

Double-feed Kit S7
Machine Code:D3DS
Field Service Manual
Ver 1.0

Latest Release: Nov, 2016

Initial Release: Nov, 2016

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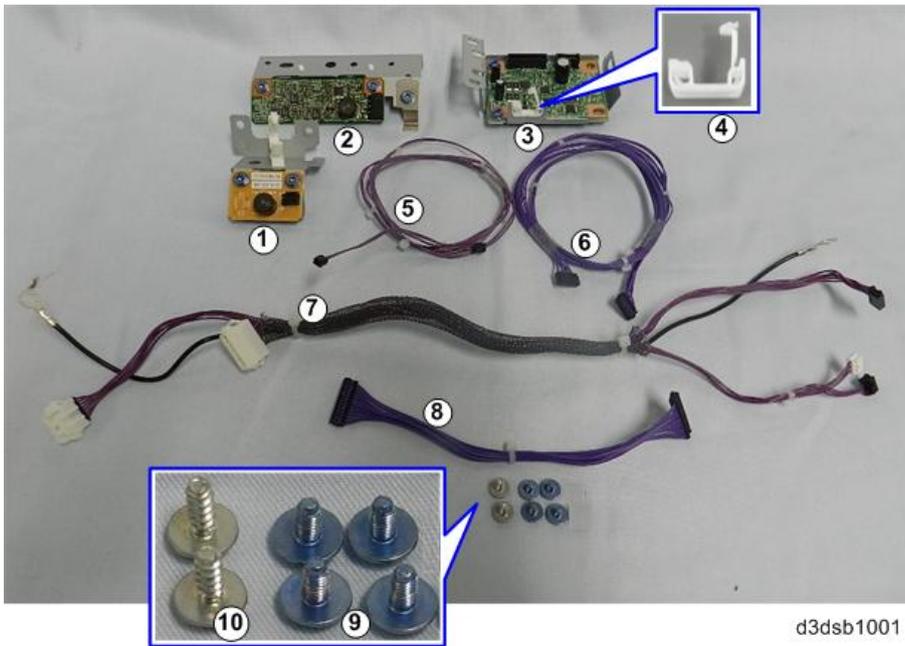
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1. Install

Double-feed Kit S7 D3DS

Accessories

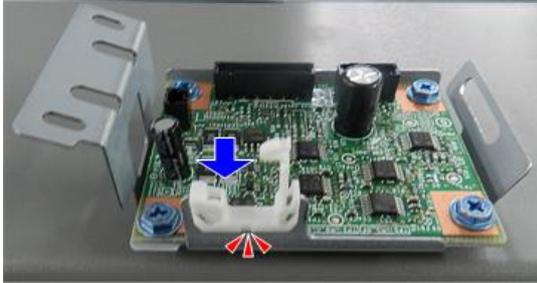


No.	Description	Q'ty
1	Double-feed Sensor 1 (Emitter)	1
2	Double-feed Sensor 2 (Receiver)	1
3	Double-feed Sensor Board	1
4	Clamp	1
5	Long Harness (2-pin)	1
6	Long Harness (7-pin)	1
7	Shielded Harnesses	1
8	Short Harness (13-pin)	1
9	Screws M3x6	4
10	Screws M3x8	2

 Installation

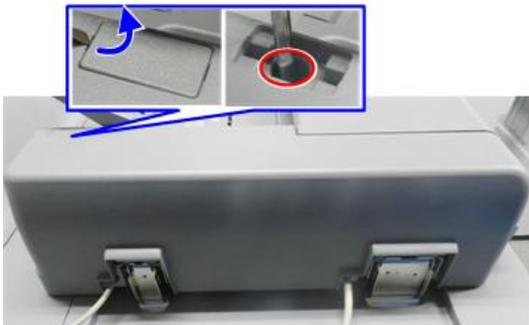
 Remove ADF Covers

1. Set the saddle clamp on the double-feed sensor board.



d3dsb1057

2. At the back of the machine, remove the cap and screw from the rear cover.



x1

d3dsb1002

3. Raise the feed cover, and then remove the screw from the top edge of the rear cover.



x1

d3dsb1003

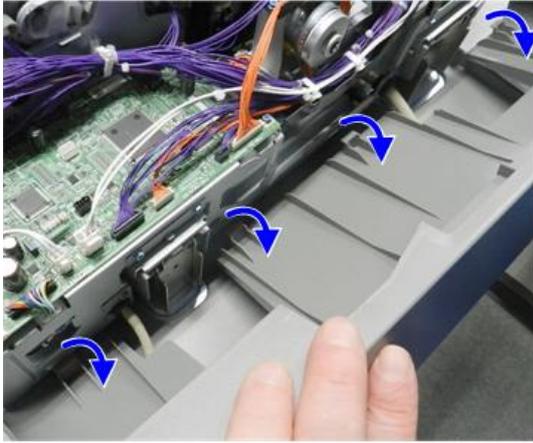
4. Press the tab [A] on the end of the rear cover to release the cover, and then rotate the cover [B] down slowly.



d3dsb1004

1. Install

5. Disconnect the bottom tabs, and then remove the rear cover.



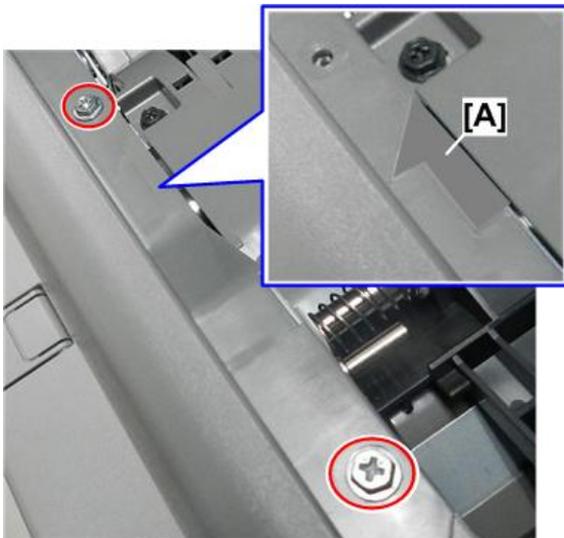
d3dsb1005

6. At the front, raise the ADF slightly.



d3dsb1006

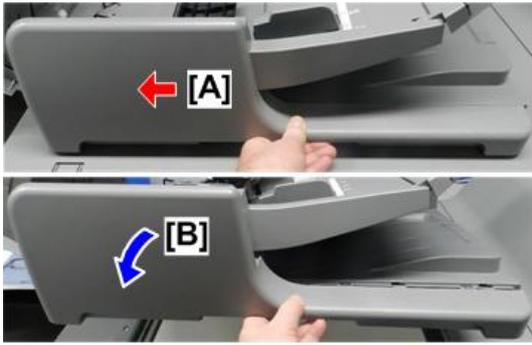
7. Disconnect the top edge of the front cover. The embossed arrow [A] shows which direction to slide the cover to unlock the tabs..



 x2

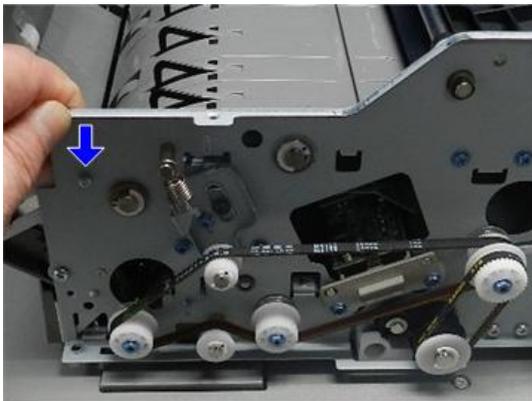
d3dsb1007

8. Push the front cover [A] to the left, and then remove it [B].



d3dsb1008

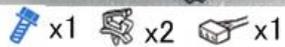
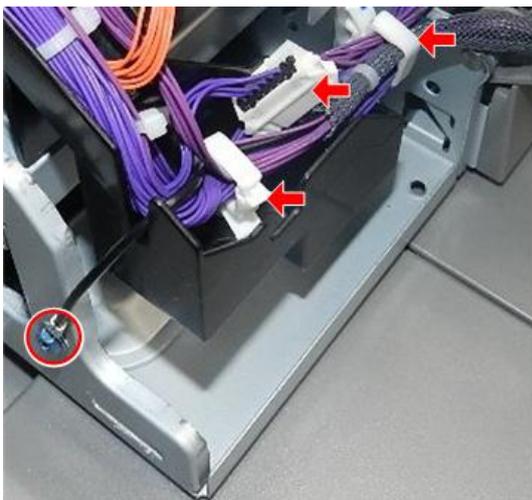
9. Lower the ADF.



d3dsb1009

Remove Feed Cover, Upper Guide

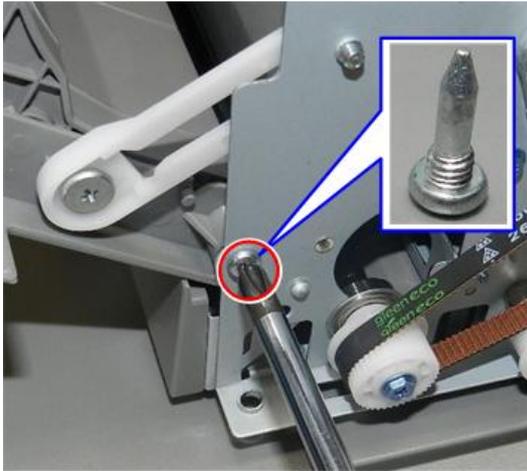
1. At the left rear corner of the ADF, disconnect and free the shielded harnesses.



d3dsb1010

1. Install

2. At the front, remove the pivot screw.



 x1

d3dsb1011

3. Disconnect the hinge arm.

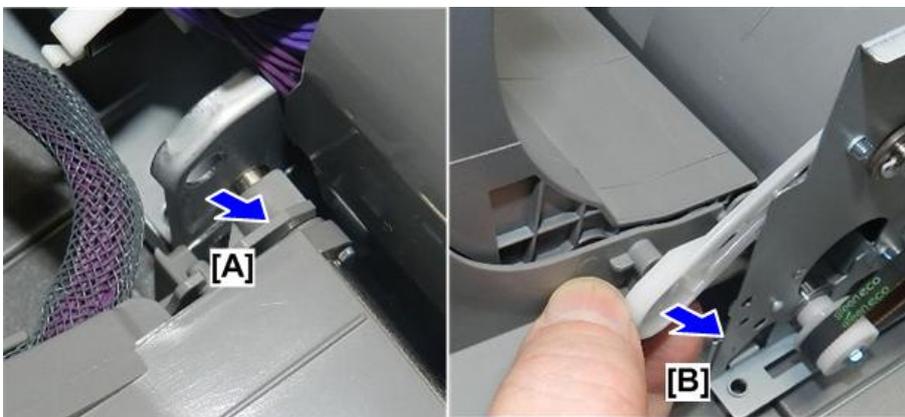


 x1

d3dsb1012

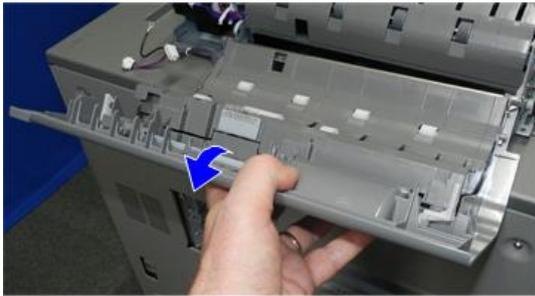
4. Carefully disconnect the cover at the rear [A].

5. At the front, disconnect the hinge arm [B].



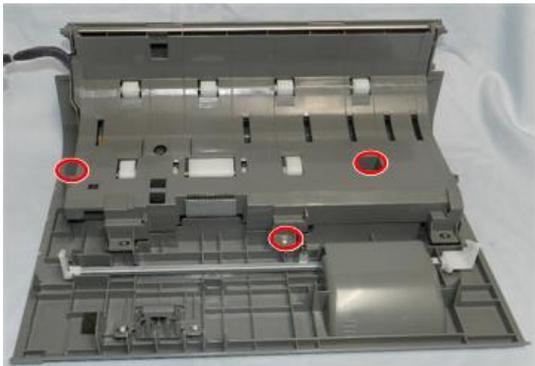
d3dsb1013

6. Remove the feed cover.



d3dsb1014

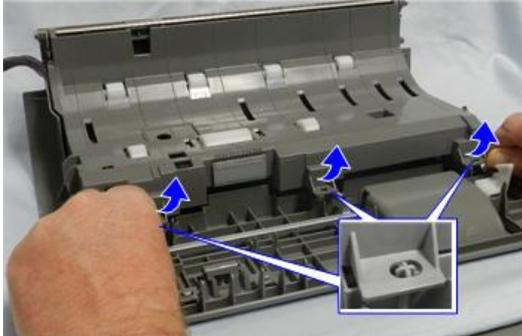
7. Lay the feed over on a flat clean surface as shown, and then disconnect the upper guide.



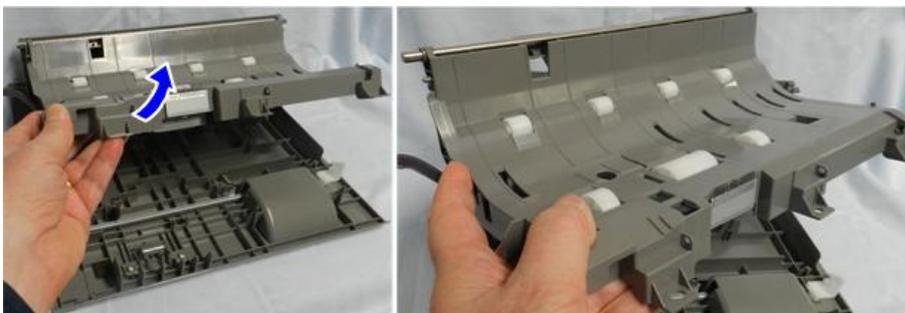
 x3

d3dsb1015

8. Release the edge of the upper guide from the posts.



9. Swing the upper guide up, and then remove it.



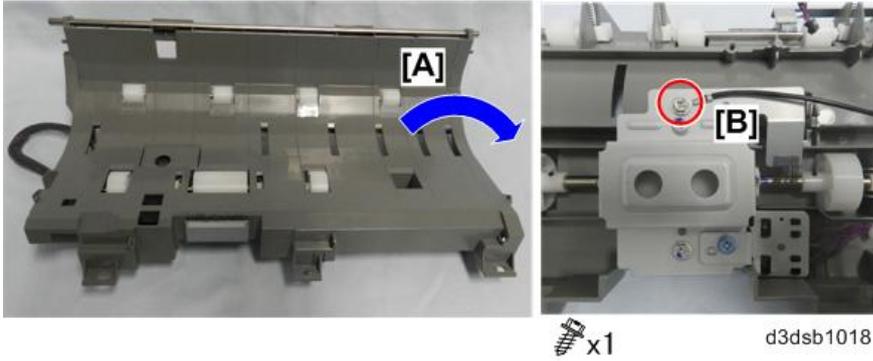
d3dsb1017

Remove Original Shielded Harnesses

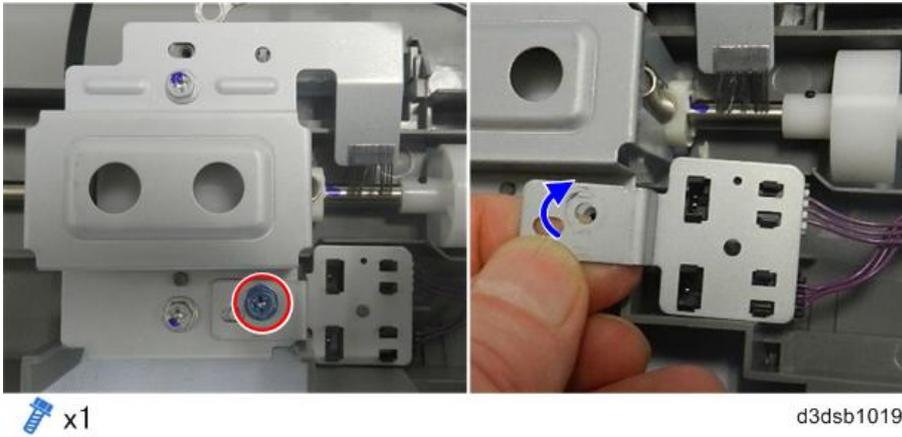
1. Turn the upper guide [A] upside down.

1. Install

2. Disconnect the ground wire [B].



3. Remove the sensor bracket.

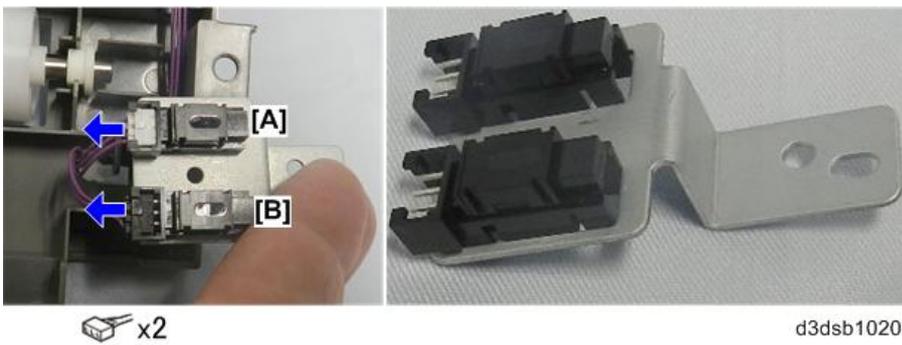


4. Disconnect the skew correction sensor [A] (white connector).

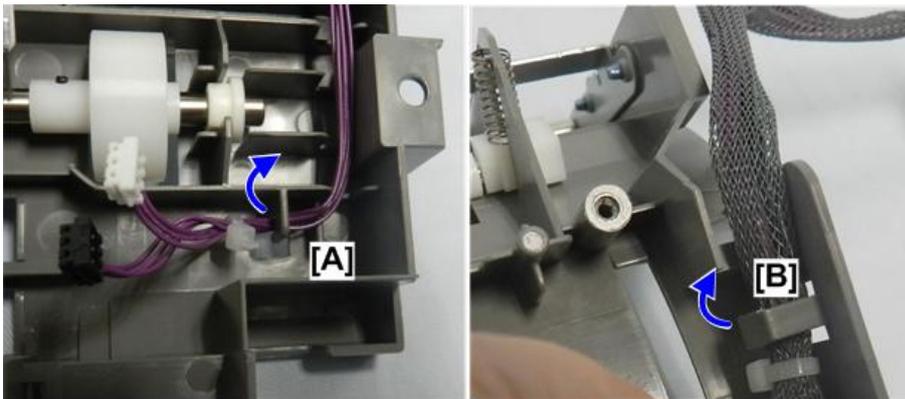
5. Disconnect the separation sensor [B] (black connector).

Note

- These sensor harnesses must be re-connected as shown.



6. Release the shielded harnesses at the front [A] and rear [B].



d3dsb1021

7. Remove the original shielded harnesses.

Install the Double-feed Sensors

Note

- You will need a short screwdriver to fasten the double-feed sensor board.

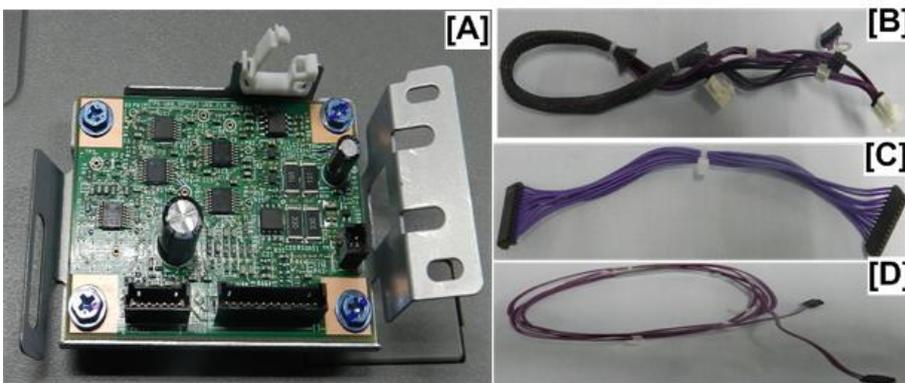
1. Gather these items from the kit accessories.

[A] Double-feed sensor board

[B] Shielded harnesses

[C] Short harness (13-pin)

[D] Long harness (2-pin)

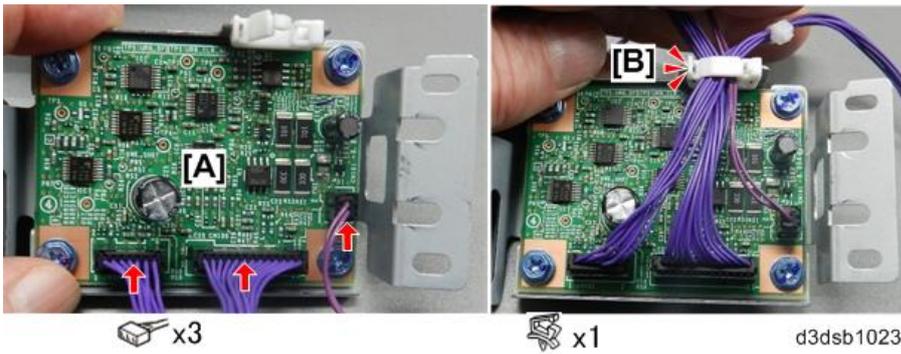


d3dsb1022

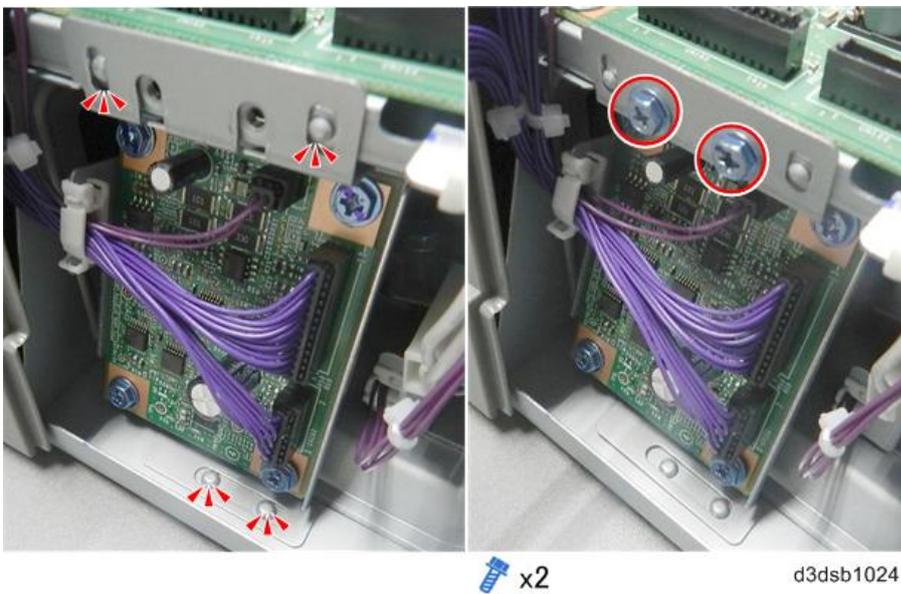
2. Connect the harnesses to the board [A].
3. Clamp the harnesses at [B].

1. Install

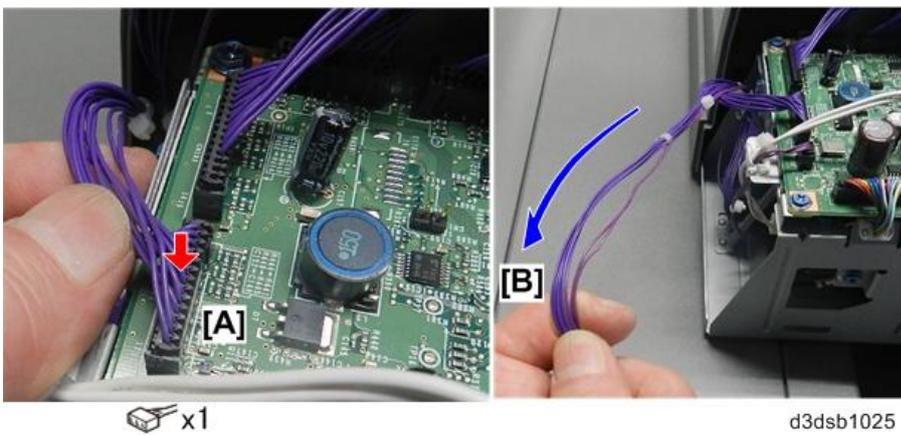
4. Make sure there is no slack in the harness cables between their connectors and the clamp.



5. At the back of the machine, set the double-feed sensor board below the edge of the ADF control board, and then use a short screwdriver to fasten the sensor board.

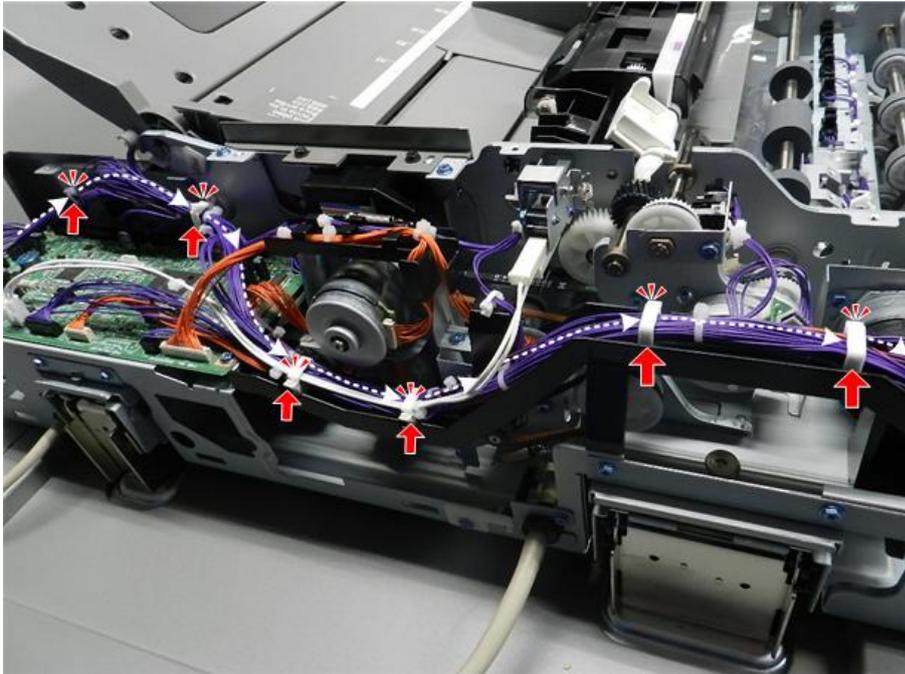


6. Connect the end of the short harness to the ADF control board [A].
7. Gather the long harnesses [B] away from the back of the machine.



8. At the back of the ADF, working from the left, open and close each clamp over both harnesses. Make sure that

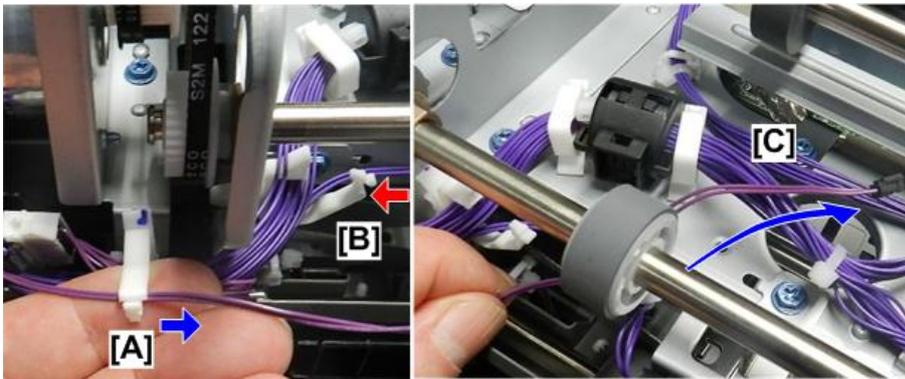
there is no slack in the harnesses between clamps.



 x6

d3dsb1026

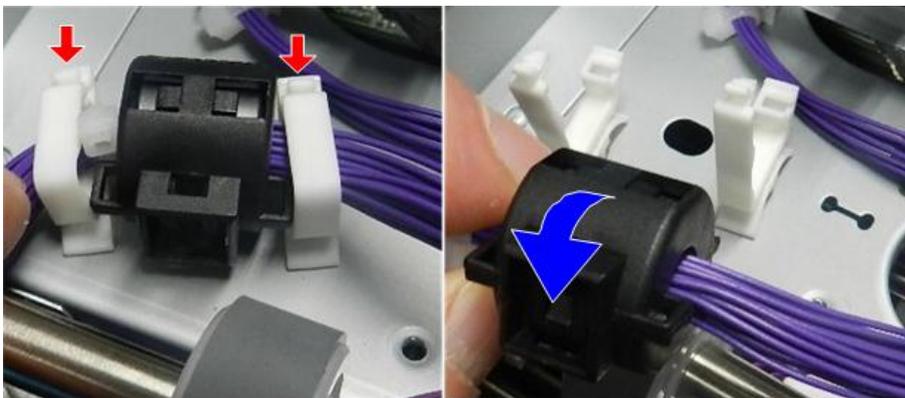
9. At the left corner of the ADF, pass the long harness (2-pin) under the open clamp [A].
10. Open clamp [B], and then pass the harness through it as you pull the harness as far as [C].



 x1

d3dsb1027

11. Free the ferrite core.



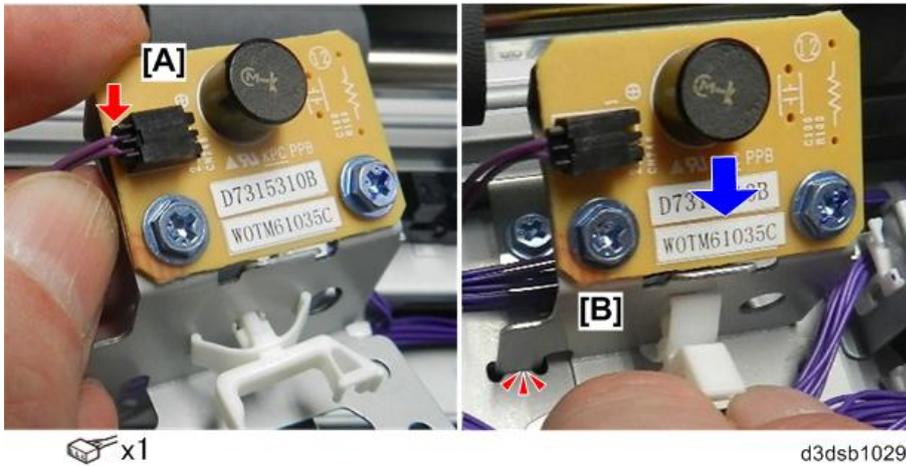
 x2

d3dsb1028

1. Install

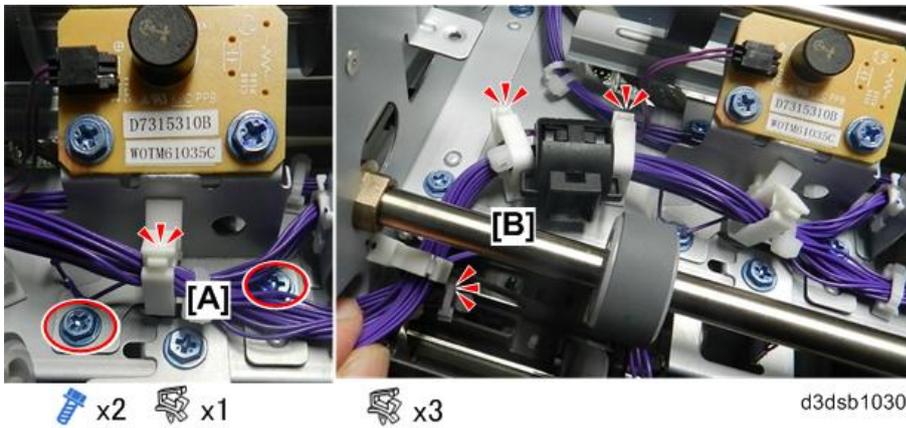
12. Hold double-feed sensor 1 as shown [A], and then connect the harness.

13. Insert the blade of the bracket [B] into the slot.



14. Fasten the sensor bracket [A], and then close the clamp.

15. Thread the harness through the three clamps [B] and then close them.

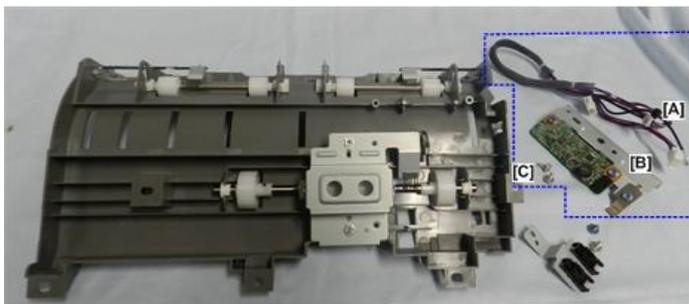


16. Set the upper guide as shown, and then gather these items from the accessories.

[A] Shielded harnesses

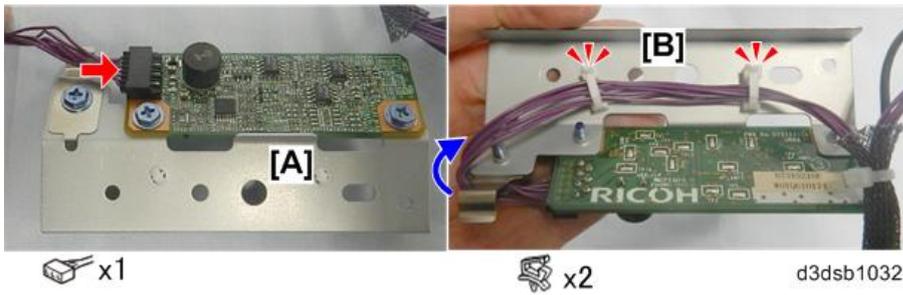
[B] Double-feed sensor 2

[C] Screws (M3x8)

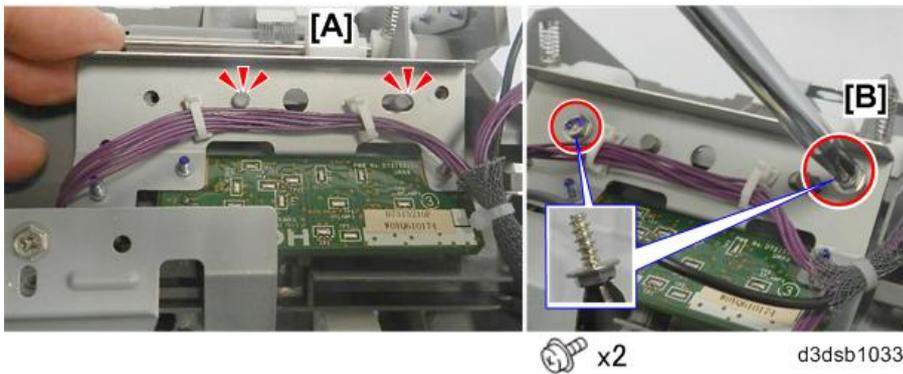


17. Connect the harness to the sensor board [A].

18. Turn the bracket over, make sure that there is no slack in the harness, and then fasten the harness to the bracket [B].

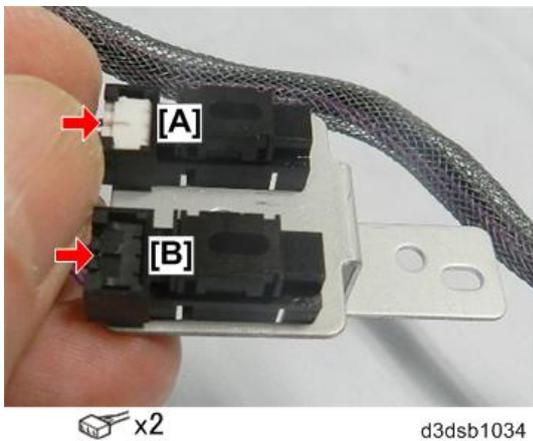


19. Set the bracket [A] and then fasten it [B].

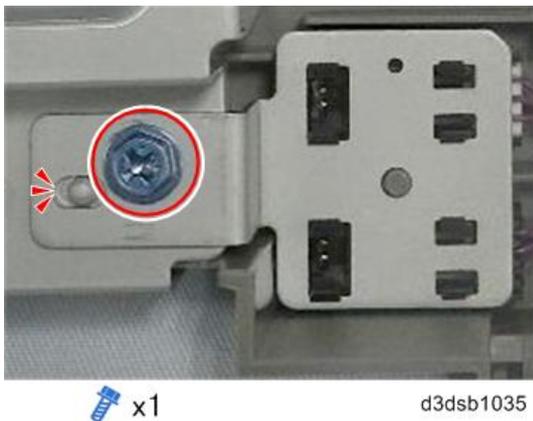


20. Hold the sensor bracket as shown.

21. Connect the skew correction sensor harness [A], and then connect the separation sensor harness [B].

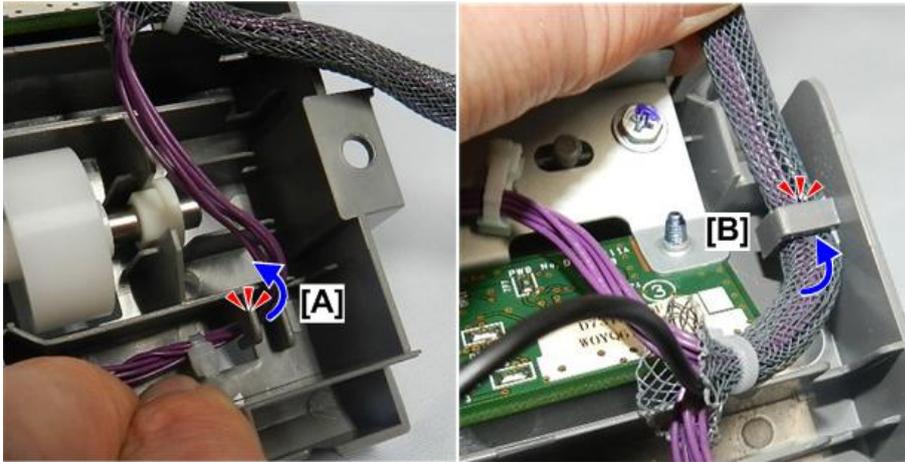


22. Attach the sensor bracket



1. Install

23. Make sure there is no slack in the harnesses, and then fasten the sensor harnesses under the hooks at [A] and [B].



d3dsb1036

24. Push the shielded harnesses into the channel at the rear corner.



d3dsb1037

Re-assembly

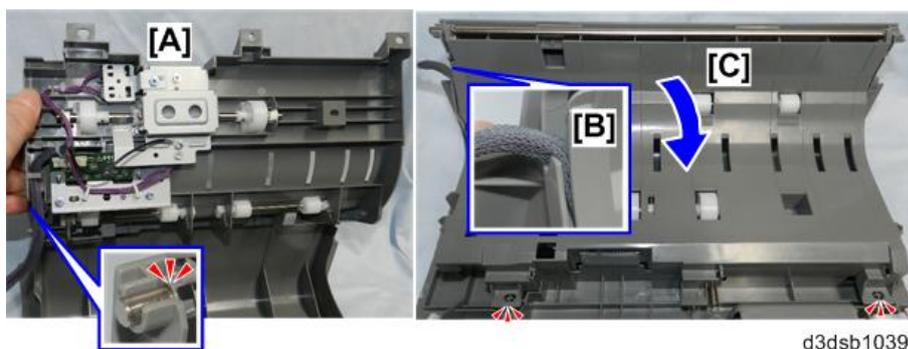
1. Set the feed cover as shown.



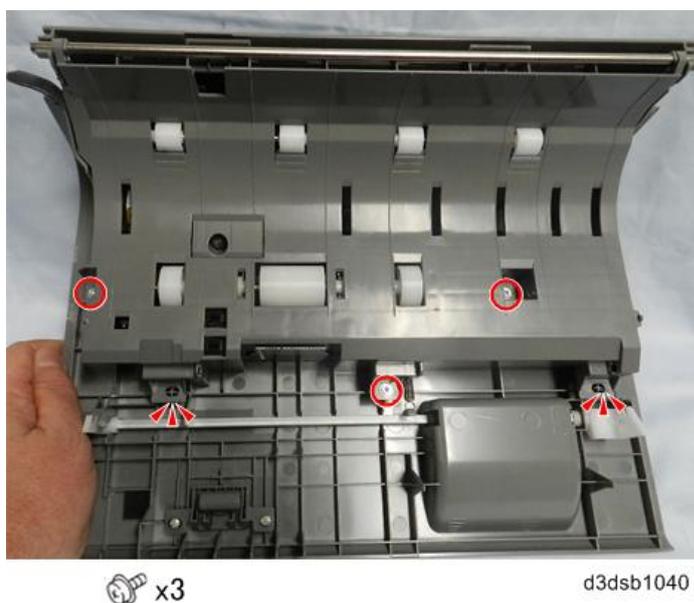
d3dsb1038

2. Set the shaft of the upper guide [A] on the edge of the feed cover.
3. Make sure that the shielded harnesses [B] are not pinched between the cover and the guide, and then lower the

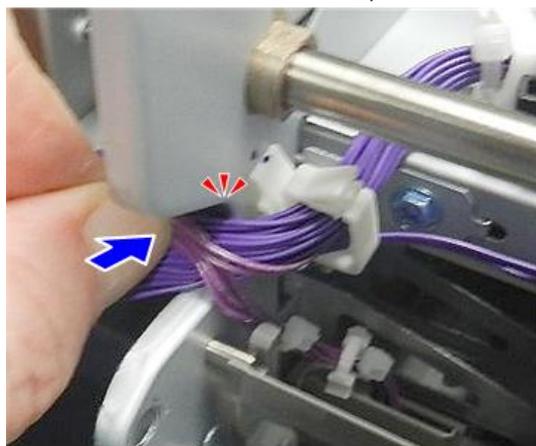
guide onto the feed cover.



4. Snap the edge of the guide onto the posts, and then fasten the guide with the screws.



5. At the left rear corner of the ADF, push the harnesses into the cutout.



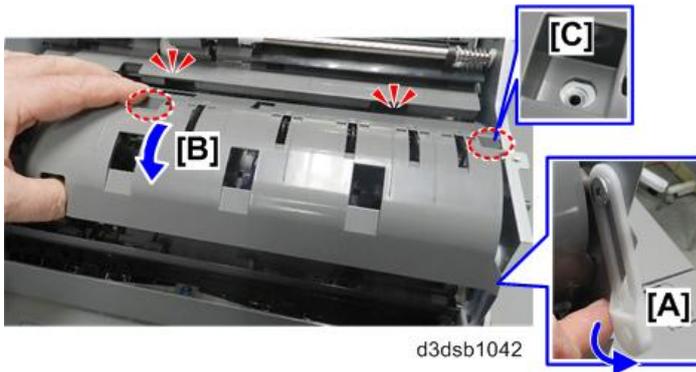
6. At the front, pull the hinge arm [A] out slightly.
7. Set the lower guide [B].
8. Make sure that three holes [C] across the top are aligned with the frame below.

★ Important

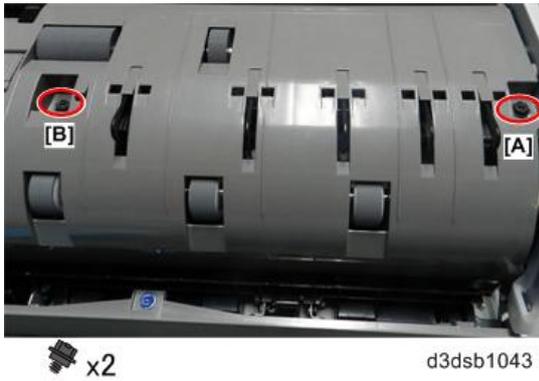
- If the holes are not perfectly aligned, or if the guide is “floating” above the holes, make sure the

1. Install

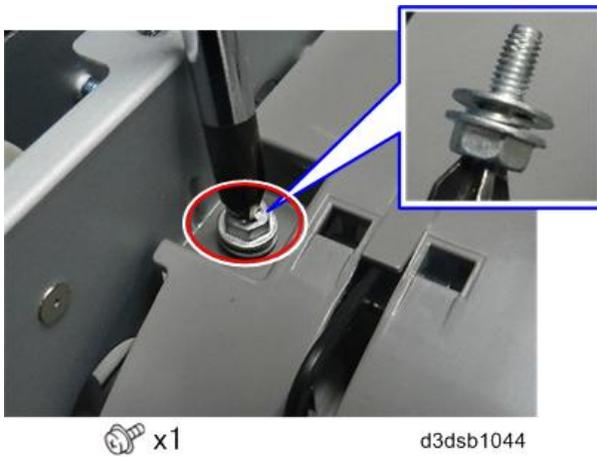
harnesses are completely tucked into the cutout at the rear left corner of the ADF. (See the previous step.)



9. Use the black step screws to fasten the guide at the front [A] and center [B].

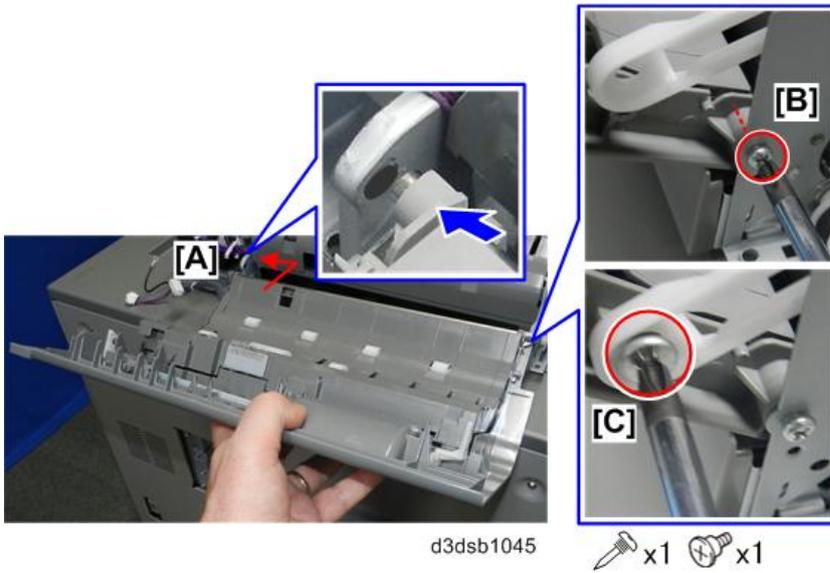


10. Use the longer screw to fasten the back end of the guide.

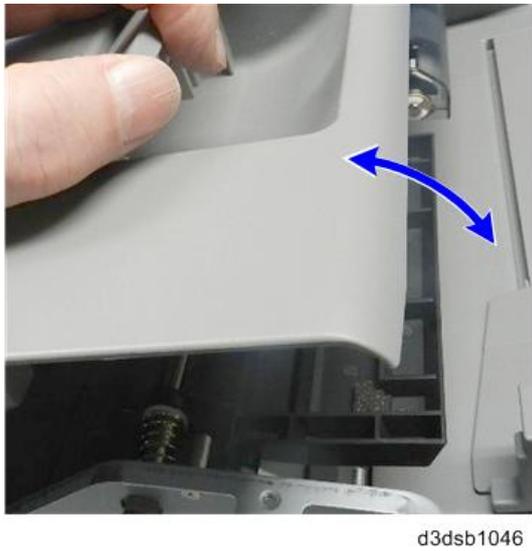


11. Insert the feed cover [A] at the rear.

12. At the front, set pivot screw [B], and then fasten hinge arm [C].



13. Open and close the feed cover to make sure that it is operating smoothly.



14. At the left rear corner of the ADF, make sure that the shielded harnesses are not pinched between feed cover and

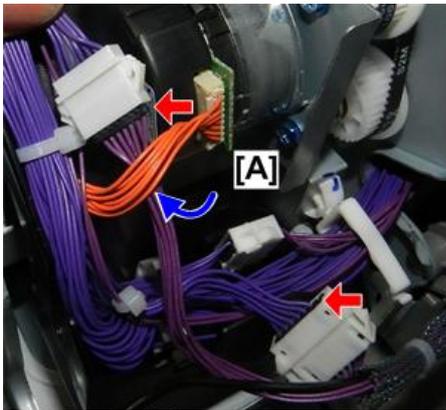
1. Install

upper guide.

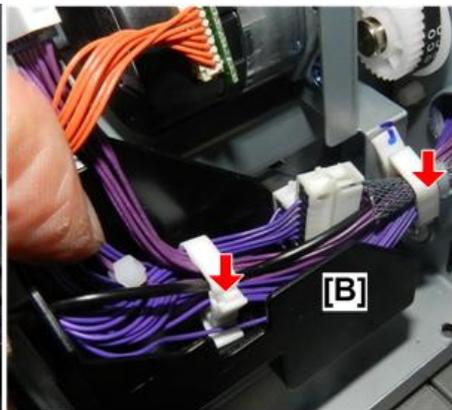


d3dsb1047

15. Connect the shielded harnesses [A] and then close the clamps [B].



 x2



 x2

d3dsb1048

16. Fasten the ground wire.



 x1

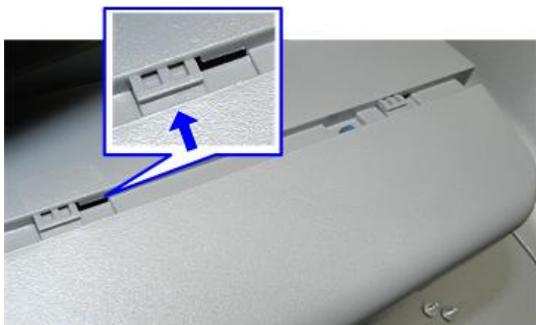
d3dsb1049

17. At the front, lower the ADF.



d3dsb1050

18. Set the tabs to attach the front cover.



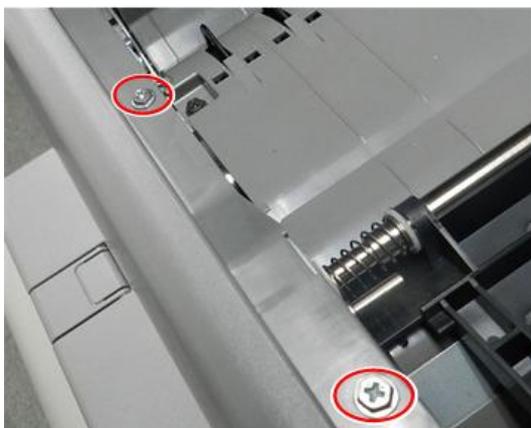
d3dsb1051

19. Push the attached front cover to the right to lock the tabs.



d3dsb1052

20. Fasten the top edge of the front cover.



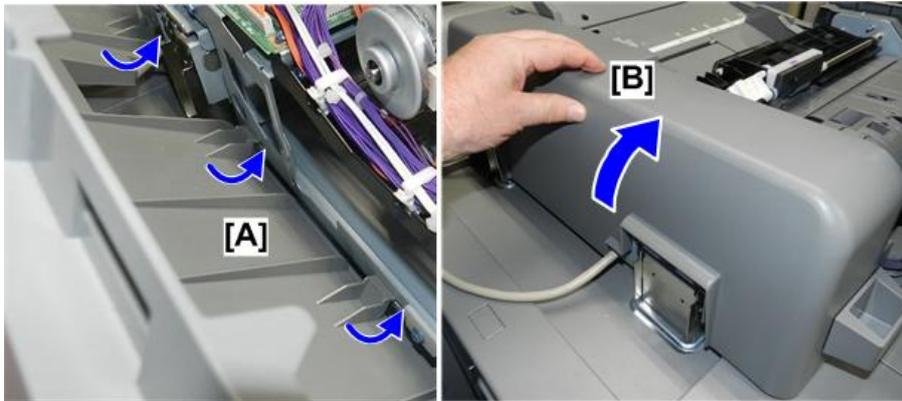
 x2

d3dsb1053

21. At the rear, set the bottom tabs [A] of the rear cover.

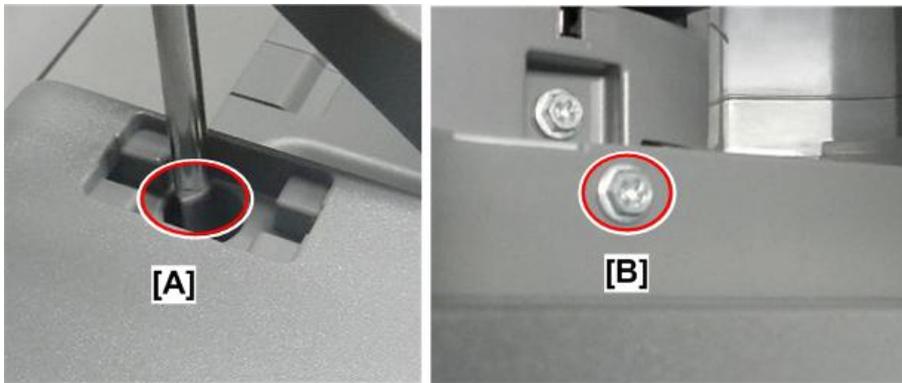
1. Install

22. Rotate the rear cover up [B].



d3dsb1054

23. Fasten the top edge of the rear cover at [A] and [B].



 x1

 x1

d3dsb1055

24. Attach the cover screw cover plate [A], and then lower the feed cover [B].



d3dsb1056

Final Adjustments

Before you can use double-feed detection you must first enable the double-feed detection setting, and then set the detection sensitivity.

1. Make sure that the machine is fully reassembled.
2. Connect the machine to the power source and turn it on.
3. Go into the SP mode.
4. Open **SP6040-001**, and then set it to "1" (On). This enables double-feed detection.
5. Next, open **SP6040-008** to adjust double-feed sensitivity.
6. Set an original in the ADF, and then press [Start]. (If you set more than one original, only one will feed.)
7. Touch "EXECUTE" to feed one sheet

- The sensitivity setting for one sheet is written into flash memory.
- The machine displays the "Completed" message. This tells you the setting was successfully stored.

-or-

- If the machine displays the "Failed" message, repeat the procedure.

8. Touch "CLOSE".
9. Open **SP6040-009** to see the value of the registered setting.
10. Touch "EXECUTE".
11. When you see the "COMPLETE" message, touch "CLOSE".
12. You will see the sensitivity setting displayed below the "EXECUTE" button on the screen.

