Cover Interposer Tray CI5020/CI5030 Machine Code: D518/D738

Field Service Manual

May 2015

Revision History

This is the Revision History for the Cover Interposer Tray CI5030 service manual.

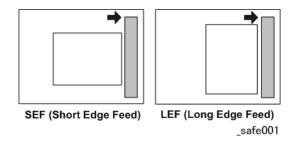
| Version | Date | Changes |
|----------|-------------|--|
| Ver. 1.1 | 31 Mar 2015 | Text, Illustrations. In procedures the order of the text and illustrations has been reversed. For each step, the text description (action) is followed by the relevant illustration. The callouts [A], [B], [C] in text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

Symbols, Abbreviations and Trademarks

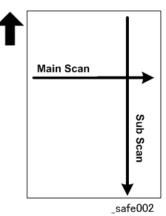
Conventions

| Symbol | What it means |
|-----------------|---|
| \$ | Binding screw (shoulder hexagonal head) |
| ø | Binding screw (round flathead) |
| * | Black screw (heavy, fusing unit, TCRU) |
| 4 | Bushing |
| Ø | C-ring |
| Ŵ | Clip |
| Ť | Connector |
| B | E-ring |
| 600 | FFC (Flat Film Connector) |
| | FFC (Flat Film Connector) |
| | FFC (Flat Film Connector) |
| ۲ | Gear |
| ş | Harness clamp |
| 40 | Harness clamp: metal: fusing unit |
| ▼ | Hook (or tab release: sensors) |
| * | Knob screw (black) |
| 5 10 | Knob screw (sliver) |
| A | Pivot screw |
| SP ^a | Screw: most common: silver |
| Ð | Shoulder screw |

| Symbol | What it means |
|------------|-----------------------------|
| * | Shoulder screw (black) |
| -CUUD-S | Spring |
| ¢ol | Standoff |
| ê | Stud screw |
| P | Tapping screw (for plastic) |
| \bigcirc | Timing belt |
| 0 | 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.

• 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.

Coloritant 🔁

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

Vote

• 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 |
| РВ | 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

Common Procedures

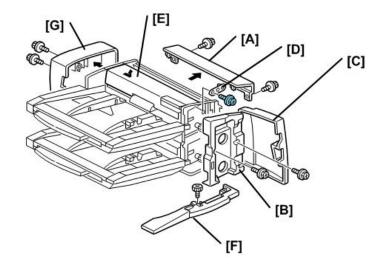
Covers

1. Open the vertical feed cover.



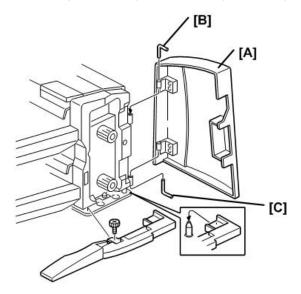
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- 2. Remove:
 - [A] Top cover (@ x2)
 - [B] Inner cover with front door [C] (@x2)
 - [D] 1st tray cover holder (@x1)
 - [E] 1st tray cover. Slide the cover toward you to remove it from the inside pins.
 - [F] Base cover (Knob (@x1)
 - [G] Tray unit rear cover (@x2)



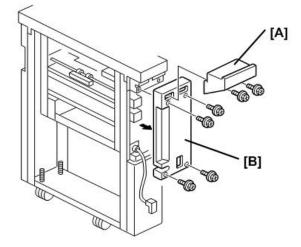
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- 3. Remove front door [A] (L-pins x2)
 - Swing the upper L-pin [B] out of its groove and pull it up.
 - Swing the lower L-pin [C] out of its groove and pull it down.



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- 4. Remove:
 - [A] Rear top cover of the feed unit (\Im x2)
 - [B] Feed unit rear upper cover (@x4)



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1 st, 2nd Trays

- 1. Remove:
 - Inner cover with tray unit front door
 - Tray unit rear cover
- 2. 1st Tray

Disconnect [A]

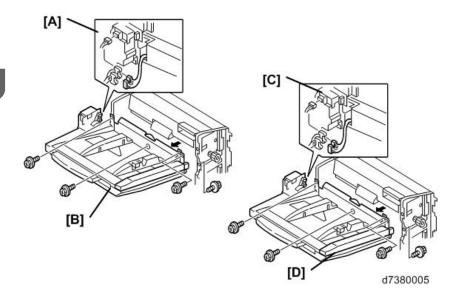
- 1 st lift motor (≪x1,∞x1)
- White connectors (STx2)

[B] 1 st tray (@ x5)

3. 2nd Tray

Remove:

- Inner cover with tray unit front door
- Tray unit rear cover
- 4. Disconnect [C]:
 - 2nd lift motor ([®]x1,[™]x1)
 - Red, blue connectors (🎯 x2)
 - [D] 2nd tray (@x5)



Feed Units

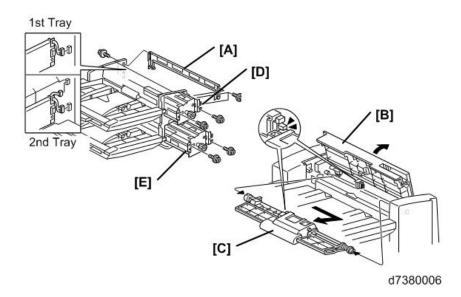
1 st Feed Unit

Remove:

- Top cover
- Inner cover with front door
- Tray unit rear cover
 - [A] Stay (@°x5)
 - [B] Open the 1st tray cover and hold it open
 - [C] 1 st feed belt unit
 - [D] 1st feed unit (@x2, @x1)

2nd Feed Unit

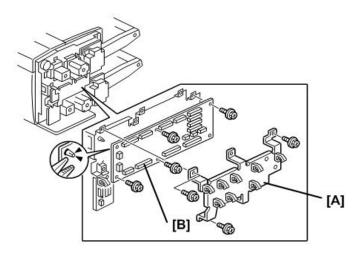
- Open the vertical feed cover
- Remove inner cover with tray unit front dwoor
- 2nd feed belt unit (same as [C])
- [E] 2nd feed unit (@x2,@x2)



Boards

Tray Unit Control Board

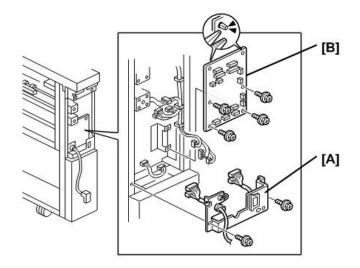
- 1. Remove tray unit rear cover (@x2)
 - [A] Board cover (ୖୖୖ™x3,∜x8)
 - [B] Tray unit control board (Fx 17, \$x5, \$x1)



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Main Control Board

- 1. Remove transport unit rear upper cover.
 - [A] Connector bracket (@x2)
 - [B] Main control board (𝒱x4,☜x2,𝒱 x14, 摹 x2)

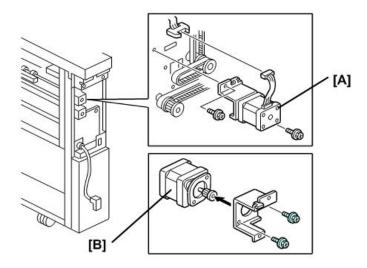


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Motors

Vertical Transport Motor

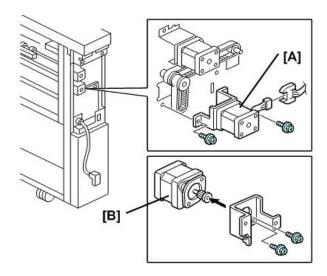
- 1. Remove transport unit rear cover.
 - [A] Motor unit (☞x2,☞x1,◎x1)
 - [B] Vertical transport motor (@*x2)



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Horizontal Transport Motor

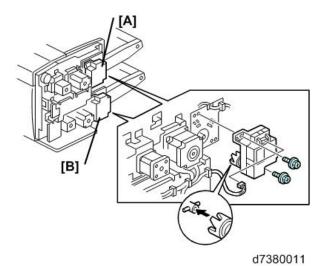
- 1. Remove transport unit rear cover
 - [A] Motor unit (𝔐x2,𝔐x1,𝔍x1)
 - [B] Horizontal transport motor (@*x2)



d7380010

1st, 2nd Lift Motors

- 1. Remove tray unit rear cover.
 - [A] 1 st lift motor (@2,&x1)
 - [B] 2nd lift motor (☞x2,☞x1)



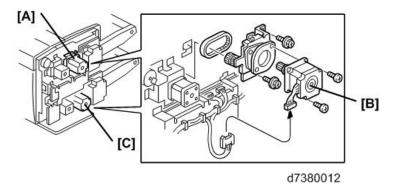
1st, 2nd Feed Motors

1. Remove tray unit rear cover.

[A] 1 st feed motor unit (ℬx3,ỗx2,ℱx1)

[B] 1st feed motor ($\Im x2$, $\Im x1$)

[C] 2nd feed motor unit, 2nd feed motor ($\Im x5$, $\Im x1$, $\Im x1$)

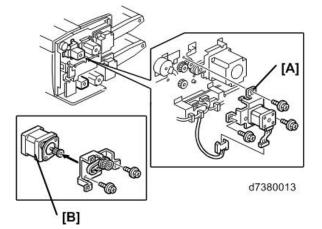


1st, 2nd Transport Motors

1. Remove tray unit rear cover.

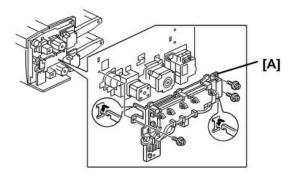
1st Transport Motor

- [A] 1 st transport motor unit (@x3, (&x1)
- [B] 1 st transport motor (@x2, @x1)



2nd Transport Motor

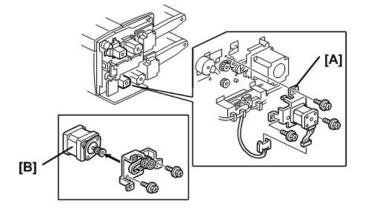
[A] Tray unit control board unit (Hooks, 🕅 x3, 🗺 x9)



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[A] 2nd transport motor unit (@x3)

[B] 2nd transport motor (@x2, @x1)

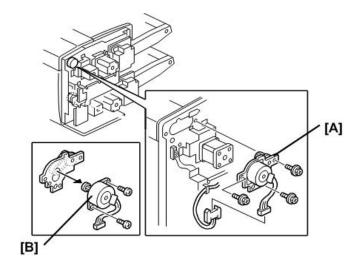


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1st, 2nd Pick-Up Motors

1st Pick-up Motor

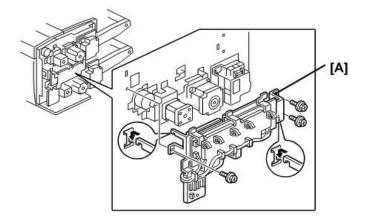
- 1. Remove tray unit rear cover.
 - [A] 1 st pick-up motor unit (\$\$\vec{x}1\$,\$\$\vec{y}x3\$)
 - [B] 1st pick-up motor (@x2, @x1)



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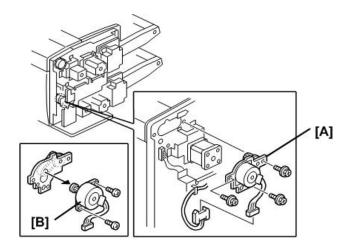
2nd Pick-up Motor

1. Tray unit control board unit (Hooks,@x3,@x9)



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- [A] 2nd pick-up motor unit (@x1, &x3)
- [B] 2nd pick-up motor (𝒱x2, 𝔍x1)

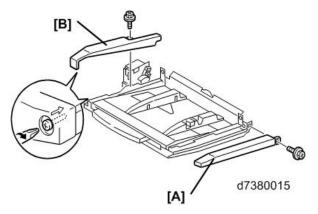


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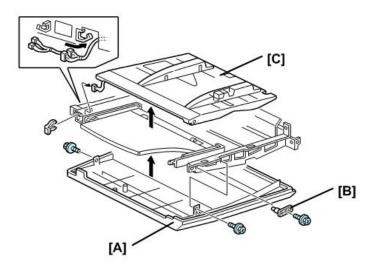
Sensors

Paper Width Switch, Set Sensors, Length Sensor

- 1. Remove 1st or 2nd paper tray
 - [A] Front cover (@[®]x1)
 - [B] Rear cover (@[®]x1)



- [A] Bottom cover (@x2)
- [B] Holder pin (@x1, Spring x1)
- [C] Bottom plate
 - 1. Turn over the bottom plate so it is facing up.

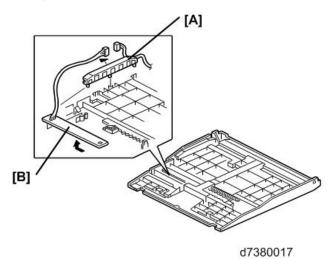


d7380016

2. Remove:

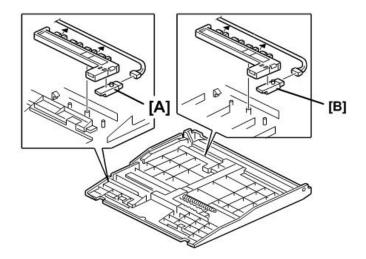
[A] Harness cover (**T** x2)

[B] Paper width switch (▼x2,x4,☞x1)



[A] Paper set sensor (▼x1,∞x1)

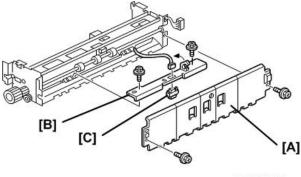
[B] Paper length sensor (▼x1,∞√x1)



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1 st Transport Sensor

- 1. Remove top cover, vertical feed cover, stay.
- 2. Remove:
 - [A] Upper paper guide (🎯 x2)
 - [B] Sensor unit (☞x2,x1,☞x1)
 - [C] 1 st transport sensor (**** x2)



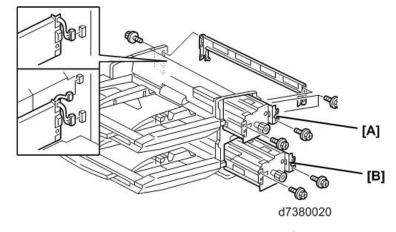
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Feed Unit Sensors

1. Remove:

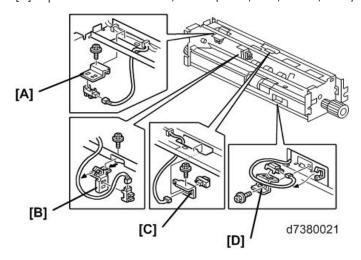
[A] 1st feed unit

[B] 2nd feed unit



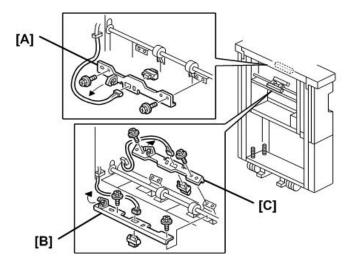
[A] Pickup roller HP sensor bracket, sensor (𝒱x1,𝒱x1, ▼x2)
[B] Bottom plate position sensor bracket, sensor (𝒱x1,𝒱x1,𝒱x1, ▼x2)

[C] 1st Vertical transport sensor bracket, sensor (𝔅 x1, (𝔅 x1, 𝔹 x2)
[D] Paper Feed sensor bracket, sensor (𝔅 x1, 𝔹x1, 𝔤 x1, 𝔤 x2)



2nd Vertical Transport, Exit Sensors

- 1. Remove:
 - [A] 2nd vertical transport sensor bracket, sensor (𝔐x1,x1,☞x1,▼x2)
 - [B] Vertical exit sensor bracket, sensor (𝔐x2,x1,☞x1,▼x2)
 - [C] Exit sensor bracket, sensor (𝔐x2,x1,☞x1,▼x2)



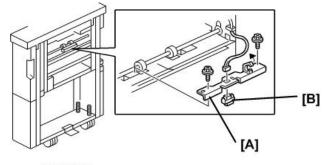
d7380022

Entrance Sensor

1. Remove:

[A] Sensor bracket (ୖୖ∞x2,≪x1,∞√x1)

[B] Entrance sensor (**T** x2)

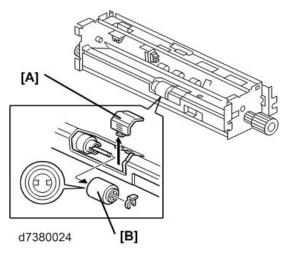


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Rollers

Separation Roller

- 1. Remove 1st (or 2nd) feed unit.
 - [A] Cover
 - [B] Separation Roller (🕅 x 1)

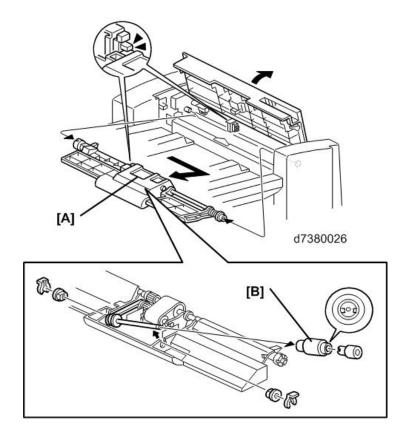


Feed Belt Unit And Pick-Up Roller

1. Open the 1st tray cover.

[A] Feed belt unit

The unit is spring loaded. Push it to the right to release it, and then lift it out.
 [B] Pick-up roller (𝔅x2, ◀ x2)



Feed Belt

1. Remove feed belt unit

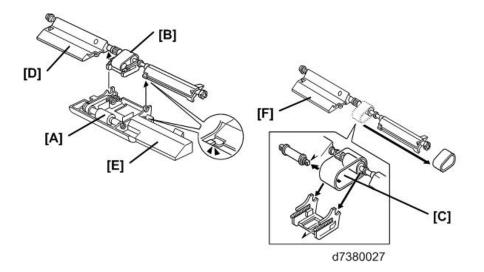
[A] Pick-up roller unit.

- 2. Pull the unit away from the bushings in the direction of the arrow.
 - [B] Feed belt holder
 - Hold the feed belt holder by the sides, then lift up to separate from the holder.
 - Pull slowly to avoid losing the springs.

[C] Feed belt.

Re-assembly

- 1. Position the pick-up roller unit [A] and feed belt holder [B] as shown above.
- On the rear side, slide out the bushing, and rotate guide plate [D] until its stepped side attaches at [E] as shown above, then snap the guide plate on.
- 3. On the front side, rotate guide plate [F] until its flat side is parallel with [D], then snap it on. Viewed from the bottom, the plates must be aligned.



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