

| Model | | ARDF for M210 ,NC11, and N230 (Ricoh DF57, Savin 9180, NRG RF 3020, infotec ARDF IV/II) | | | | | | Volt/Hz | Date of Modification | Serial Number | |
|-------------------------|---------------|--|---------------|---------------------------|--------|------------------------|----------------------|---|----------------------|---------------|------|
| Modified Article | | Decal - Mode Confirmation | | | | | | | | | |
| Reason for Modification | | To ensure normal mode setting | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Draw No. | Old Parts No. | | New Parts No. | Description | A.B.C. | Q'ty Used Old → New | Inter-change-ability | Part needed for replacement by new part | | Parts Catalog | |
| | | | | | Rank | | | Part No. | Description | Index No. | Page |
| | A4652017 | | A3182017 | Decal - Mode Confirmation | | 1 → 1 | X/O | | | 31 | 3 |
| | | | | | | | | | | | |
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Rank: A : Replace with new parts immediately. B : Replace with new parts at time of repair. C : Replace with new parts at time of overhaul.

Interchangeability:

(1) When old and new parts are not mutually interchangeable, use additional parts or an assembly part as indicated in "Parts needed for replacement by new part" to install the new part.

(2) The mark to the left of the slash indicates whether the old part can be used in the new machine, and the mark to the right indicates whether the new part can be used in the old machine. x = Not interchangeable o = Interchangeable

DETAILS OF MODIFICATION

This A318 ARDF was initially developed for A027 copier, so that the DIP switch factory setting, 101-1 and 101-2 ON, corresponds with A027 copier.

To meet the present conditions, the decal is modified as follows:

| 1 | 2 | 3 | 4 | FUNCTION |
|---|---|---|---|-------------------------------------|
| 1 | 1 | 0 | 0 | Factory Setting |
| 1 | 1 | 0 | 0 | Normal Mode (only for A027 copier) |
| 1 | 0 | 0 | 0 | Normal Mode (for other copiers) |
| 1 | 0 | 0 | 1 | 1 Sided Free Run |
| 0 | 1 | 0 | 1 | 2 Sided Free Run |
| 0 | 0 | 1 | 1 | SOL Test (ON:SW101 ON OFF:SW102 ON) |
| 1 | 1 | 0 | 1 | MOTOR TEST (lift switch must be on) |
| 1 | 1 | 1 | 1 | All Indicators On |

Article Modified

Newly Added

T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3811031996 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2471030001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2701030001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2471030021 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50310001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2701030386 |

| Model | | ADF for M210, NC11, and N230 (Ricoh DF57, Sa0, NRG RF 3020, infotec ARDF IV/II) | | | | | | Volt/Hz | Date of Modification | Serial Number | |
|-------------------------|---------------|--|---------------|-----------------|--------|------------------------|----------------------|---|----------------------|---------------|------|
| Modified Article | | Friction Belt and Friction Roller | | | | | | | | | |
| Reason for Modification | | To ensure separation | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Draw No. | Old Parts No. | | New Parts No. | Description | A.B.C. | Q'ty Used Old → New | Inter-change-ability | Part needed for replacement by new part | | Parts Catalog | |
| | | | | | Rank | | | Part No. | Description | Index No. | Page |
| | A4221354 | | A4971170 | Friction belt | | 1 → 1 | X/O | | | 69 | 5 |
| | A4221069 | | | Friction Roller | | 1 → 0 | | | | 72 | 5 |
| | | | | | | | | | | | |
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Rank: A : Replace with new parts immediately. B : Replace with new parts at time of repair. C : Replace with new parts at time of overhaul.

Interchangeability:

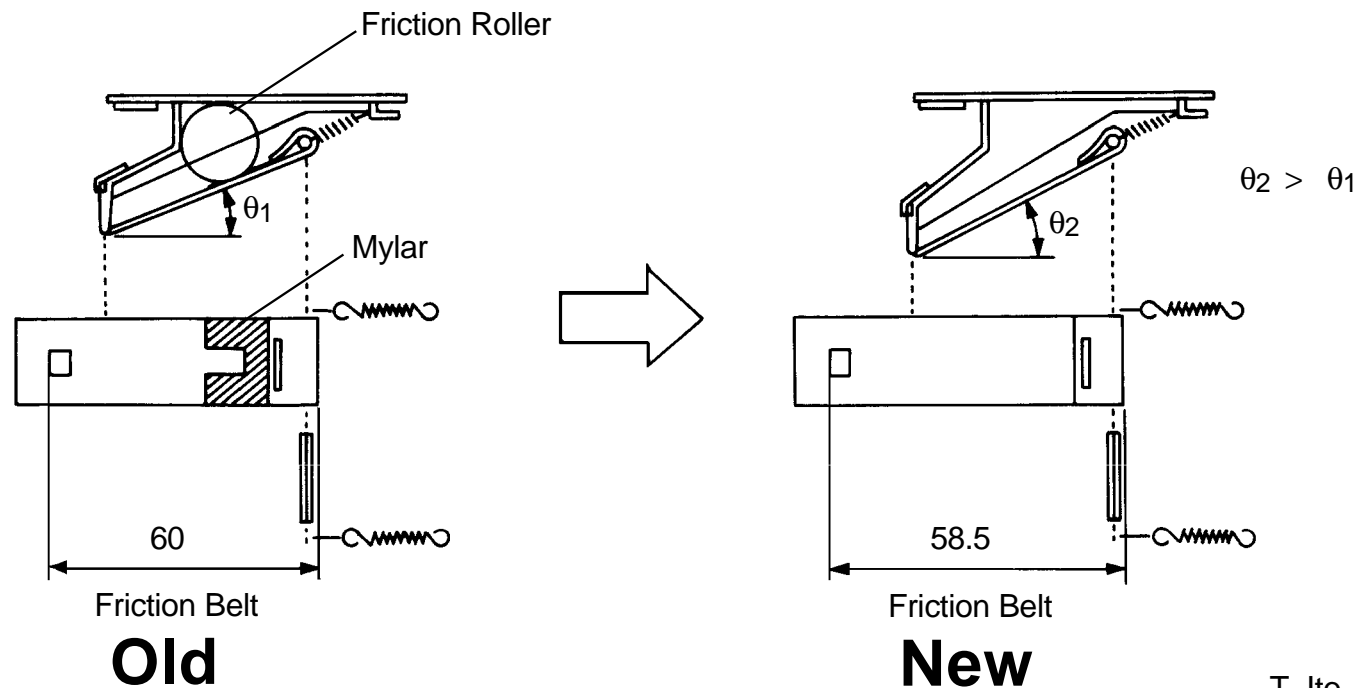
(1) When old and new parts are not mutually interchangeable, use additional parts or an assembly part as indicated in "Parts needed for replacement by new part" to install the new part.

(2) The mark to the left of the slash indicates whether the old part can be used in the new machine, and the mark to the right indicates whether the new part can be used in the old machine. x = Not interchangeable o = Interchangeable

DETAILS OF MODIFICATION

To ensure the original separation, we found that it is more effective to increase the angle (θ) as shown. These are the modifications on production machines to change the angle from θ_1 to θ_2 :

1. The friction roller has been removed.
2. The mylar on the friction belt has been removed.
3. The dimension of the friction belt has been changed.



T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3811031996 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 247107XXXX |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2701040001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2471040001 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50410001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2701042374 |

| | | | | |
|--------------------------------|--|----------------|-----------------------------|----------------------|
| Model | ARDF for M210, NC11, and N230 (Ricoh DF57, Savin 9180, NRG RF 3020, infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Software | | | |
| Reason for Modification | To improve original misfeed reset (M210 only) | | | |
| | | | | |
| | | | | |

To improve original misfeed reset only on the M210, the software has been changed.

| Old P/N | New P/N | Description | Q'ty | Interchangeability | Page | Index |
|----------|----------|-----------------|------|--------------------|------|-------|
| A4655180 | A4655185 | IC - D27 128A-2 | 1→1 | X/O | 8 | 2 |

Refer to RTB of M210 (ARDF) 007.

T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3811063001 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2471080001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2701060001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2471060001 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50910001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2701061246 |

| | | | | |
|--------------------------------|---|----------------|-----------------------------|----------------------|
| Model | ARDF for M210, NC11, N210, N220 and N230 (Ricoh DF57, Savin 9180, NRG RF 3020, infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Parts Catalog | | | |
| Reason for Modification | Parts catalogue correction | | | |
| | | | | |
| | | | | |

Please correct your parts catalogue as follows:

| Old P/N | Old Description | New P/N | New Description | Q'ty | Page | Index |
|----------|-----------------|----------|-----------------|------|------|-------|
| 11050011 | Nylon Clip - 8N | 11050034 | Nylon Clip - 7N | 1→1 | 7 | 119 |

T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | |

| Model | ARDF for M210, NC11, N210, N220 and N230 (Ricoh DF57, Savin 9180, NRG RF 3020, infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
|-------------------------|---|---------|----------------------|---------------|
| Modified Article | Main board, feed-in motor and caution decal - fuse | | | |
| Reason for Modification | Vendor change and to meet the UL standards | | | |
| | | | | |
| | | | | |

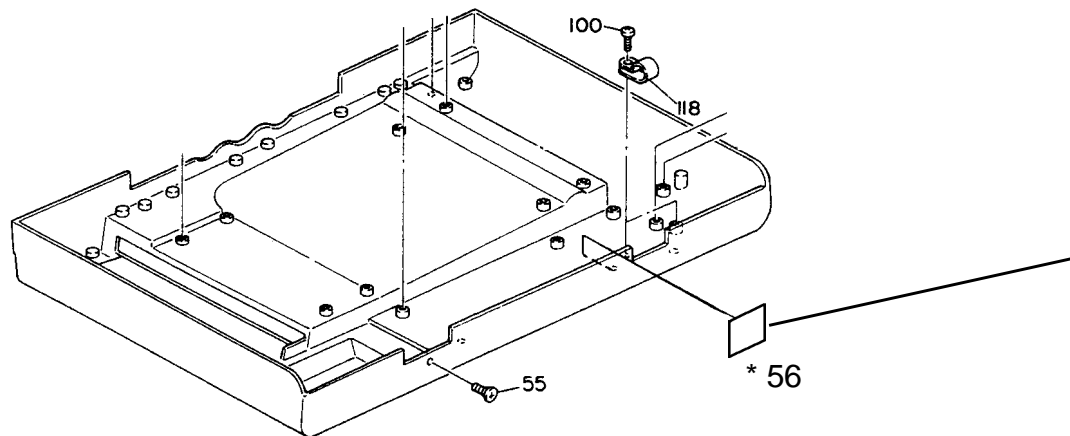
The feed-in motor is now procured from the new vendor and the part number has been changed. To meet the UL standards for the new motor, the fuse specification printed on the main board has been changed from "FU101 3A" to "FU101 F3A/125V, and a caution decal has been added to the inside of the DF upper cover. The old and new parts' interchangeability is O/O, except in the U.S.A.

| Old P/N | New P/N | Description | Q'ty | Interchangeability | Page | Index |
|----------|----------|----------------------|------|--------------------|------|-------|
| A4655190 | A4655175 | DF Main Board | 1→1 | O/O | 9 | * |
| A4225300 | AX060043 | Feed-in Motor | 1→1 | O/O | 5 | 83 |
| --- | AA000072 | Caution Decal - Fuse | 0→1 | — | 7 | * 56 |

Note: The old motor (A4225300) is still used on other models.

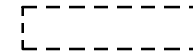
* 56 : New Index Number

DETAILS OF MODIFICATION



CAUTION

For continued
protection against risk
of fire, replace only with same type
and rating of fuse.



T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|----------------------------|-------------------|------------------------|--------------------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2471080001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2471060001 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50910001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2701061246 |

| Model | ARDF for M210, NC11, N210, N220 and N230 (Ricoh DF57, Savin 9180, NRG RF 3020, infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
|----------------------------|---|---------|-------------------------|---------------|
| Modified Article | Main board, feed-in motor and caution decal - fuse | | | |
| Reason for Modification | To meet UL standards | | | |
| | | | | |
| | | | | |

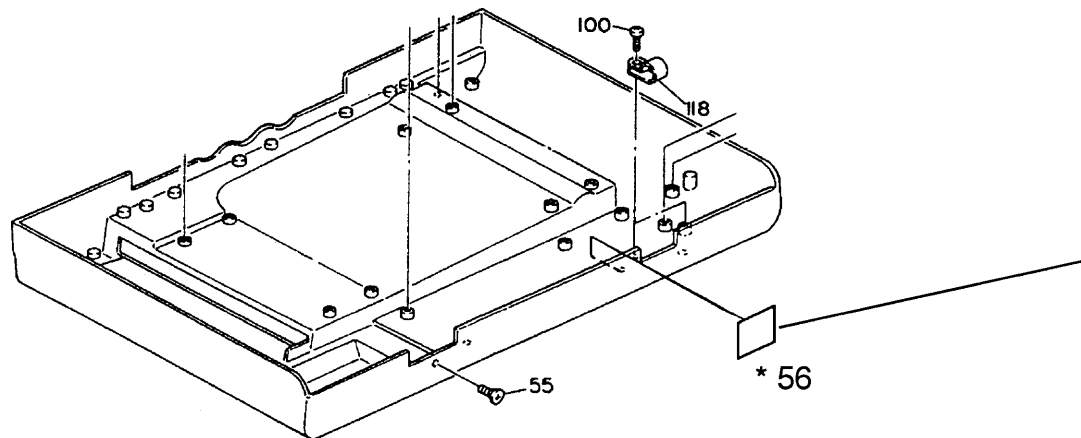
Because the feed- in motor has been discontinued, a new motor is supplied. To meet the UL standards, the main board has been modified to match the new motor used, and a caution decal has been added. The fuse specification printed on the main board has been changed from "FU1 01 3A" to "FU1 01 F3A/125V, and a caution decal has been added to the inside of the DF upper cover.

| Old P/N | New P/N | Description | Q'ty | Interchangeability | Page | Index |
|----------|----------|-----------------------------------|-------|--------------------|------|-------|
| A4655190 | A4655175 | DF Main Board | 1 - 1 | 0/0 | 9 | * |
| A4225300 | A3189500 | Feed-in Motor (See NOTE below) | 1 - 1 | 0/0 | 5 | 83 |
| --- | AA000072 | Caution Decal - Fuse | 0- 1 | — | 7 | *56 |

* 56: New Index Number

NOTE : The feed-in motor (A3189500) is composed of the new feed-in motor and the decal (P/N : AA000072).
When installing the new motor on document feeders produced before this modification, attach the caution decal on the DF upper cover (see next page).

DETAILS OF MODIFICATION



CAUTION

For continued protection against risk of fire, replace only with same type and rating of fuse.



A handwritten signature in black ink, appearing to read 'T. Ito'.

T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|-------------------------------|-----------------------|----------------------------|--------------------|---------------|
| | | | | |
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3811063001 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | |
| Ricoh DF57 | 115/60 | USA, Canada | A31 8-17 | 2701060001 |
| NRG RF 3020 | 220,240/50 | Europe, etc | A318-25 | |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | |
| Ricoh DF57 | 220,240/50 | Europe, etc | A318-27 | |

| | | | | |
|------------------------------------|--|----------------|---------------------------------|----------------------|
| Model | ARDF for M210, NC11, N210, N220, and N230 (Ricoh DF57, Savin 9180 ARDF, Nashua RF 3020, Infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Feed-in Motor Harness | | | |
| Reason for Modification | Part standardization with other ARDF | | | |
| | | | | |
| | | | | |

Due to part standardization with other ARDF, the Feed-in Motor Harness has been changed. The interchangeability is O/O.

| Old P/N | New P/N | Description | Q'ty Used | Interchangeability | Index No. | Page |
|----------|----------|-----------------------|-----------|--------------------|-----------|------|
| A4225204 | A3385204 | Feed-in Motor Harness | 1 → 1 | O/O | 84 | 5 |

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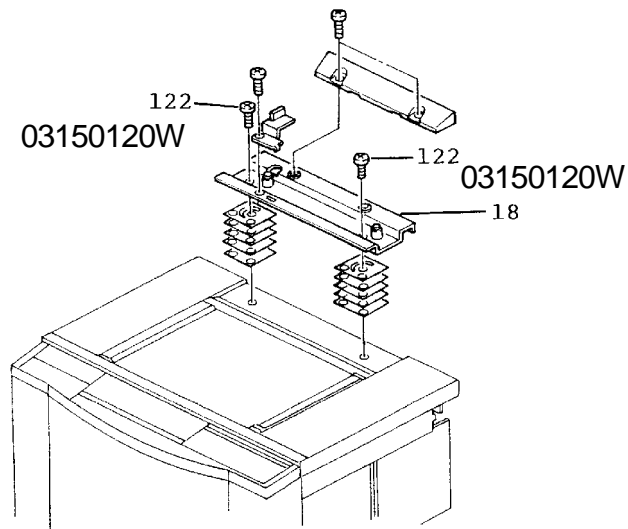
| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 381108XXXX |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2471080001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2701080001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2471080001 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50810001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2701081226 |

| Model | ARDF for M210, NC11, N210, N220, and N230 (Ricoh DF57, Savin 9180 ARDF, Nashua RF 3020, Infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
|-------------------------|--|---------|----------------------|---------------|
| Modified Article | Philips Pan Head Screw - M5 x 10 | | | |
| Reason for Modification | To install the ARDF onto the new product | | | |
| | | | | |
| | | | | |

To install the ARDF onto the new product, these screws which secure the Mounting Bracket (Index # 18) is changed from 10mm long to 12mm.

| Old P/N | New P/N | Description | Q'ty Used | Interchangeability | Index No. | Page |
|-----------|-----------|--------------------------------|-----------|--------------------|-----------|------|
| 03150100W | 03150120W | Philips Pan Head Screw M5 x 12 | 2 → 2 | X/O | 122 | 3 |

1. EXTERIOR & TRANSPORT SECTION (A318) (Page 2)

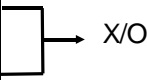


T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 381108XXXX |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2471080001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2701080001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2471080001 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50810001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2701081226 |

| | | | | |
|--------------------------------|--|----------------|-----------------------------|----------------------|
| Model | ARDF for M210, NC11, N210, N220, and N230 (Ricoh DF57, Savin9180 ARDF, Nashua RF3020, Infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Harness - Pulse Generator | | | |
| Reason for Modification | Part standardization with other ARDF | | | |
| | | | | |
| | | | | |

Due to part standardization with other ARDF, the Harness - Pulse Generator has been changed. The new Harness - Pulse Generator is an assembly of a relay harness and a grounding wire. The interchangeability is X/O.

| Old P/N | New P/N | Description | Q'ty Used | Interchangeability | Index No. | Page |
|----------|----------|-------------------------|-----------|---|-----------|------|
| A4225202 | A4975202 | Harness Pulse Generator | 1 → 1 |  X/O | 10 | 5 |
| A4225212 | ----- | Grounding Wire | 1 → 0 | | 88 | 5 |

T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3811104246 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2471100001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2701100001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2471100007 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A51010001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2701101451 |

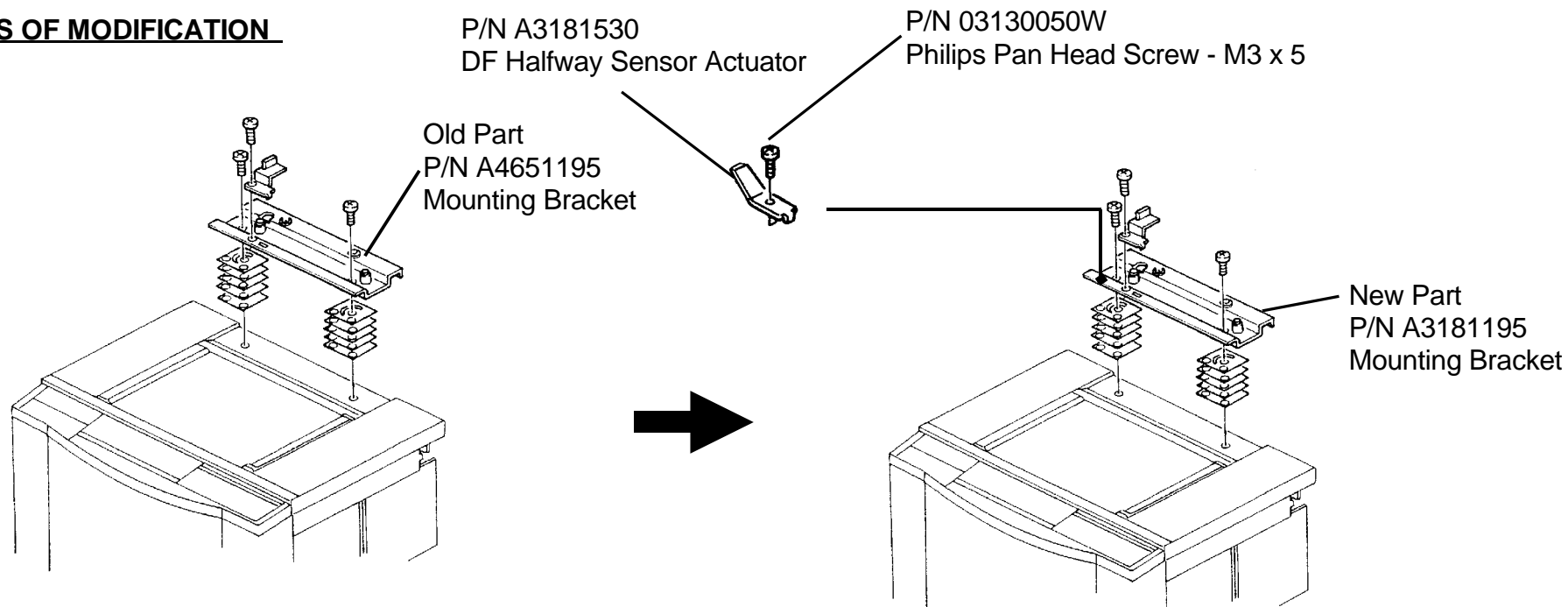
| | | | | | | | | | | | |
|-------------------------|---------------|--|---|---------------------------------|--------|------------------------|---------------------|---|----------------------|---------------|-------|
| Model | | | ARDF for M210, NC11 and NCX, N210, N220 and N230 (Ricoh DF57, Savin 9180ARDF, Nashua RF3020, Infotec ARDF IV / II) | | | | | Volt/Hz | Date of Modification | Serial Number | |
| Modified Article | | | DF Mounting Bracket | | | | | | | | |
| Reason for Modification | | | To install the ARDF onto the new product | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Draw No. | Old Parts No. | | New Parts No. | Description | A.B.C. | Q'ty Used Old → New | Inter-changeability | Part needed for replacement by new part | | Parts Catalog | |
| | | | | | Rank | | | Part No. | Description | Index No. | Page |
| | A4651195 | | A3181195 | Mounting Bracket | | 1 → 1 | X/O | | | * 18 → 66 | 1 - 3 |
| | | | A3181530 | DF Halfway Sensor Actuator | | ** 1 → 1 | | | | 62 | 1 - 3 |
| | | | 03130050W | Philips Pan Head Screw - M3 x 5 | | ** 1 → 1 | | | | 116 | 1 - 3 |
| | | | | | | | | | | | |

Note: * This ARDF has two mounting brackets as accessories. Each brackets has its own part number, but both have the same index number (No.18).
So, to identify these two mounting brackets, a new index number (No.66) is set to the new mounting bracket.

** These two parts (A3181530, 03130050W) are already described in the parts list on page 1-3. Please add them only in the illustration on page 1-2.

Rank: A : Replace with new parts immediately. B : Replace with new parts at time of repair. C : Replace with new parts at time of overhaul.
Interchangeability:
(1) When old and new parts are not mutually interchangeable, use additional parts or an assembly part as indicated in "Parts needed for replacement by new part" to install the new part.
(2) The mark to the left of the slash indicates whether the old part can be used in the new machine, and the mark to the right indicates whether the new part can be used in the old machine. x = Not interchangeable o = Interchangeable

DETAILS OF MODIFICATION



To install the ARDF onto the new product.:

1. A screw hole and a positioning hole to accept a DF Halfway Sensor Actuator are added to the Mounting Bracket.
2. A Philips Pan Head Screw - M3 x 5 and a DF Halfway Sensor Actuator are newly added.

Note: Before, the DF Halfway Sensor Actuator could only be installed with the Mounting Bracket "A3181191". By this modification, this actuator can also be installed with Mounting Bracket "A3181195". Since only one of the Mounting Brackets (A3181191, A3181195) is used to install the ARDF on the copier, the quantity of Actuator (A3181530) and fixing screw (03130050W) as accessory parts of the ARDF are the same.

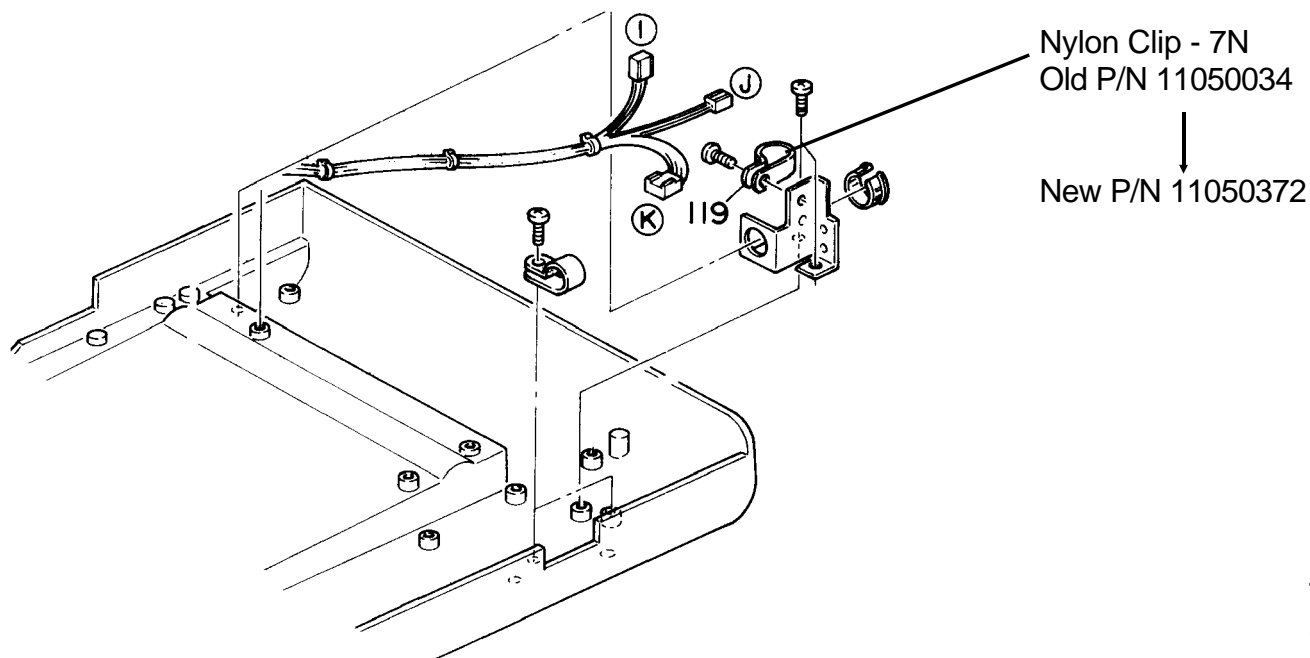
T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|------------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3811031996 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | First Production |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2701020001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | First Production |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50310001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2701030386 |

| Model | ARDF for M210, NC11 and NCX, N210, N220 and N230 (Ricoh DF57, Savin 9180ARDF, Nashua RF3020, Infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
|-------------------------|---|---------|----------------------|---------------|
| Modified Article | Harness Clamp | | | |
| Reason for Modification | To meet UL standard | | | |
| | | | | |
| | | | | |

To meet UL standard a harness clamp has been modified to UL approved type. The interchangeability is X/O.

| Old P/N | New P/N | Description | Q'ty Used | Interchangeability | Index No. | Page |
|----------|----------|-----------------|-----------|--------------------|-----------|------|
| 11050034 | 11050372 | Nylon Clip - 7N | 1 → 1 | X/O | 119 | 7 |



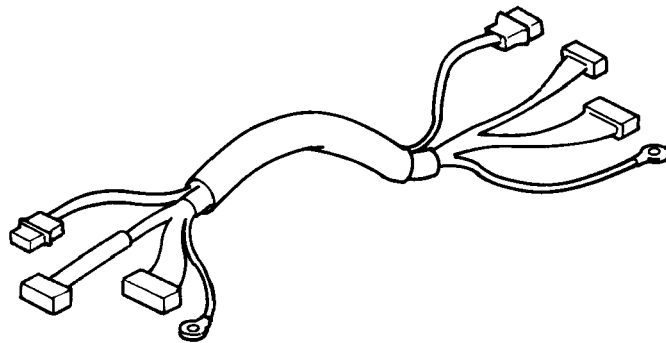
T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3811104246 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2471100001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2701100001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2471100007 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A51010001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2471101451 |

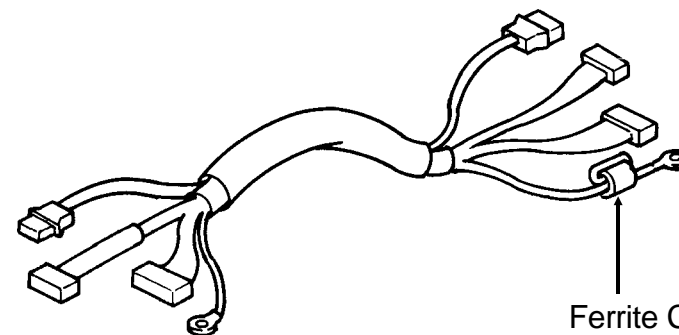
| Model | ARDF for M210, NC11, N210, N220 and N230 (Ricoh DF57, Savin 9180 ARDF, Nashua RF3020, infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
|-------------------------|--|---------|----------------------|---------------|
| Modified Article | Interface Harness | | | |
| Reason for Modification | To meet VDE standard | | | |
| | | | | |
| | | | | |

A ferrite core has been added to the interface harness.

| Old Parts No. | New Parts No. | Description | Q'ty Used | Interchangeability | Parts Catalog | |
|---------------|---------------|-------------------|-----------|--------------------|---------------|------|
| | | | | | Index No. | Page |
| A3185205 | A3185206 | Interface Harness | 1 → 1 | X/O | 7 | 7 |



Old



New

T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|----------------------------|-------------------|----------------------------|--------------------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2472020003 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50220001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2702020561 |

| | | | | |
|------------------------------------|---|----------------|---------------------------------|----------------------|
| Model | ARDF for M210, NC11, N210, N220, N230 (Ricoh DF57, Savin 9180 ARDF, Nashua RF3020, infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Feed - in Motor | | | |
| Reason for Modification | Parts standardization | | | |
| | | | | |
| | | | | |

To standardize parts with other models, the feed-in motor has been changed.

| Old P/N | New P/N | Description | Q'ty | Interchangeability | Index No. | Page |
|----------|----------|---------------|-------|--------------------|-----------|------|
| AX060043 | AX060067 | Feed-in Motor | 1 → 1 | O/O | 83 | 5 |

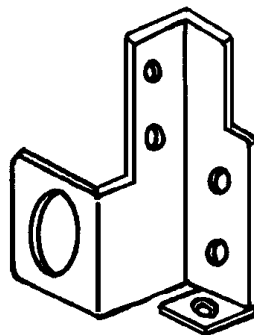
T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3812035889 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2472030001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2702030001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2472030009 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50320001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2702030551 |

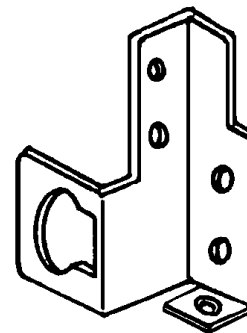
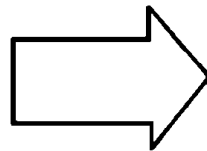
| Model | ARDF for M210, NC11, N210, N220, N230 (Ricoh DF57 Savin 9180 ARDF, Nashua RF 3020, Infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
|-------------------------|---|---------|----------------------|---------------|
| Modified Article | I/F Harness Bracket | | | |
| Reason for Modification | To facilitate assembly | | | |
| | | | | |
| | | | | |

As we have informed you of the modification by MB no. 12, a ferrite core has been added to the I/F harness. The shape of the hole on the I/F harness bracket has been changed so that the modified harness can pass through the hole.

| Old P/N | New P/N | Description | Q'ty Used | Interchangeability | Index No. | Page |
|----------|----------|---------------------|-----------|--------------------|-----------|------|
| A4971500 | A3181611 | I/F Harness Bracket | 1 → 1 | X/O | 11 | 7 |



Old



New

T. Ito, Manager
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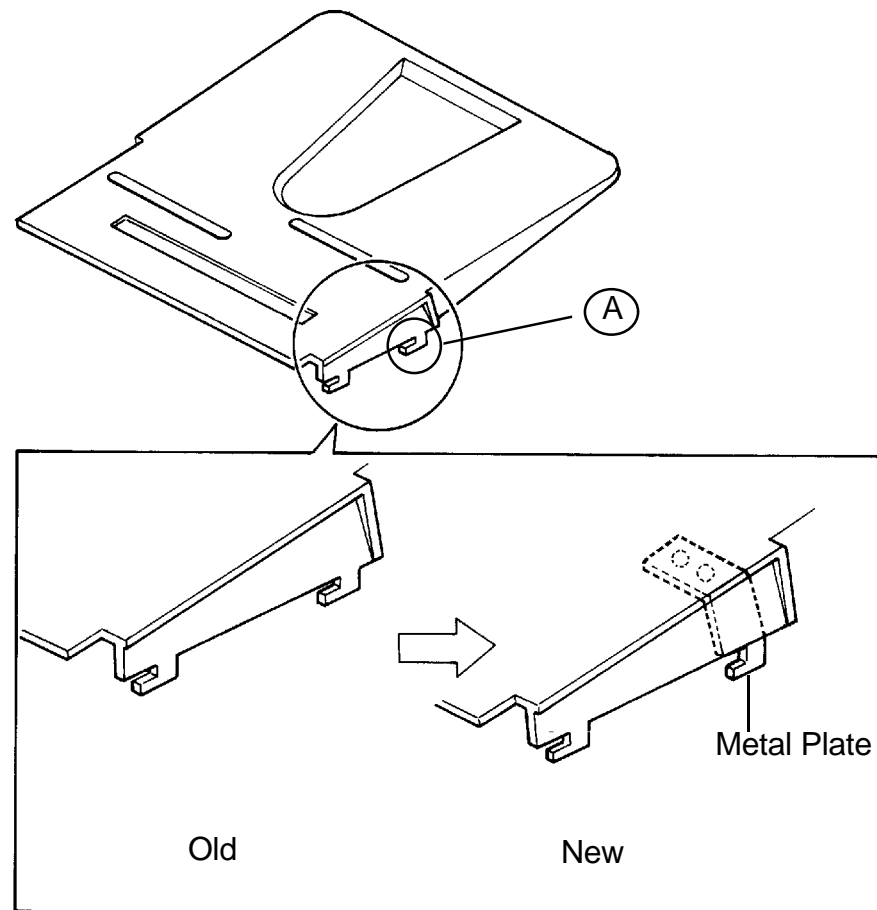
| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2472040113 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50420001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2702040841 |

| Model | | | ARDF for M210, NC11, N210, N230 (Ricoh DF57, SAVIN 9180 ARDF, Nashua RF3020, infotec ARDF IV / II) | | | | | Volt/Hz | Date of Modification | Serial Number | |
|--------------------------------|----------------------|--|---|--------------------------|---------------|--------------------------------|-----------------------------|--|-----------------------------|----------------------|-------------|
| Modified Article | | | Original Table | | | | | | | | |
| Reason for Modification | | | To prevent the original table from being broken | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Draw No. | Old Parts No. | | New Parts No. | Description | A.B.C. | Q'ty Used Old → New | Inter-change-ability | Part needed for replacement by new part | | Parts Catalog | |
| | | | | | Rank | | | Part No. | Description | Index No. | Page |
| | A3181327 | | A3181242 | Original Table (SAVIN) | | 1 → 1 | X/O | | | 8 | 3 |
| | A3181328 | | A3181243 | Original Table (NRG) | | 1 → 1 | X/O | | | 8 | 3 |
| | A4221323 | | A3181241 | Original Table (Ricoh) | | 1 → 1 | X/O | | | 8 | 3 |
| | A4651328 | | A3181244 | Original Table (Infotec) | | 1 → 1 | X/O | | | 8 | 3 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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Rank: A : Replace with new parts immediately. B : Replace with new parts at time of repair. C : Replace with new parts at time of overhaul.
Interchangeability:
(1) When old and new parts are not mutually interchangeable, use additional parts or an assembly part as indicated in "Parts needed for replacement by new part" to install the new part.
(2) The mark to the left of the slash indicates whether the old part can be used in the new machine, and the mark to the right indicates whether the new part can be used in the old machine. x = Not interchangeable o = Interchangeable

DETAILS OF MODIFICATION

The operators often open and close the DF by holding the original table. After about 1000 ~ 3000 times, (A) of the original table will break. To prevent this problem, the material of (A) has been changed to metal.



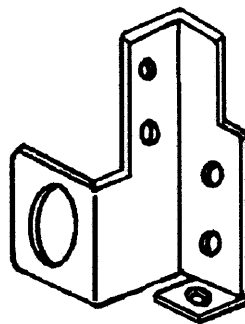
T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3812056387 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 247206XXXX |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2702050001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2472050001 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50520001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2702051036 |

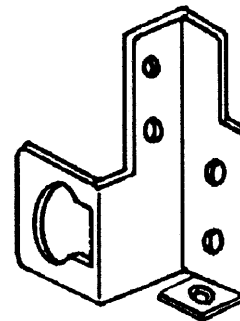
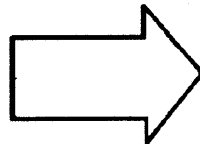
| Model | ARDF for M210, NC11. N210, N220, N230 (Ricoh DF57, Savin9180 ARDF, Nashua RF3020, infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
|----------------------------|--|---------|-------------------------|---------------|
| Modified Article | I/F Harness Bracket | | | |
| Reason for Modification | Parts standardization | | | |
| | | | | |
| | | | | |

To standardize parts with other models, the I/F harness bracket has been changed.

| Old P/N | New P/N | Description | Q'ty Used | Interchangeability | Index No. | Page |
|----------|----------|---------------------|-----------|--------------------|-----------|------|
| A4971500 | A3181611 | I/F Harness Bracket | 1 - 1 | 0/0 | 11 | 7 |



Old



New

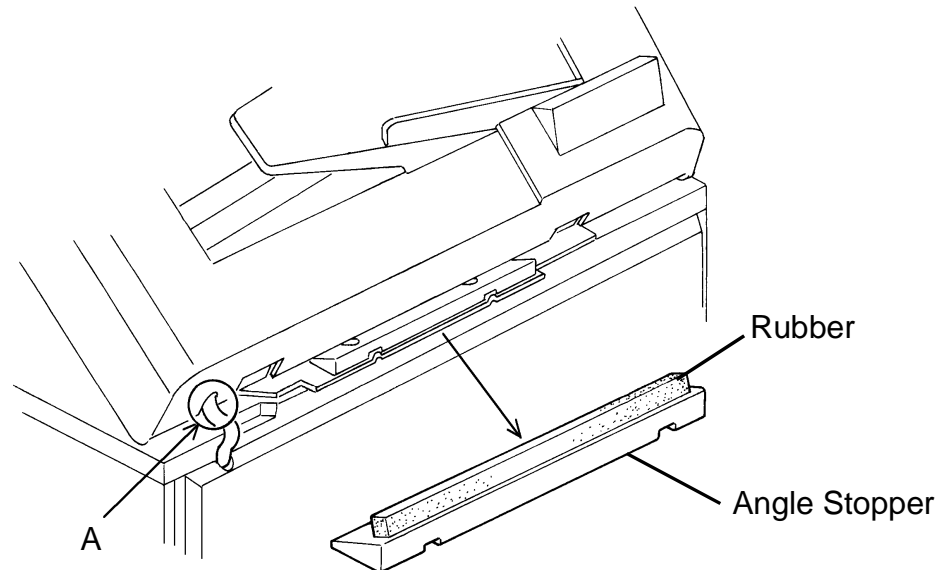

T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|-------------------------------|-----------------------|-------------------------|--------------------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | |
| NRG RF 3020 | 115/60 | S. America, etc. | A318-16 | |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | |
| INEOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | |

| Model | ARDF for M210, NC11, NC - X, N210, N220, N230 (Ricoh DF57, SAVIN 9180 ARDF, Nashua RF3020, infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
|-------------------------|---|---------|----------------------|---------------|
| Modified Article | Angle Stopper | | | |
| Reason for Modification | To prevent the I/F harness from being broken. | | | |
| | | | | |
| | | | | |

After the operator many times opens and closes the DF which is installed on the N230, the platen cover/DF position sensor harness will break at the position (A) in the following figure. To prevent this problem, a rubber has been added to the angle stopper.

| Old P/N | New P/N | Description | Interchangeability | Q'ty | Index No. | Page |
|----------|----------|---------------|--------------------|-------|-----------|------|
| A4651125 | A3181550 | Angle Stopper | X/O | 1 → 1 | 15 | 3 |



T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3812066908 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2472060001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2702060001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2472060009 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50620001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2702060961 |

| | | | | |
|--------------------------------|---|----------------|-----------------------------|----------------------|
| Model | ARDF for M210, NC11, NC-X, N210, N220, N230 (Ricoh DF57, SAVIN 9180 ARDF, Nashua RF3020, infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Main Board | | | |
| Reason for Modification | To prevent a document from being damaged. | | | |
| | | | | |
| | | | | |

After copying in platen mode, operators sometimes forget on the exposure glass. If the next operator makes a copy using the ADF, the forgotten original might be damaged. To prevent this, the copier will not allow copies to be made unless the first original is removed. However, if the machine is turned off, the copier will not remember that the first original is on the exposure glass. To prevent this problem, a ROM on the DF main board has been changed.

| Old P/N | New P/N | Description | Q'ty Used | Interchangeability | Index No. | Page |
|----------|----------|----------------|-----------|--------------------|-----------|--------|
| A4655175 | A4655176 | DF Main Board | 1 → 1 | X/O | 9 * | 7 9 |
| A4655185 | A4655187 | IC - D27128A-2 | 1 → 1 | X/O | 2 | 9 |

T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3812077528 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2472070001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2702070001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2472070009 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50720001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2702071242 |

| | | | | |
|------------------------------------|---|----------------|---------------------------------|----------------------|
| Model | ARDF for M210, NC11, NC-X, N220, N230 (Ricoh DF57, Savin 9180 ARDF, Nashua RF3020, infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Feed - in Motor | | | |
| Reason for Modification | Parts standardization | | | |
| | | | | |
| | | | | |

To standardize parts with other models, the feed-in motor has been changed.

| Old P/N | New P/N | Description | Q'ty | Interchangeability | Index No. | Page |
|----------|----------|---------------|-------|--------------------|-----------|------|
| AX060043 | AX060067 | Feed-in Motor | 1 → 1 | O/O | 83 | 5 |

T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | |

| Model | | | ARDF for M210, NC11, NC - X, N210, N220, N230 (Ricoh DF57, SAVIN 9180ARDF, Nashua RF3020, Infotec ARDF IV/II) | | | | | Volt/Hz | Date of Modification | Serial Number | |
|--------------------------------|---------------|--|--|----------------------|--------|-------------------------|----------------------|---|-----------------------------|----------------------|------|
| Modified Article | | | Friction Belt | | | | | | | | |
| Reason for Modification | | | To ensure the original separation | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Draw No. | Old Parts No. | | New Parts No. | Description | A.B.C. | Q'ty Used Old New | Inter-change-ability | Part needed for replacement by new part | | Parts Catalog | |
| | | | | | Rank | | | Part No. | Description | Index No. | Page |
| | A4221352 | | A4221360 | Friction Belt Holder | | 1 → 1 | X/X | | | 68 | 5 |
| | A4971170 | | A4221358 | Friction Belt | | 1 → 1 | X/X | | | 69 | 5 |
| | A4221003 | | A4971034 | Feed Roller | | 1 → 1 | X/X | | | 47 | 5 |
| | | | A4971024 | Guide Mylar | | 0 → 1 | | | | * 100 | 5 |
| | | | | | | | | | | | |
| | | | | | | | | | * New Index No. | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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| | | | | | | | | | | | |

Rank: A : Replace with new parts immediately. B : Replace with new parts at time of repair. C : Replace with new parts at time of overhaul.

Interchangeability:

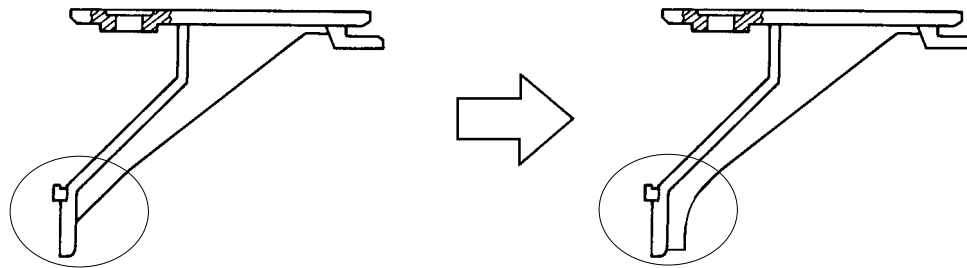
(1) When old and new parts are not mutually interchangeable, use additional parts or an assembly part as indicated in "Parts needed for replacement by new part" to install the new part.

(2) The mark to the left of the slash indicates whether the old part can be used in the new machine, and the mark to the right indicates whether the new part can be used in the old machine. x = Not interchangeable o = Interchangeable

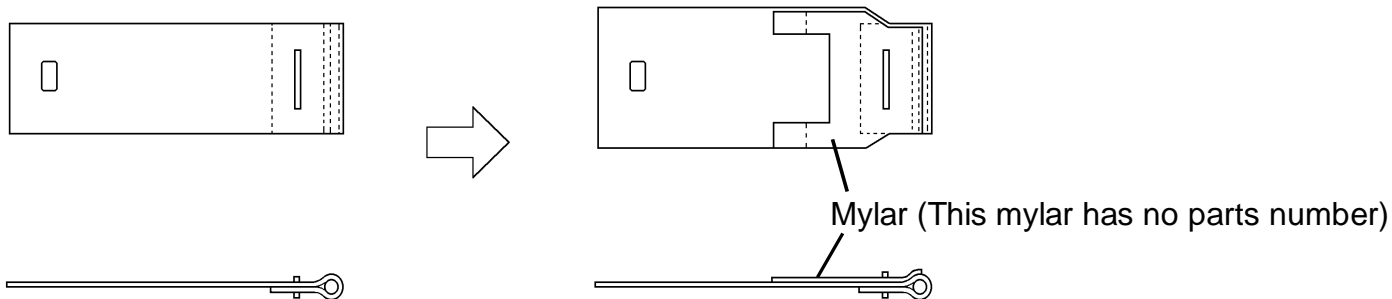
DETAILS OF MODIFICATION

To ensure the original separation, the following parts have been modified.

1. Friction Belt Holder : The configuration of the friction belt holder has been changed as shown.

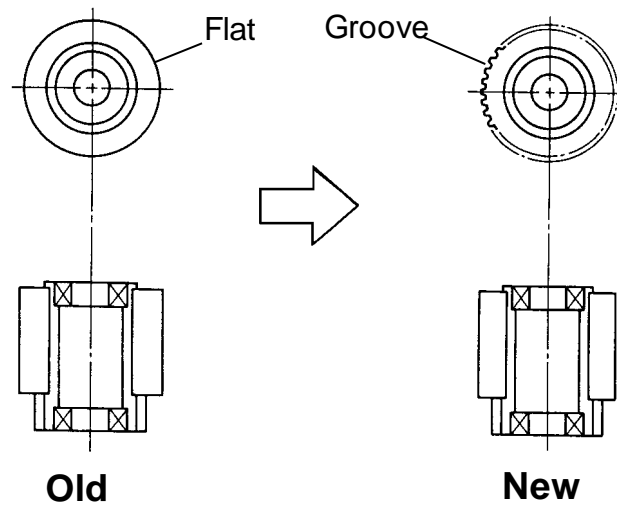
**Old****New**

2. Friction Belt : The configuration of the belt has been changed and a mylar has been added to improve feeding of the original.

**Old****New**

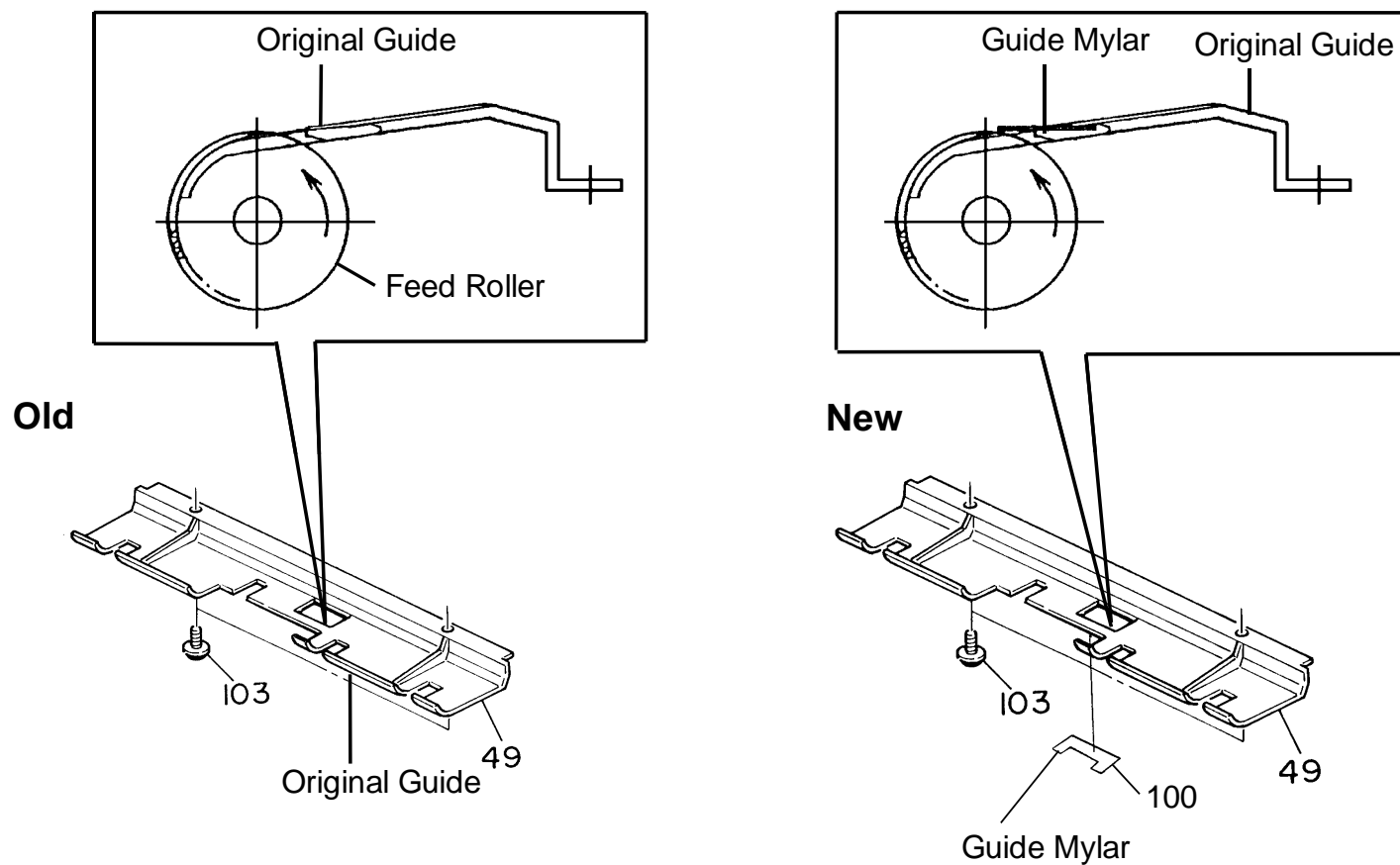
DETAILS OF MODIFICATION

3. Original Feed Roller : To improve feeding of the original, the groove has been added to the feed roller.



DETAILS OF MODIFICATION

4. Guide Mylar: A guide mylar has been added to the original guide to improve feeding of the original.



T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3812108813 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2472100001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2702100001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2472100013 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A51020001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2702100761 |

| | | | | |
|------------------------------------|--|----------------|---------------------------------|----------------------|
| Model | ARDF for M210, NC11, NC - X, N210, N220, N230 (Ricoh DF57, Savin 9180 ARDF, Nashua RF3020, Infotec ARDF IV /II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Photocoupler | | | |
| Reason for Modification | Due to vendor change | | | |
| | | | | |
| | | | | |

Due to vendor change, the following part has been changed. The interchangeability is O/O.

| Page | Index | Old P/N | New P/N | Description |
|------|-------|----------|----------|-----------------------|
| 9 | 119 | 14030388 | | Photocoupler - ON3111 |
| 9 | 119 | | 14030784 | Photocoupler - ON3131 |

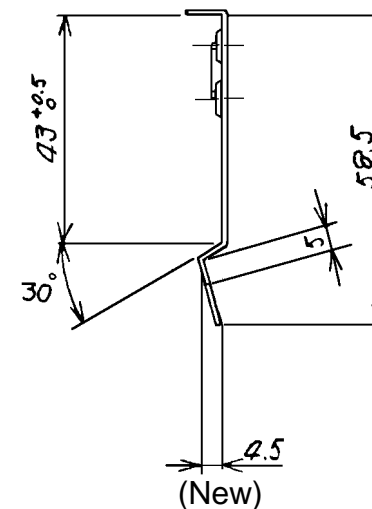
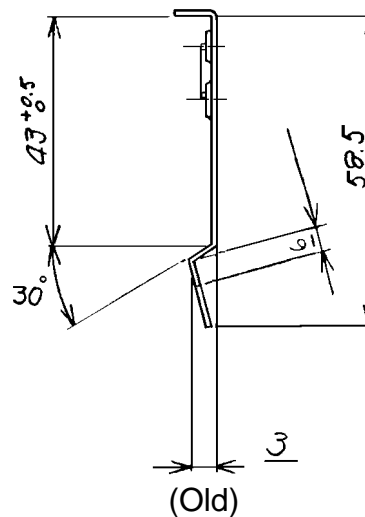
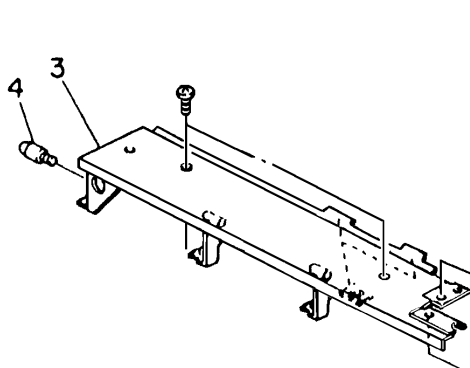
T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | |

| Model | ARDF for M210, NC-11, NC-X, N210, N220, N230 (Ricoh DF57, Savin 9180 ARDF, Nashua RF3020, Infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
|-------------------------|--|---------|----------------------|---------------|
| Modified Article | Pull-out Bracket | | | |
| Reason for Modification | To prevent original misfeed | | | |
| | | | | |
| | | | | |

The DF registration sensor is activated by paper dust on the sensor pad, affecting its color. This is because, when the original roller starts rotating, the DF upper plate is warped slightly downward. The clearance between the DF registration sensor and the sensor pad is reduced. To prevent this the pull-out bracket has been modified to improve the clearance.

| Old P/N | New P/N | Description | Q'ty Used | Inter-change-ability | Parts Catalog | |
|----------|----------|------------------|-----------|----------------------|---------------|------|
| | | | | | Index No. | Page |
| A4651057 | A4971052 | Pull-out Bracket | 1 → 1 | X/O | 3 | 5 |



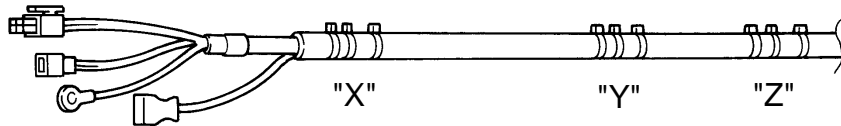
T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3813039521 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 247304XXXX |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2703030001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2473030001 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50330001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2703030761 |

| Model | ARDF for M210, NC-11, NC-X, N210, N220, N230 and Pigeon (Ricoh DF57, Savin 9180 ARDF, Nashua RF3020, Infotec ARDF IV/II) | Volt/Hz | Date of Modification | Serial Number |
|-------------------------|--|---------|----------------------|---------------|
| Modified Article | Interface Harness | | | |
| Reason for Modification | To equip this ARDF with the Pigeon series | | | |
| | | | | |
| | | | | |

To equip this ARDF with the Pigeon series, binders for the clamp position have been added.

| Old P/N | New P/N | Description | Q'ty Used | Inter-change-ability | Parts Catalog | |
|----------|----------|--------------------------|-----------|----------------------|---------------|---------|
| | | | | | Index No. | Page |
| A3185205 | A3185207 | Interface Harness - 115V | 1 → 1 | X/O | 7 * | 7 15 |



(These binders have been added)

NOTE: The clamp position of the DF harness with the bushing or clamp is different for each machine as follows:

"X" position A027 copier

"Y" Position A030, A048, A054, A072 and A075 copiers

"Z" position A110 and A111 copiers

T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3813039521 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 247304XXXX |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2703030001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | |

| | | | | |
|------------------------------------|---|----------------|---------------------------------|----------------------|
| Model | ARDF for M210, NC-11, NC-X, N210, N220, N230 and Pigeon (Ricoh DF57, Savin 9180 ARDF, Nashua RF3020, Infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Covers | | | |
| Reason for Modification | Material change | | | |
| | | | | |
| | | | | |

To change the material, the following parts have been changed.

NOTE: In this modification, the color of the above parts has been changed from black to silver.

| Old P/N | New P/N | Description | Q'ty Used | Inter- change- ability | Parts Catalog | |
|----------|----------|------------------------|-----------|------------------------------|---------------|------|
| | | | | | Index No. | Page |
| A3181499 | A3181171 | Belt Drive Motor Cover | 1 → 1 | O/O | 50 | 3 |
| A3181184 | A3181181 | Feed-out Motor Cover | 1 → 1 | O/O | 46 | 3 |
| A4221183 | A4221475 | Main Motor Cover | 1 → 1 | O/O | 51 | 3 |

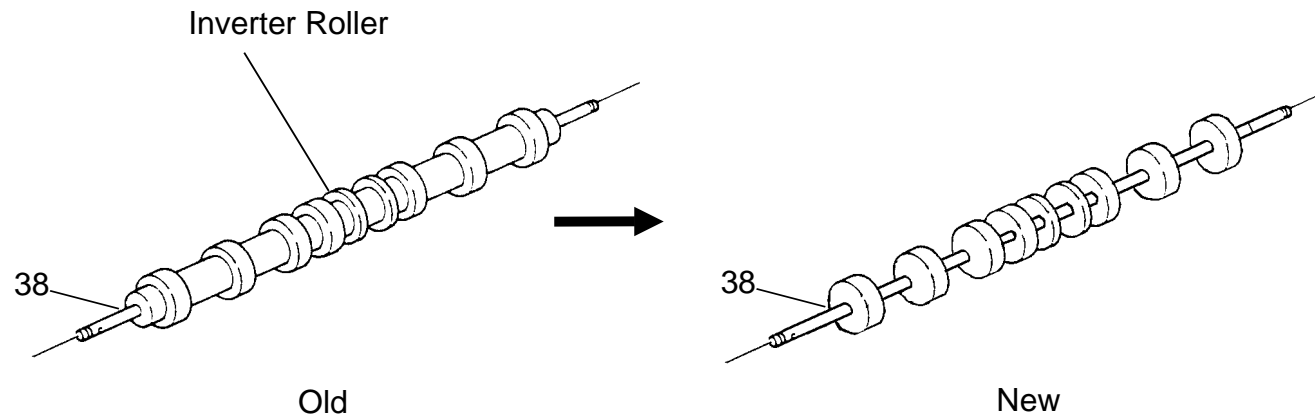
T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3813049989 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2473060001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2703040001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2473040252 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50430001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2703040786 |

| Model | ARDF for M210, NC-11, NC-X, N210, N220, N230 and Pigeon (Ricoh DF57, Savin 9180 ARDF, Nashua RF3020, Infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
|-------------------------|--|---------|----------------------|---------------|
| Modified Article | Inverter Roller | | | |
| Reason for Modification | Parts standardization | | | |
| | | | | |
| | | | | |

To standardize the parts with other models, the following parts have been changed.

| Old P/N | New P/N | Description | Q'ty Used | Inter-change-ability | Parts Catalog | |
|----------|----------|-----------------|-----------|----------------------|---------------|------|
| | | | | | Index No. | Page |
| A4221210 | A4972090 | Inverter Roller | 1 → 1 | O/O | 38 | 7 |



T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3813040144 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2473060001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2703040001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2473050001 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50530001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2703040886 |

| Model | ARDF for M210, NC-11, NC-X, N210, N220, N230 and Pigeon (Ricoh DF57, Savin 9180 ARDF, Nashua RF3020, Infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
|----------------------------|---|---------|-------------------------|---------------|
| Modified Article | DF Main Board | | | |
| Reason for Modification | To prevent an original from being damaged | | | |
| | | | | |
| | | | | |

| Old P/N | New P/N | Description | Q'ty Used | Inter- change- ability | Parts Catalog | |
|----------|----------|----------------|-----------|------------------------------|---------------|--------|
| | | | | | Index No. | Page |
| A4655176 | A4655177 | DF Main Board | 1 → 1 | X/O | 9 * | 7 9 |
| A4655187 | A4655140 | IC - D27128A-2 | 1 → 1 | X/O | 2 | 9 |

We have modified the software in the ROM on the DF main board to prevent originals from being damaged (refer to the MB no. 18). The modification solved the problem when the main switch was turned off but not when the front cover was opened. When opening the front cover of an N220 series machine, the main power supply is interrupted. So, the same kind of original damage is likely to occur. To prevent this problem, a ROM on the DF main board has been changed.

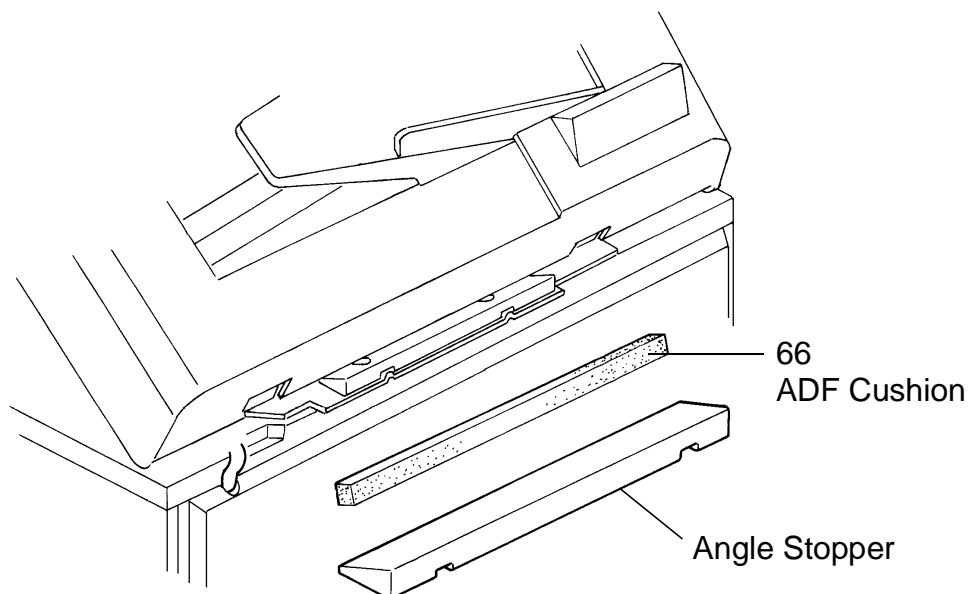
T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 381360595 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2473060001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2703060509 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 247307XXXX |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A5073XXXX |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 270307XXXX |

| Model | ARDF for M210, NC11, NC-X, N210, N220, N230 and Pigeon (Ricoh DF57, SAVIN 9180 ARDF, Nashua RF3020, infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
|----------------------------|--|---------|-------------------------|---------------|
| Modified Article | ADF Cushion | | | |
| Reason for Modification | To facilitate servicing | | | |
| | | | | |
| | | | | |

To facilitate servicing, the ADF cushion on the angle stopper has been registered as a service parts.

| New P/N | Description | Q'ty | Index No. | Page |
|----------|-------------|-------|-----------|------|
| A3181560 | ADF Cushion | 0 → 1 | 67 | 3 |



T. Ito, Manager
Copier Technical Support

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | |

ISSUED ON: April 15, '94

| | | | | |
|------------------------------------|--|----------------|---------------------------------|----------------------|
| Model | ARDF for M210, NC11, NC-X, N210, N220, N230, Pigeon and Ibis (Ricoh DF57, SAVIN 9180 ARDF, Nashua RF3020, Infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | ROM on the DF main board | | | |
| Reason for Modification | To increase the margin against mis-sensing | | | |
| | | | | |
| | | | | |

To increase the margin against mis-sensing of the original set sensor, the Rom has been changed.

| Old P/N | New P/N | Description | Q'ty Used | Inter- change- ability | Parts Catalog | |
|----------|----------|---------------------|-----------|------------------------------|---------------|------|
| | | | | | Index No. | Page |
| A4655140 | A4655145 | IC - MBM27C128A - 2 | 1 → 1 | O/O | 2 | 9 |

S. Hamano, Assistant General Manager
Technical Support Department

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3814023882 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 2474020001 |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2704020001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 247404XXXX |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A5044XXXX |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2704021022 |

| | | | | |
|------------------------------------|--|----------------|---------------------------------|----------------------|
| Model | ADF for M210, NC11, NC-X, N210, N220, N230, Pigeon and Ibis (Ricoh DF57, SAVIN 9180ARDF, Nashua RF3020, Infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Microswitch | | | |
| Reason for Modification | Due to vendor change | | | |
| | | | | |
| | | | | |

Due to vendor change, the microswitch has been changed.

| Old P/N | New P/N | Description | Q'ty Used | Inter- change- ability | Parts Catalog | |
|----------|----------|-------------|-----------|------------------------------|---------------|------|
| | | | | | Index No. | Page |
| 12041319 | 12042398 | Microswitch | 1 → 1 | O/O | 122 | 7 |

S. Hamano, Assistant General Manager
Technical Support Department

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | |

ISSUED ON: July 15, '95


| | | | | |
|------------------------------------|---|----------------|---------------------------------|----------------------|
| Model | ADF for M210, NC11, NX-X, N210, N220, N230, Pigeon and Ibis (Ricoh DF57, SAVIN 9180 ARDF, Nashua RF3020, Infotec ARDF IV / II) | Volt/Hz | Date of Modification | Serial Number |
| Modified Article | Fiber Connector - 2P | | | |
| Reason for Modification | To improve reliability | | | |
| | | | | |
| | | | | |

To improve reliability, the 2P fiber connector has been changed.

| Old P/N | New P/N | Description | Q'ty Used | Inter- change- ability | Parts Catalog | |
|----------|----------|--------------------|-----------|------------------------------|---------------|------|
| | | | | | Index No. | Page |
| A4655210 | 11027252 | Fiber Connector 2P | 1 → 1 | X/O | 3 | 9 |

M. Iwasa, Manager
Technical Support Department

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3815027540 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | 247506XXXX |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2705020001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2475021138 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50250001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2705021409 |

| Model | | | ADF for M210, NC11, NC-X, N210, N220, N230, Pigeon and Ibis (Ricoh DF57, SAVIN 9180 ARDF, Nashua RF3020, Infotec ARDF IV / II) | | | | | | Volt/Hz | Date of Modification | Serial Number | |
|----------------------------|------------------|--|---|----------------------------|------|----------------------|------------------------------|--|---------------|-------------------------|------------------|--|
| Modified Article | | | Main Board, etc. | | | | | | | | | |
| Reason for Modification | | | To comply with CE Mark standards | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Draw No. | Old Parts No. | | New Parts No. | Description | Rank | Q'ty Used Old→New | Inter- change- ability | | | Parts Catalog | | |
| | | | | | | | | | Destination | No. | Page | |
| | A4655177 | | A4655500 | DF Main Board | | 1 → 1 | X/O | | All | 9 | 7 | |
| | 16041379 | | | Capacitor - 2.2μF ±20% 50V | | 2 → 1 | | | All | 142 | 9 | |
| | 16100067 | | | Resistor - 4.7KΩ 1/8W ±5% | | 38 → 37 | | | All | 162 | 9 | |
| | 16114229 | | | Resistor - 2.2Ω 1/4W ±5% | | 1 → 0 | | | All | 170 | 9 | |
| | 16100035 |  | | Resistor - 100Ω 1/8W | | 1 → 0 | | | All | 157 | 9 | |
| | | | 16100071 | Resistor - 10KΩ 1/8W | | 4 → 5 | | | All | 163 | 9 | |
| | A3185220 | | A3185221 | Main Harness | | 1 → 1 | X/O | | -25, -26, -27 | 10 | 7 | |
| | | | 16070116 | Ferrite Core | | 1 → 2 | X/O | | -25, -26, -27 | 119 | 13 | |
| | A4651393 | | A3181393 | Left Hinge | | 1 → 1 | X/O | | -25, -26, -27 | 4 | 7 | |
| | A4651499 | | A3181450 | Right Hinge | | 1 → 1 | X/O | | -25, -26, -27 | 1 | 7 | |

Rank: A : Replace with new parts immediately. B : Replace with new parts at time of repair. C : Replace with new parts at time of overhaul.

Interchangeability:

(1) When old and new parts are not mutually interchangeable, use additional parts or an assembly part as indicated in "Parts needed for replacement by new part" to install the new part.

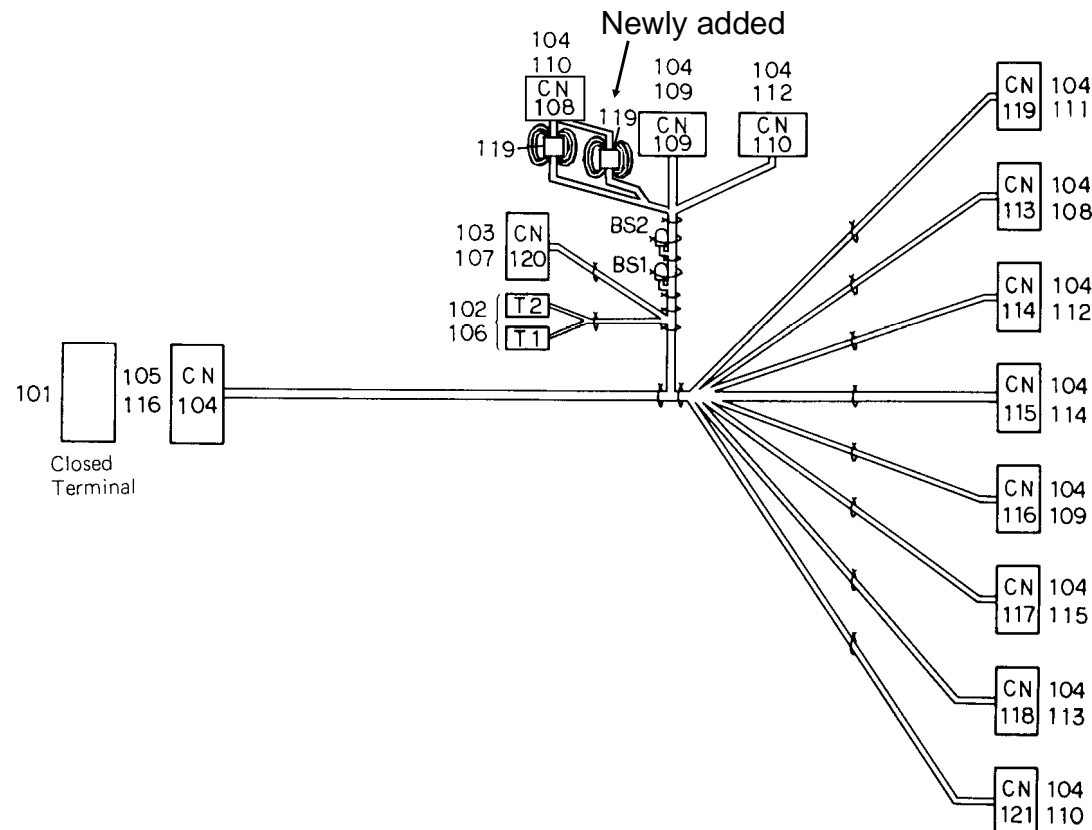
(2) The mark to the left of the slash indicates whether the old part can be used in the new machine, and the mark to the right indicates whether the new part can be used in the old machine. x = Not interchangeable o = Interchangeable

To comply with CE mark standards, the following modifications have been made.

1. The DF Main Board has been modified to reduce the level of electrical noise.

| | | |
|--------------------|------|---------------------------|
| Components Removed | C117 | (P/N 16041379) |
| | R124 | (P/N 16100067) |
| | R116 | (P/N 16114229) |
| Components Changed | R122 | (P/N 16100035 → 16100071) |

2. A Ferrite Core has been added to the Main Harness to absorb electrical noise.



DETAILS OF MODIFICATION

3. To improve grounding, the Left Hinge and Right Hinge have been nickel plated. Also, zinc plated screws have been used to secure the hinges to the mounting bracket.
4. The Mounting Bracket has been nickel plated to improve grounding. Also, zinc plated screws have been used to secure the bracket to the copier.
5. Chrome plated screws have been used to attach the Belt Drive Motor Cover (P/N A3181171) and Feed-out Motor Cover (P/N A3181181).

M. Iwasa, Manager
Technical Support Department

| MODEL NAME | V/Hz | DESTINATION | CODE | SERIAL NUMBER |
|--------------------|------------|-----------------|---------|---------------|
| Savin 9180 ARDF | 115/60 | USA, Canada | A318-15 | 3815089523 |
| NRG RF 3020 | 115/60 | S.America, etc. | A318-16 | ----- |
| Ricoh DF57 | 115/60 | USA, Canada | A318-17 | 2705080001 |
| NRG RF 3020 | 220,240/50 | Europe, etc. | A318-25 | 2475080001 |
| INFOTEC ARDF IV/II | 220,240/50 | Europe | A318-26 | 3A50850001 |
| Ricoh DF57 | 220,240/50 | Europe, etc. | A318-27 | 2705080401 |