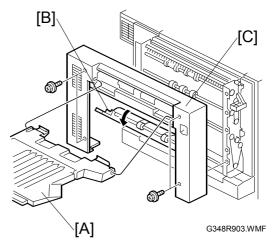
DUPLEX UNIT (Machine Code: G348)

1. REPLACEMENT AND ADJUSTMENT

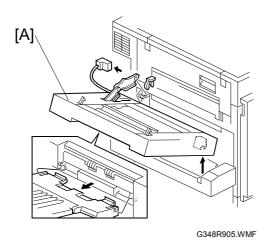
1.1 DUPLEX INVERTER UNIT

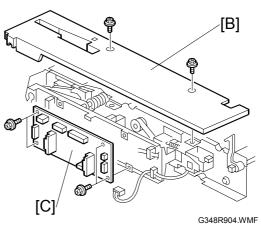
1.1.1 TOP COVER

- 1. External tray [A]
- 2. Open the duplex left cover [B]
- 3. Top cover [C] (🖗 x 4)



1.1.2 DUPLEX CONTROL BOARD

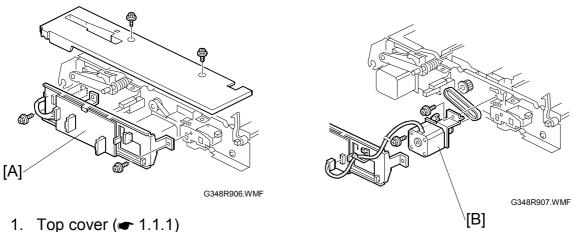




Peripherals

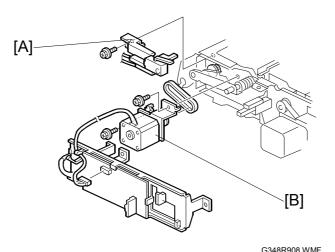
- 1. Top cover (🖝 1.1.1)
- 2. Duplex unit [A] (x 1, 🐼 x 1)
- 3. Rear inner cover [B] (²/₈ x 2)
- 4. Duplex control board [C] (*≩* x 4, ⊑ x 7)

1.1.3 DUPLEX INVERTER MOTOR 1



- 2. Duplex unit (**•** 1.1.2)
- 4. Duplex inverter motor 1 [B] ($\hat{\beta}^{3} x 2, 1$ timing belt)

1.1.4 DUPLEX INVERTER MOTOR 2 AND SWITCH



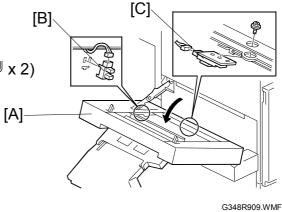
- 1. Top cover (1.1.1)
- 2. Duplex unit (🖝 1.1.2)
- 3. Duplex control board bracket
- 4. Duplex inverter unit switch [A] ($\mathscr{F} \times 1$, $\mathfrak{W} \times 1$)
- 5. Duplex inverter motor 2 [B] (3 x 2, 1 timing belt)

1.1.5 EXIT SENSOR 3 AND DUPLEX INVERTER SENSOR

- 1. Open the duplex inverter unit [A]
- 2. Exit sensor 3 [B] (1 x 1)

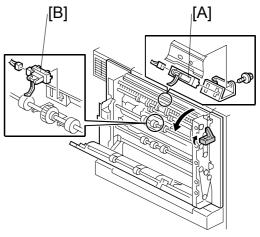
17 January, 2003

3. Duplex inverter sensor [C] ($\hat{F} \times 1$, $\exists \mathbb{P} \times 2$)



1.1.6 EXIT SENSOR 1 AND 2

- 1. Top cover (1.1.1)
- 2. Open the duplex unit
- 3. Exit sensor 1 [A] (ℱ x 1, ⊑ x 1, 1 bracket)
- 4. Exit sensor 2 [B] (≅^J x 1)

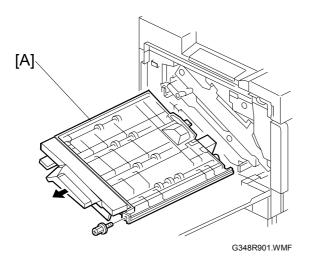


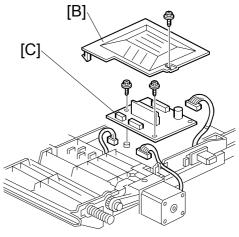
G348R910.WMF



1.2 DUPLEX FEED UNIT

1.2.1 DUPLEX DRIVE BOARD



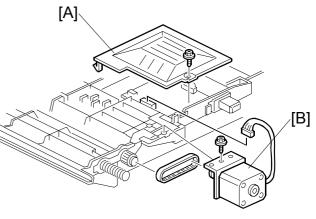


G348R911.WMF

- 1. Open the front cover
- 2. Duplex feed unit [A] ($\hat{\mathscr{F}} \times 1$)
- 3. Inner cover [B] (🕅 x 1)
- 4. Duplex drive board [C] (ℰ x 2, 🗊 x 3)

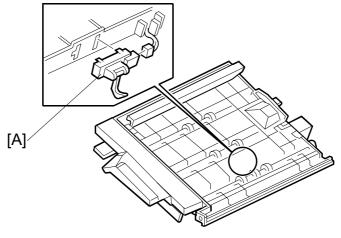
1.2.2 DUPLEX FEED MOTOR

- 1. Duplex feed unit (1.2.1)
- 2. Inner cover [A] (🕅 x 1)
- Duplex feed motor [B] (x 1, □ x 1, 1 timing belt)



G348R912.WMF

1.2.3 DUPLEX FEED SENSOR



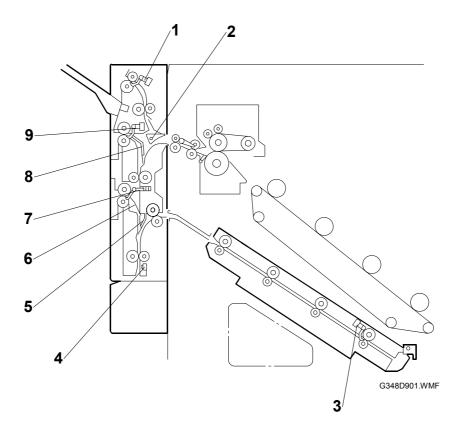
G348R902.WMF

- 1. Duplex feed unit (r 1.2.1)
- 2. [A] Duplex feed sensor (⊑^{IJ} x 1)



2. DETAILED DESCRIPTIONS

2.1 OVERVIEW



- 1. Exit sensor 1
- 2. Junction gate
- 3. Duplex feed sensor
- 4. Duplex inverter sensor
- 5. Junction mylar 3

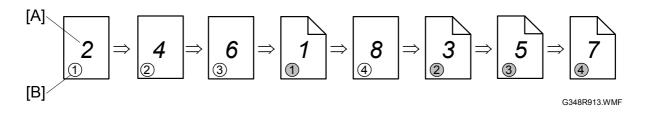
- 6. Junction mylar 2
- 7. Exit sensor 3
- 8. Junction mylar 1
- 9. Exit sensor 2
- For duplex printing, the second page (rear side) is printed first.
- To print on the second side, the duplex inverter unit (on the side of the machine) inverts the paper from the fusing unit and feeds it to the duplex feed unit (inside the machine).
- The duplex feed unit feeds the inverted paper back to the paper feed section.
- When both sides have been printed, the duplex inverter unit feeds the paper out to the finisher.
- If the mailbox or standard exit tray (on top of the machine) was selected to
 receive the duplex copies, the print will not enter the duplex unit after the second
 side has been printed. The junction gate inside the printer directs it upwards to
 the selected tray.
- Duplex copies are not fed out to the external tray (on the left of the machine).

2.2 DUPLEX OPERATION

2.2.1 UP TO A4/LT (81/2" X 11") LEF

There are three sheets of paper in the paper feed path at the same time. The interleave method is used.

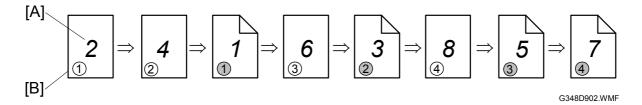
Example: 8 pages. The number [A] in the illustration shows the order of pages. The number [B] in the illustration shows the order of sheets of paper (if shaded, this indicates the second side).



2.2.2 LARGER THAN A4/LT (81/2" X 11") LEF

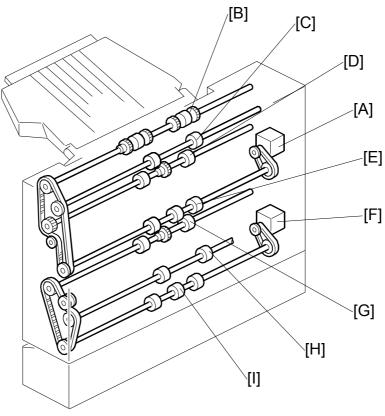
There are two sheets of paper in the paper feed path at the same time. The interleave method is used.

Example: 8 pages. The number [A] in the illustration shows the order of pages. The number [B] in the illustration shows the order of sheets of paper (if shaded, this indicates the second side).



2.3 DUPLEX INVERTER UNIT

2.3.1 DRIVE

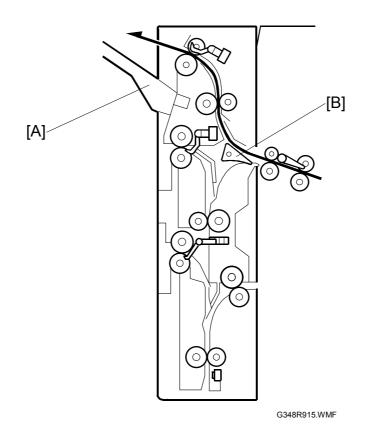


G348R914.WMF

The duplex inverter motor 1 [A] drives the paper exit roller 1 [B], paper transport roller [C], paper exit roller 2 [D], and upper inverter roller [E].

The duplex inverter motor 2 [F] drives the exit roller 3 [G], paper exit roller 4 [H], and lower inverter roller [I].

2.3.2 FEED TO EXTERNAL EXIT TRAY (NON-DUPLEX MODE)

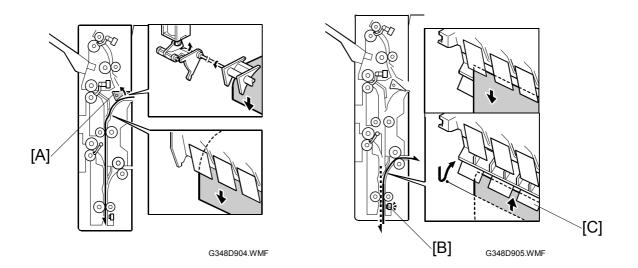


This shows how the machine feeds paper through the duplex unit to the external tray [A], when duplex mode is not selected.

NOTE: The paper cannot be fed out to the external tray if duplex printing is selected.

The junction gate [B] directs the paper from the fusing unit out to the external tray if thick paper or OHP mode is selected, or if the external tray is selected as the output tray with the printer driver.

2.3.3 FEED TO DUPLEX FEED UNIT



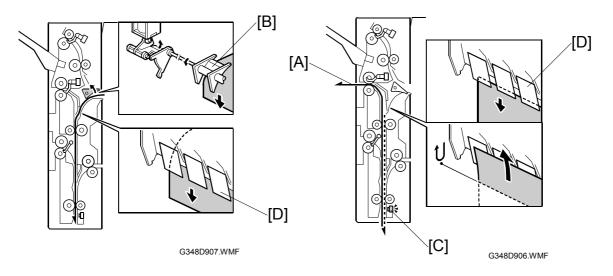
This shows how the machine feeds paper back into the machine after side 1 is printed.

The junction gate [A] diverts the paper from the fusing unit to the lower part of the inverter unit. After the duplex inverter sensor [B] is activated, the machine waits until the trailing edge has passed junction mylar 3 [C]. Then, the paper is switched back and junction mylar 3 directs the paper back into the machine for the second side.

The next page shows how the paper is fed out to the finisher after both sides are printed.

2.3.4 FEED TO TWO-TRAY FINISHER

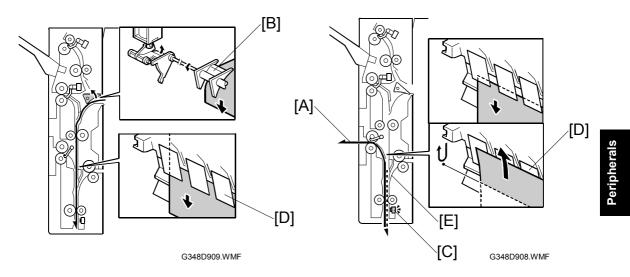
With Optional One-Tray Paper Feed Unit



The paper is fed out to the finisher from the upper exit [A].

The junction gate [B] diverts the paper from the fusing unit to the lower part of the inverter unit. After the duplex inverter sensor [C] is activated, the machine waits until the trailing edge has passed junction mylar 1 [D]. Then, the paper is switched back and junction mylar 1 directs the paper out to the finisher.

With Optional LCT or Two-Tray Paper Feed Unit

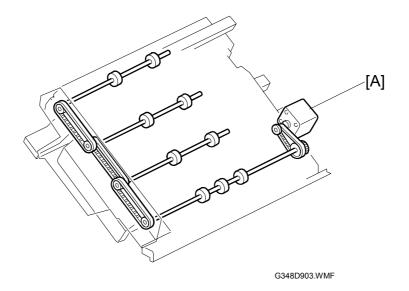


The paper is fed out to the finisher from the lower exit [A].

The junction gate [B] diverts the paper from the fusing unit to the lower part of the inverter unit. After the duplex inverter sensor [C] is activated, the machine waits until the trailing edge has passed junction mylar 2 [D], but before it passes junction mylar 3 [E]. Then, the paper is switched back and junction mylar 2 directs the paper out to the finisher.

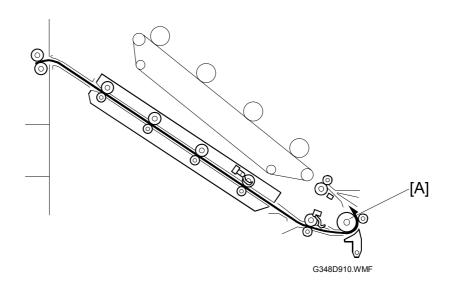
2.4 DUPLEX FEED UNIT

2.4.1 DRIVE



The duplex feed motor [A] drives all paper transport rollers.

2.4.2 FEED-IN AND FEED-OUT



The duplex feed unit feeds the paper from the duplex inverter unit to the relay roller [A].