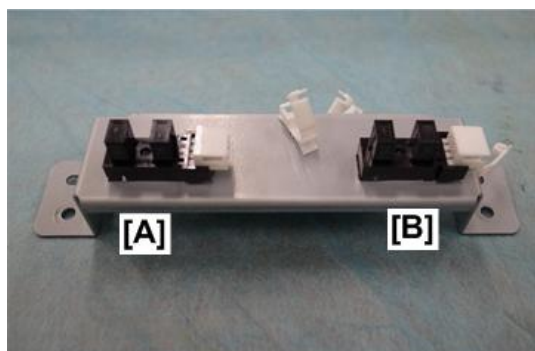
- 5. Remove the sensor bracket (with sensors attached) (🌀x3, 📦x2, 🔩x2).



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[A]	Decurl unit HP sensor
[B]	Decurl unit limit sensor

1



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