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Sample of manual. Download All 699 pages at
<https://www.arespairmanual.com/download/2010-epson-pro-7900-and-9900-printer-service-repair-workshop-manual/>

Product: 2010 EPSON Pro 7900 and 9900 Printer Service Repair Workshop Manual
 Full Download: <https://www.arespairmanual.com/downloads/2010-epson-pro-7900-and-9900-printer-service-repair-workshop-manual/>

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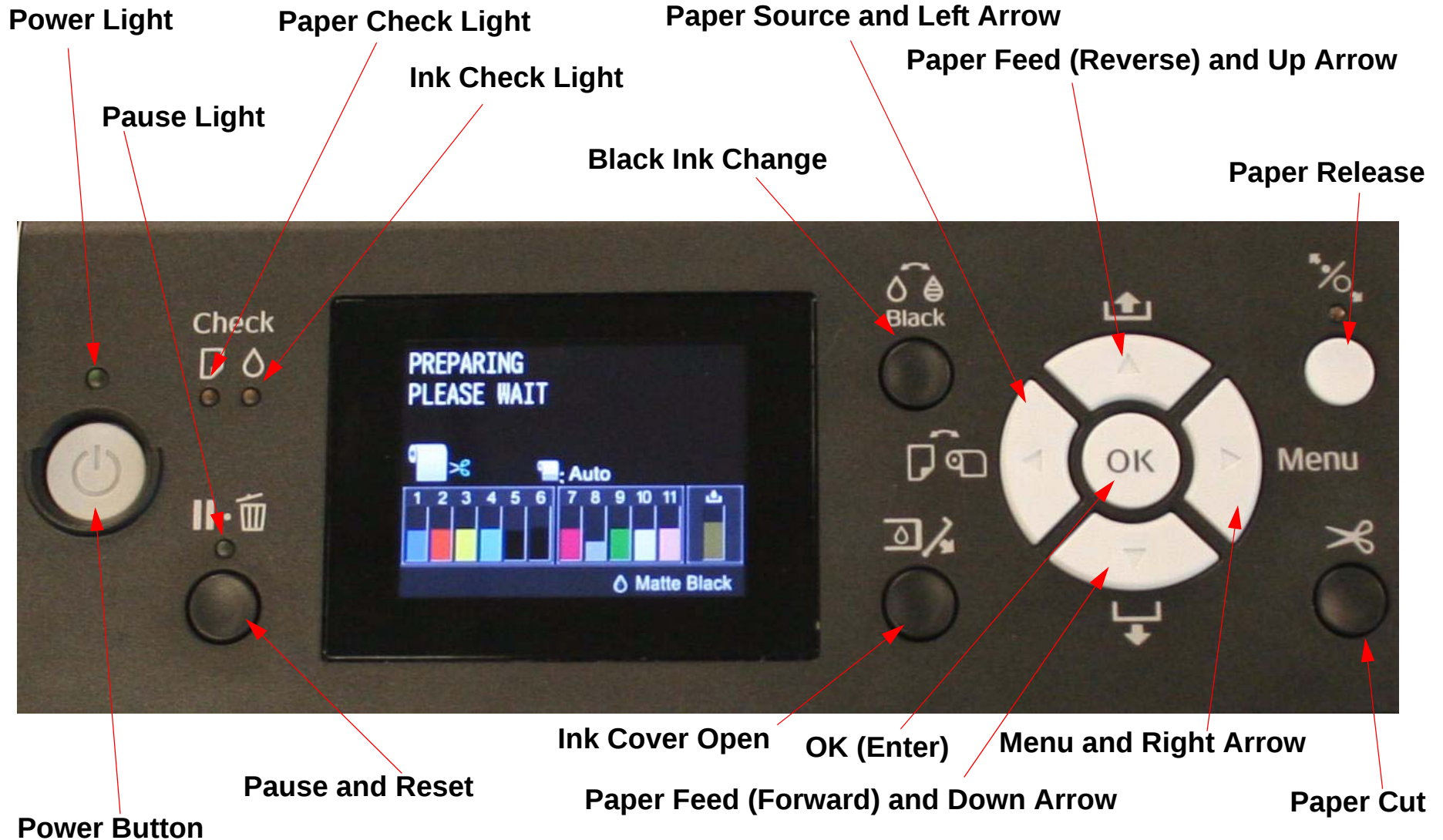
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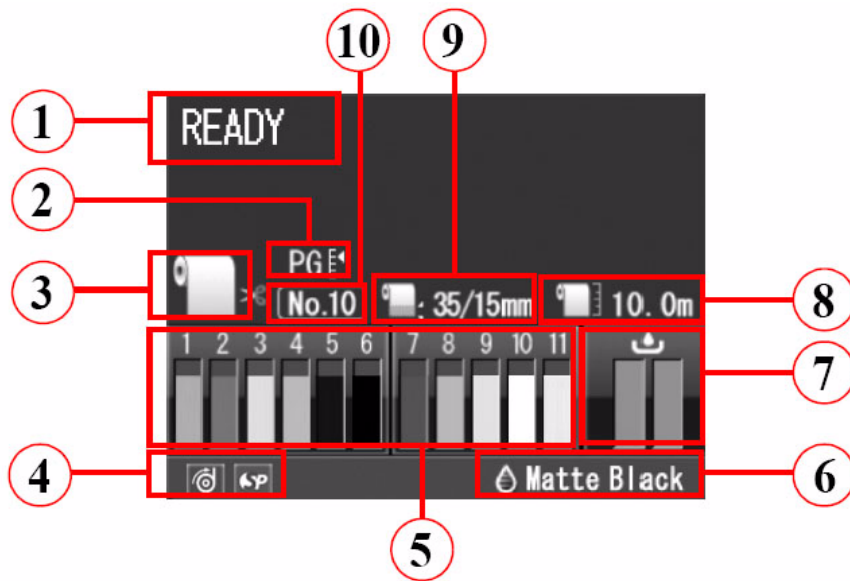
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Control Panel Map



Printers LCD Display



1. Printer Status
2. Platen Gap Setting
3. Paper Type and Roll Paper Auto Cut Setting
4. Enabled Options
5. Ink Levels
6. Black Ink Setting
7. Waste Ink Cartridge Level(s)
8. Roll Paper Counter
9. Roll Paper Margin Setting
10. Custom Paper Setting

SELF TESTING: **Down**, **Right**, and **OK**, at power on (Hold the buttons until the Ink Cartridge Icons appear).

NVRAM (Parameter) Backup Mode: **Up**, **Down**, **Left**, and **Right**, at power on.

NVRAM (Parameter) Restore Mode: Disengage **11 Ink Cartridges**, remove the **1 (or 2) Maintenance Tank(s)**, hold the **Up**, **Down**, **Left**, and **Right** buttons and turn on the **Printer**. **Wait an additional 20 seconds after the data is transferred to ensure completion.**

F/W DOWNLOAD MODE: **Up**, **Down**, **Left**, and **Right**, at power on.

Maintenance Mode 1: **Pause**, at power on.

User Menu: Press the **Menu** button when
the printer displays **Ready**

1. PRINTER SETUP.

PLATEN GAP: NARROW, *STANDARD, WIDE,
WIDER, WIDEST

PAGE LINE: *ON, OFF

ROLL PAPER MARGIN: *DEFAULT, TOP/BOTTOM
15mm, TOP 35/BOTTOM 15mm,
3mm,15mm

PAPER SIZE CHK: *ON, OFF

PAPER SKEW CHECK: *ON, OFF

REFRESH MARGIN: *ON, OFF

AUTO NOZZLE CHECK: ON:PERIODICALLY*,
ON:EVERY JOB, OFF

PRINT NOZZLE PATTERN: OFF*, ON:EVERY PAGE,
ON EVERY 10 PAGES,

INITIALIZE SETTINGS: EXECUTE

2. TEST PRINT.

NOZZLE CHECK: PRINT

STATUS SHEET: PRINT

NETWORK STATUS SHEET: PRINT

JOB INFORMATION: PRINT

CUSTOM PAPER: PRINT

3. MAINTENANCE

CUTTER ADJUSTMENT: EXEC

CUTTER REPLACEMENT: EXEC

CLEANING: NORMAL CLEANING: EXECUTE

CLEAN FOR EACH COLOR: C/VM, PK,
(MK)/LK, O/G, LLK/Y,VLM/
LC

POWER CLEANING: EXECUTE

CLOCK SETTING: (mm/dd/yy hh:mm)

4. PRINTER STATUS.

VERSION: (CURRENT FIRMWARE)

INK LEVEL: (FOR EACH COLOR) (nnn%)

MAINTENANCE TANK: LEFT (nnn%), CENTER
REAR (nnn%), RIGHT (nnn%)

JOB HISTORY: NO.(n) INK:(n)ml, PAPER:(nnnn)cm2

TOTAL PRINTS: (n) PAGES

EDM STATUS: ENABLED, LAST UPLOADED (mm/
dd/yy hh:mm)

5. PAPER SETUP.

ROLL PAPER REMAINING (*This Menu is only active when paper is not loaded and the Pinch Rollers are closed*)

REMAINING PPR SETUP: *OFF, ON:PRINT EVERY PAGE, ON: AT ROLL EXCHANGE

ROLL PAPER LENGTH: (nnn)ft (*REMAINING PPR SETUP must be on to enable*)

ROLL LENGTH ALERT: (nn)ft (*REMAINING PPR SETUP must be on to enable*)

PAPER TYPE: Photo Paper, Proofing Paper, Fine Art Paper, Matte Paper, Plain Paper, Others, Custom Paper, No Paper Selected

CUSTOM PAPER: Paper NO. (1-10)

PAPER TYPE: Photo Paper, Proofing Paper, Fine Art Paper, Matte Paper, Plain Paper, Others

PLATEN GAP: NARROW, STANDARD, WIDE, WIDER, WIDEST

THICKNESS PATTERN: PRINT

PAPER FEED ADJUST: (n.nn)%

DRYING TIME: (n.n)sec

PAPER SUCTION: *STANDARD, -1, -2, -3, -4

SET ROLL PAPER TENSION: *STANDARD, HIGH, HIGHER

6. Head Alignment.

PAPER THICKNESS: SELECT PAPER TYPE: (Photo Paper, Proofing Paper, Fine Art Paper, Matte Paper, Plain Paper, Others) SELECT THICKNESS: (N)mil

ALIGNMENT: AUTO (UNI-D, BI-D 2-COLOR, BI-D All, BI-D #1, BI-D #2, BI-D #3, BI-D #3, BI-D #4) MANUAL (UNI-D, BI-D 2-COLOR, BI-D ALL)

7. NETWORK SETUP: (*DISABLE, ENABLE)

IP ADDRESS SETTING: AUTO, PANEL,

BONJOUR: *ON, OFF

INIT NETWORK SETTING: EXECUTE

Note: Manual IP169.254.1.2 Subnet 255.255.0.0 works with most computers.

8. OPTIONS SETUP:

SPECTROPROOFER:

STATUS INFORMATION: DEVICE VERSION, CALIBRATION TILE SERIAL#, DEVICE TEMPERATURE, FIRMWARE VERSION, AIR TEMPERATURE, BACKING COLOR

Device Alignment: EXECUTE

TAKE UP REEL: Version

NVRAM Data (Parameter) Backup Mode

Hold the **Up, Down, Left, and Right** buttons and turn on the power. The Printer will display **F/W Download**.

NVRAM Data (Parameter) Restore Mode

Disengage **11 Ink Cartridges**, remove the **1 (or 2) Maintenance Tank(s)**, hold the **Up, Down, Left, and Right** buttons and turn on the **Printer**. **Wait an additional 20 seconds after the data is transferred to ensure completion.**

F/W Download Mode

Hold the **Up, Down, Left, and Right** buttons and turn on the power. The Printer will display **F/W Download**.

Maintenance Mode 1: Press and hold the **Pause** button and turn on the Printer.

LANGUAGE: JAPANESE, *ENGLISH, FRENCH, ITALIAN, GERMAN, PORTUGUE, SPANISH, DUTCH, Korean, Chinese (**Panel Language**)

LENGTH UNITS: *FEET/INCH, METRIC (**Set's the unit of measure that the printer displays**)

TEMPERATURE UNITS: C, F

ROLL PAPER TENSION: *4 (1-5)

SS CLEANING: EXEC (**Super Strong Cleaning**)

PWR ON ROLL PPR FEED: *ON, OFF (**On = Feeds the paper 3" lower, when auto cut is off**)
(**Off = Does not feed the paper 3" lower, when auto cut is off**)

DEFAULT PANEL: EXEC (**Resets to Factory Default all of the User Menus**)

AUTO CLEANING TIMES: 1, 2, 3

Custom:*0 (0 - 9)

SELF TESTING: Press and hold the **Down**, **Right**, and **OK** buttons and turn on the Printer.



1. **Down**, **Right**, and **OK**, and turn on the **Printer**. Continue to hold the buttons the **Down**, **Right**, and **OK** buttons.



2. Release the **Down**, **Right**, and **OK** buttons when the Ink Icons appear.



3. Press the **Right Arrow** to enter the **Self Testing** Menu.

Note: The **Left Arrow** can be used to temporarily leave the Self Testing Menu to access and use the Pinch Roller Release Button, the Cut Button, etc. Use the **Right Arrow** to re-enter the **Self Testing** Menu.

SELF TESTING:

Test:

Version: F/W: (nnnnnnnn,n.nn,n.nnnn) (Displays the current firmware version)

Fan: Paper(Duty): (200% - 0%) (Tests the fan suction for all paper suction fans)

Paper1: (Fan test for paper suction fan #1 (Right Side Fan))

Paper2: (Fan test for paper suction fan #2 (Left Side Fan))

Paper3: (Fan test for paper suction fan #3 (Left Side Fan))

Error History (list of past errors)

Mecha Adjustment:

Paper: Paper Thick 00, 01, 10, 11 (Displays the output from the Paper Thickness Sensors)

RearAD: [Enter]Start (nnn nnn nnn) (For adjusting the Rear Paper Sensor)

Selector Check: [Enter]Start (Tests the PK/MK Valve Motor and Sensor)

APG Check: [Enter]Start (Tests the Auto Platen Gap Motor and Sensor)

PF Ageing: Variable Mode, Aging 400, Aging 12 (Exercises the Paper Feed Motor and Encoder)

CR Ageing: [Enter]Start (Exercises the Carriage Motor and Encoder)

Cleaning PG: Adjustment, Check (Measures the gap between the Nozzle Plate and the AID Grid)

Decomp: [Enter]Start

MK Nozzle/Alignment: (Nozzle check using Matte Black plus all other colors)

Output Pattern: [Enter]Print

Output Alignment: [Enter]Print

Cleaning CL1: [Enter]Start

Cleaning CL2: [Enter]Start

Cleaning CL3: [Enter]Start

PK Nozzle/Alignment: (Nozzle check using Photo Black plus all other colors)

Output Pattern: [Enter]Print

Output Alignment: [Enter]Print

Cleaning CL1: [Enter]Start

Cleaning CL2: [Enter]Start

Cleaning CL3: [Enter]Start

IM Sensor Gap: [Enter]Un Cap

Fan: Fan Adjust *0% (-10% to +10%) (Adjusts Suction Fans)
Temporary PG: [Enter]Un Cap (Releases the Carriage Mechanism)
PF Head Slant: [Enter]Print (Prints the PF Slant adjustment pattern)
CR Head Slant: [Enter]Print (Prints the CR Slant adjustment pattern)
PG Adj: [Enter]Un Cap (Releases the Carriage Mechanism)
CR Scale: [Enter]Start (Excercises the Carriage Motor and Encoder)
CR Active Dumper: All, 240CPS, 300CPS, Hybrid
AIDCheck: [Enter] Start (Test the AID circuitry)
IM Sensor: [Enter]Print (do not perform)
Gap Adj: (Auto Bi-d and Uni-d)
 Auto Uni-D, [Enter]Print
 Auto Bi-D, [Enter]Print
Feed Adj: (990.6mm adjustment)
 Printing: [Enter]Print
 Input: Feed Adj Value: (n:nn)mm
Cutter: (Test the Cutter Mechanism)
 Printing: [Enter]Print
 Input: Cut Position Home: (n:n)mm
TBS Pos: (Margin adjustments)
 Printing: [Enter]Print
 Input: Top Margin: (n:n)mm
Pad Position: [Enter]Print (Checks the borderless pad position carriage timing)
Measurement:
 Mecha,[Enter]Start
 Ink System, [Enter]Start
Print Adj. Variable: [Enter] Print (Prints the numeric adjustment variables currently set)
Board Paper Check: Please Set Board, [Enter]Start
LCD RGB Check: Red, Green, Blue
Counter Check: [Enter] Start
Counter Clear: [Enter] Start

Maintenance

Tube Exchange: Sequence, Counter Clear

Wiper Exchange: Sequence, Counter Clear

Pump Exchange: [Enter] Start

Press Pump Exchange: [Enter] Start

Selector Exchange: Sequence, Counter Clear

I/H Exchange: Sequence, Counter Clear

Head Exchange: [Enter] Start

Cleaning:

Std. CL1

Std. CL2

Std. CL3

Init.Fill

SSCL

A/B (C/M)

C/D (Bk/Lk)

E/F (Or/Gr)

G/H (LLk/Y)

I/J (Lm/Lc)

Parameter:

Update: InkParameter: Init. Fill: (Set, Reset) (Reset, turns off the initial fill)

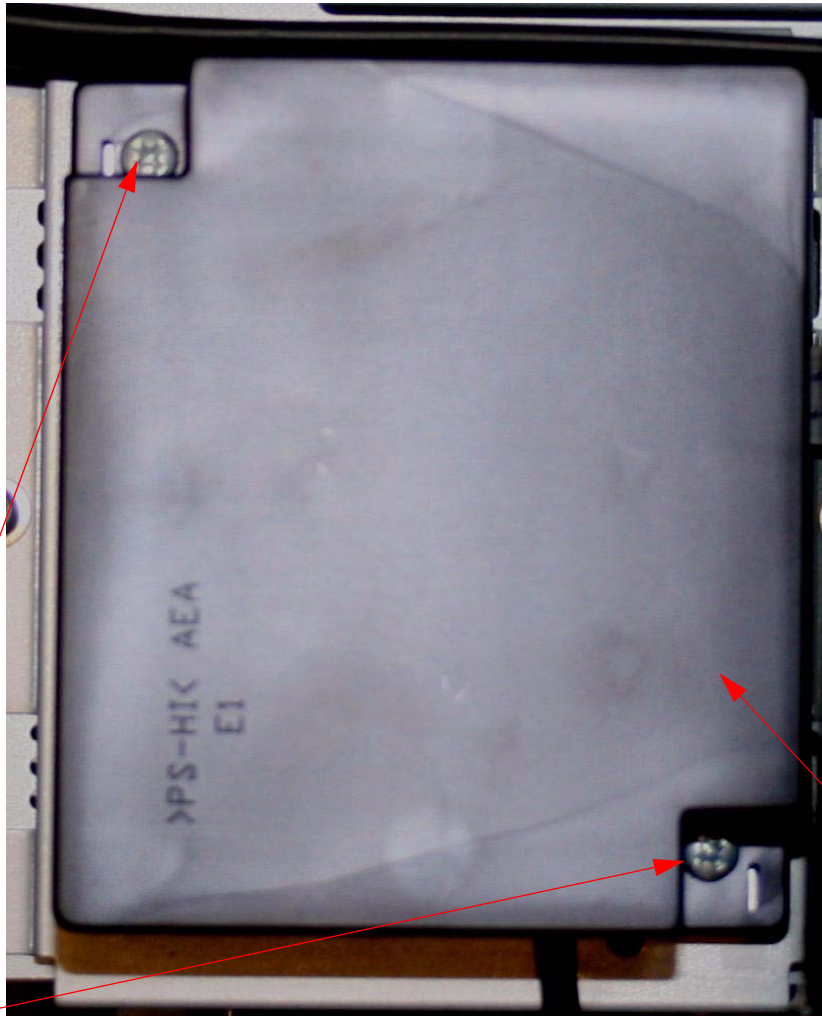
Display: (nnnn)

Life: CR, PF, RR, Tension, Driven roller, APG, Cutter, Take up, Colormetric Carrier, Paper Pressing Plate, Carriir
+ Plate, Display Count

Component Replacement

Board (AID) Removal

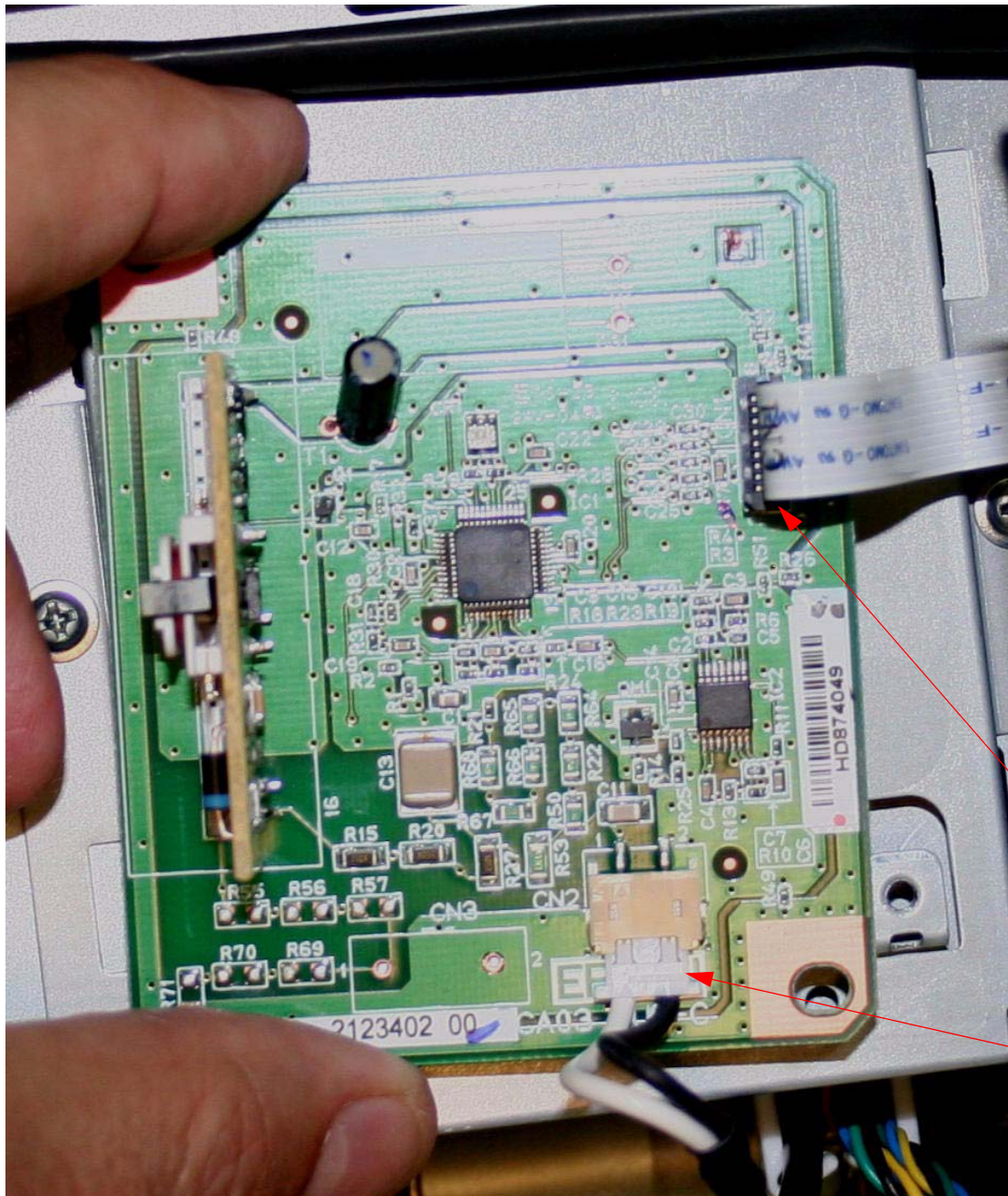
1. Remove the ***Right Side Cover***.
2. Remove **2 Screws** that fasten the ***AID Board Assembly*** to the top of the ***Cleaning Unit***.



1. Remove **2 Screws**.

2. Remove the ***Black Plastic Cover***.

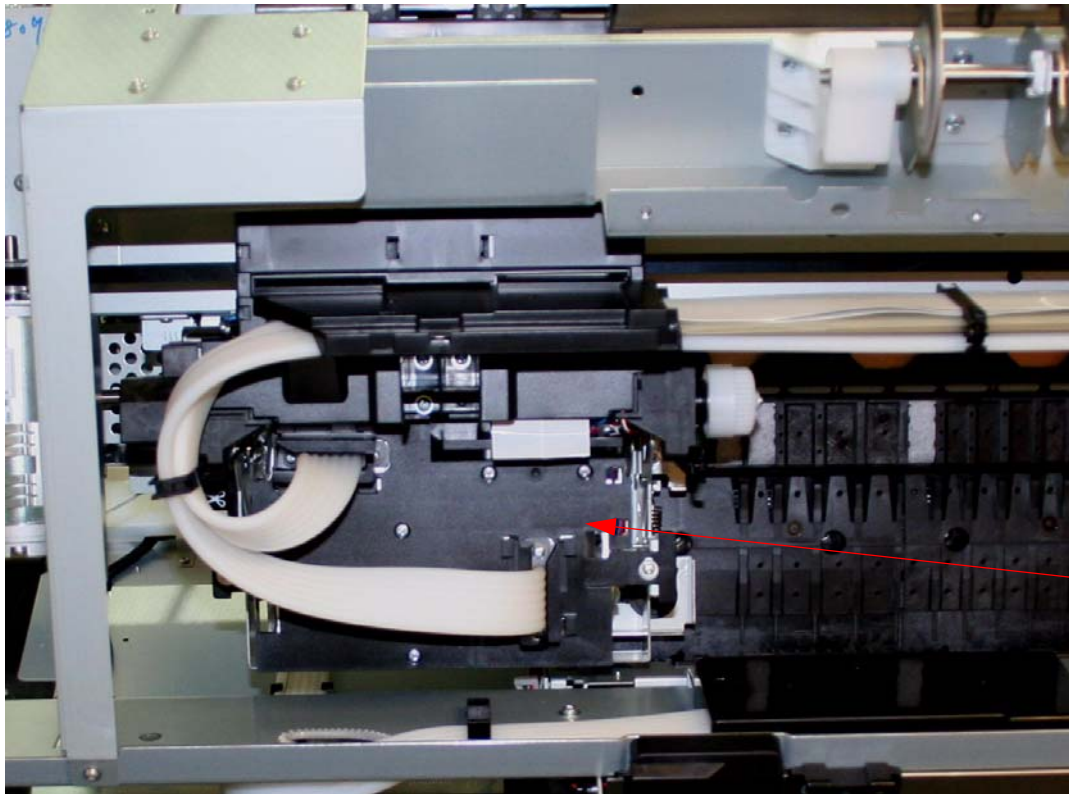
3. Unplug **2 Cables** that connect the **AID Board** to the **Printer**.



Unplug **2 Cables**.

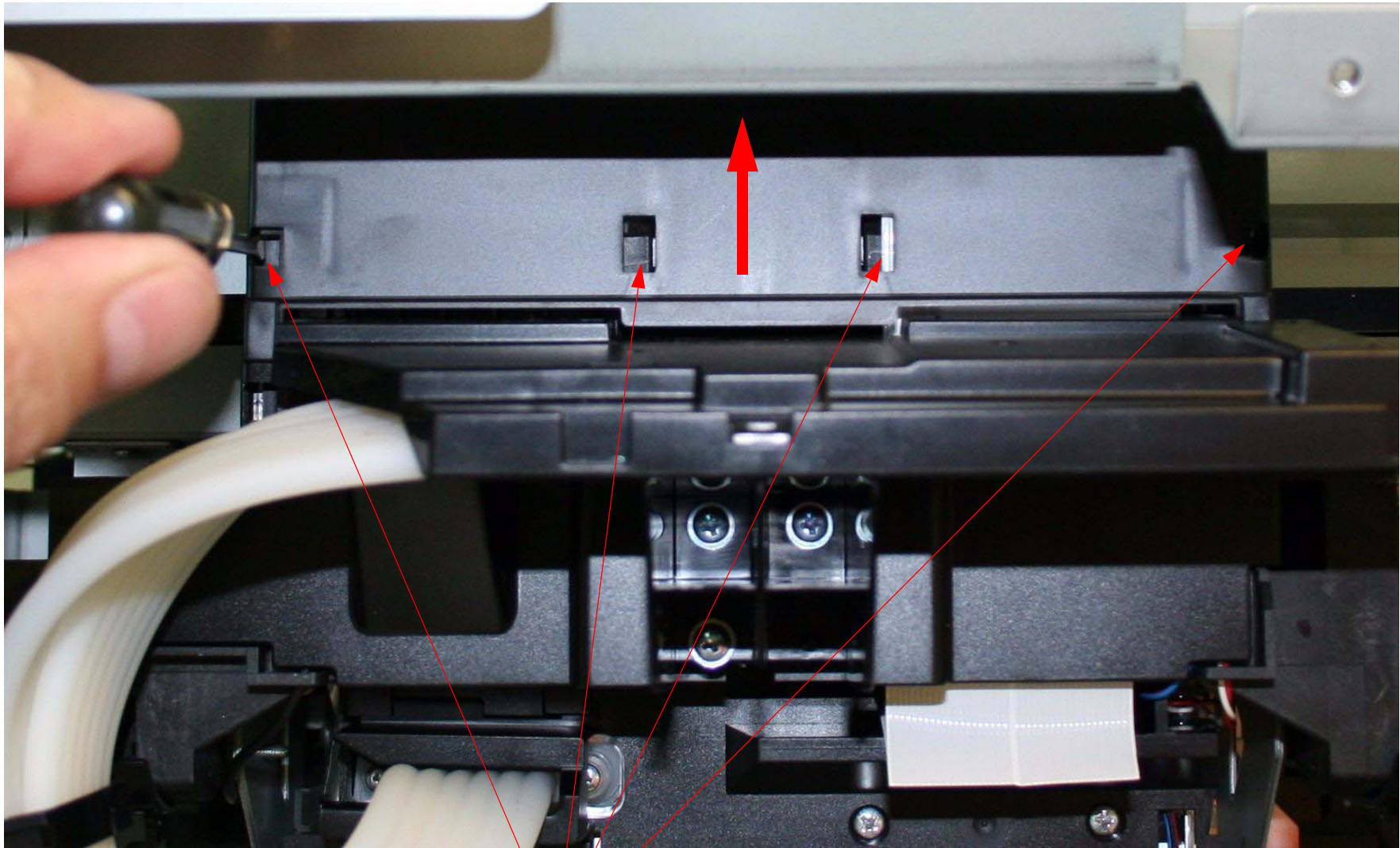
Board Carriage Removal

1. Release the **Carriage Mechanism**, following the directions found in the Carriage Release Auto) Chapter, located in the Reference Section.
2. **Unplug the Printer.**
3. Remove the **Cover (Top)**.
4. Remove the **Cover (Left Side)**.
5. Move the **Carriage Mechanism** to the left side of the **Printer**.



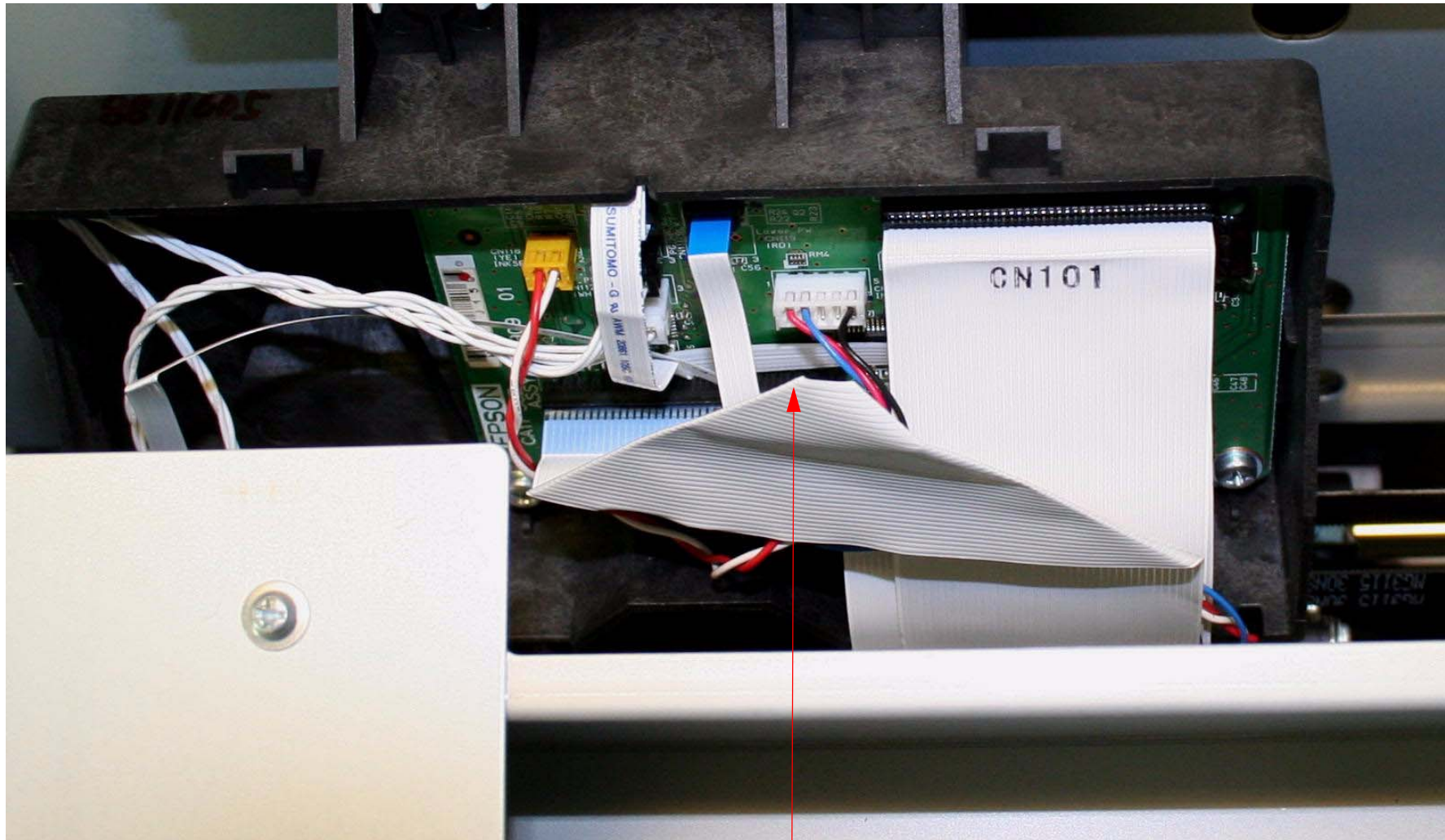
Move the **Carriage Mechanism** to the left side of the **Printer**.

6. Remove the **Carriage Board Cover**.



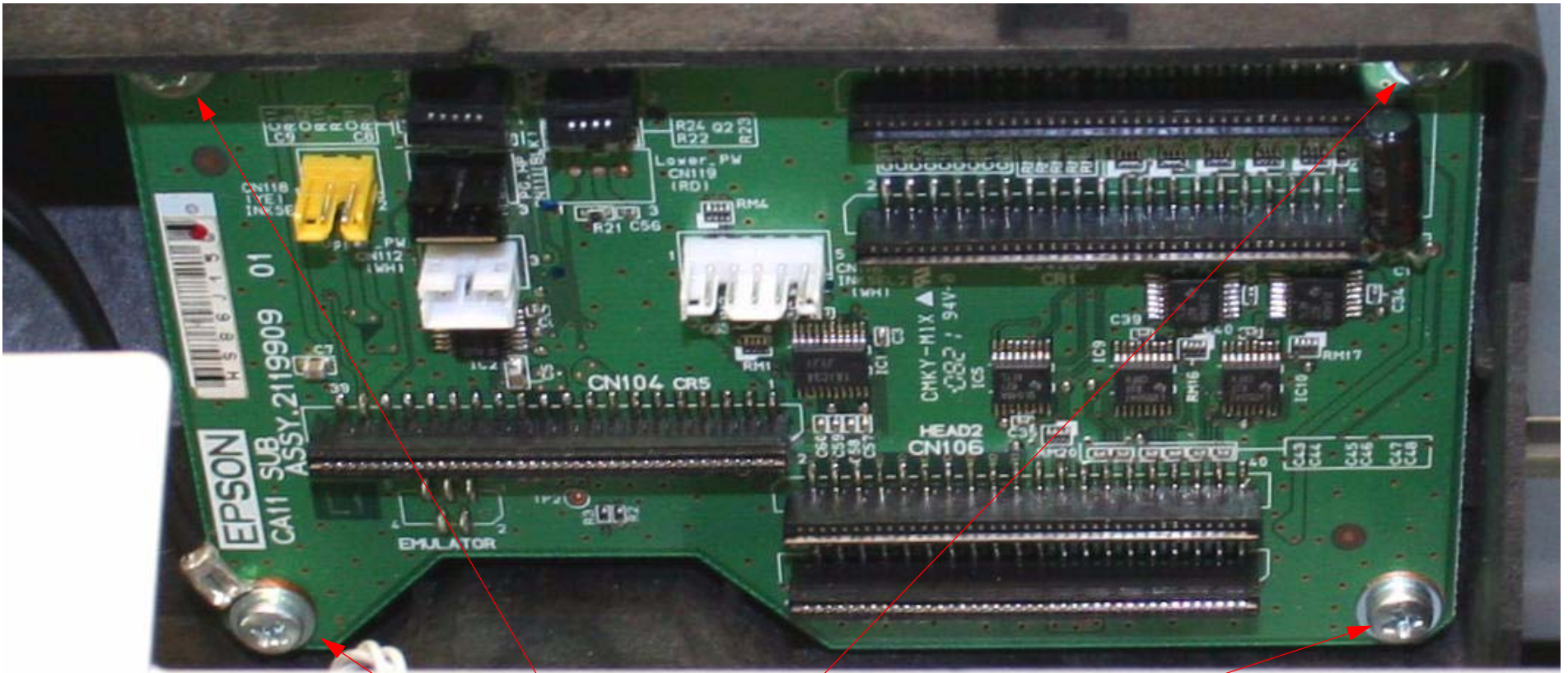
Working from left to right, release **4 Interlocks** and remove the **Carriage Board Cover**.

7. Unplug **4 Wired Cables** and **7 Foil Cables**.



Unplug all **Cables**.

8. Remove **4 Screws**, and the **Carriage Board**.



1. Remove **4 Screws**.

2. Remove the **Carriage Board**.

Board (Main) Removal

Note: 7900 Main Board Part # 2124160

Note: 9900 Main Board Part # 2124159

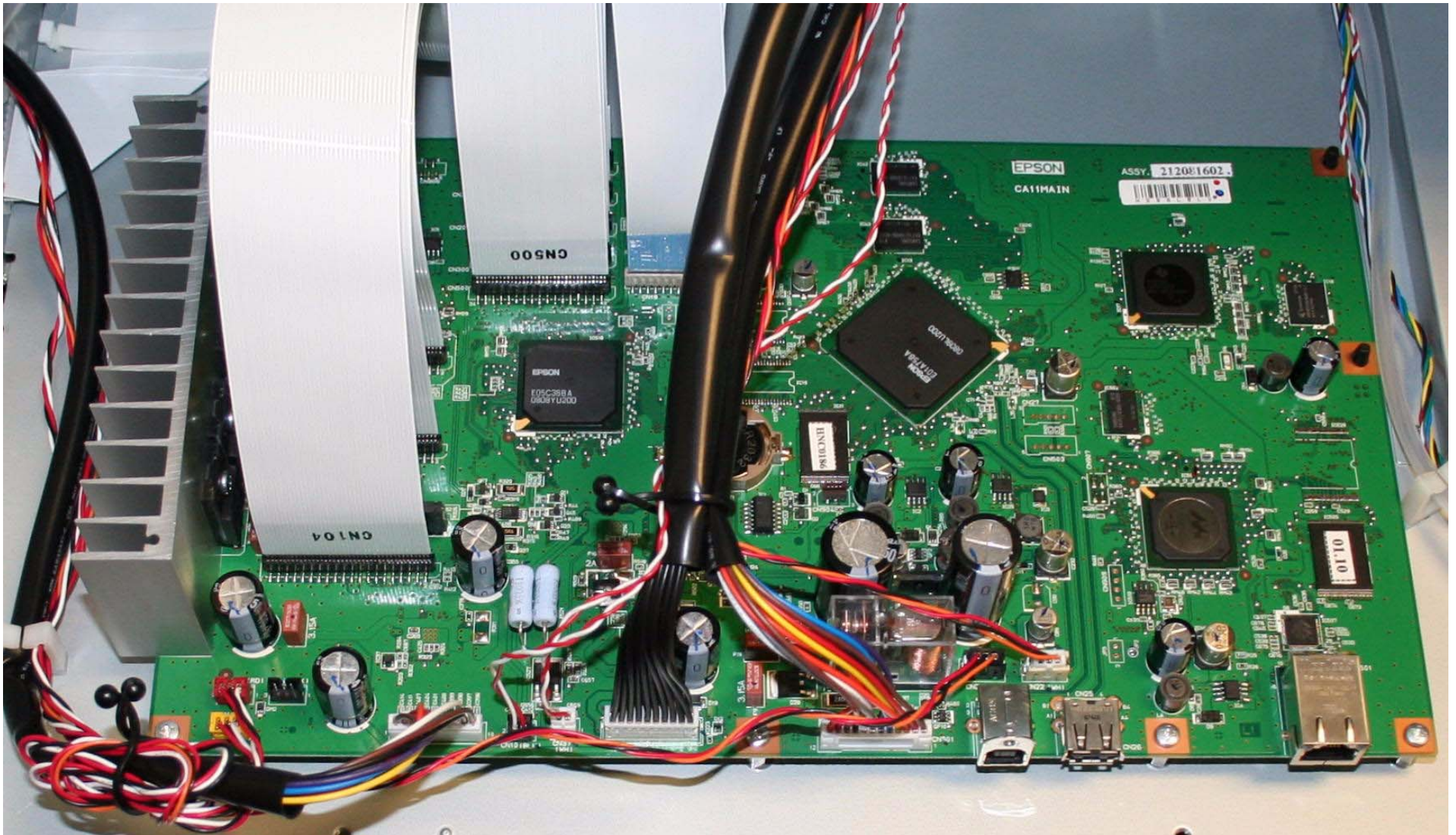
Main Board Removal (Overview)

- Back up the **Printer's Parameters**.
- Remove the **Rear Cover**.
- Unplug the **Cables**.
- Remove the **Screws**.
- Remove the **Main Board**.

Main Board Removal (Detail)

1. Back up the **Printer's** parameters using the **NV-Ram Backup Utility** feature of the **servprog.exe** utility.
2. Turn off the **Printer** and **UNPLUG from AC**.
3. Remove the **Cover (Rear)**.

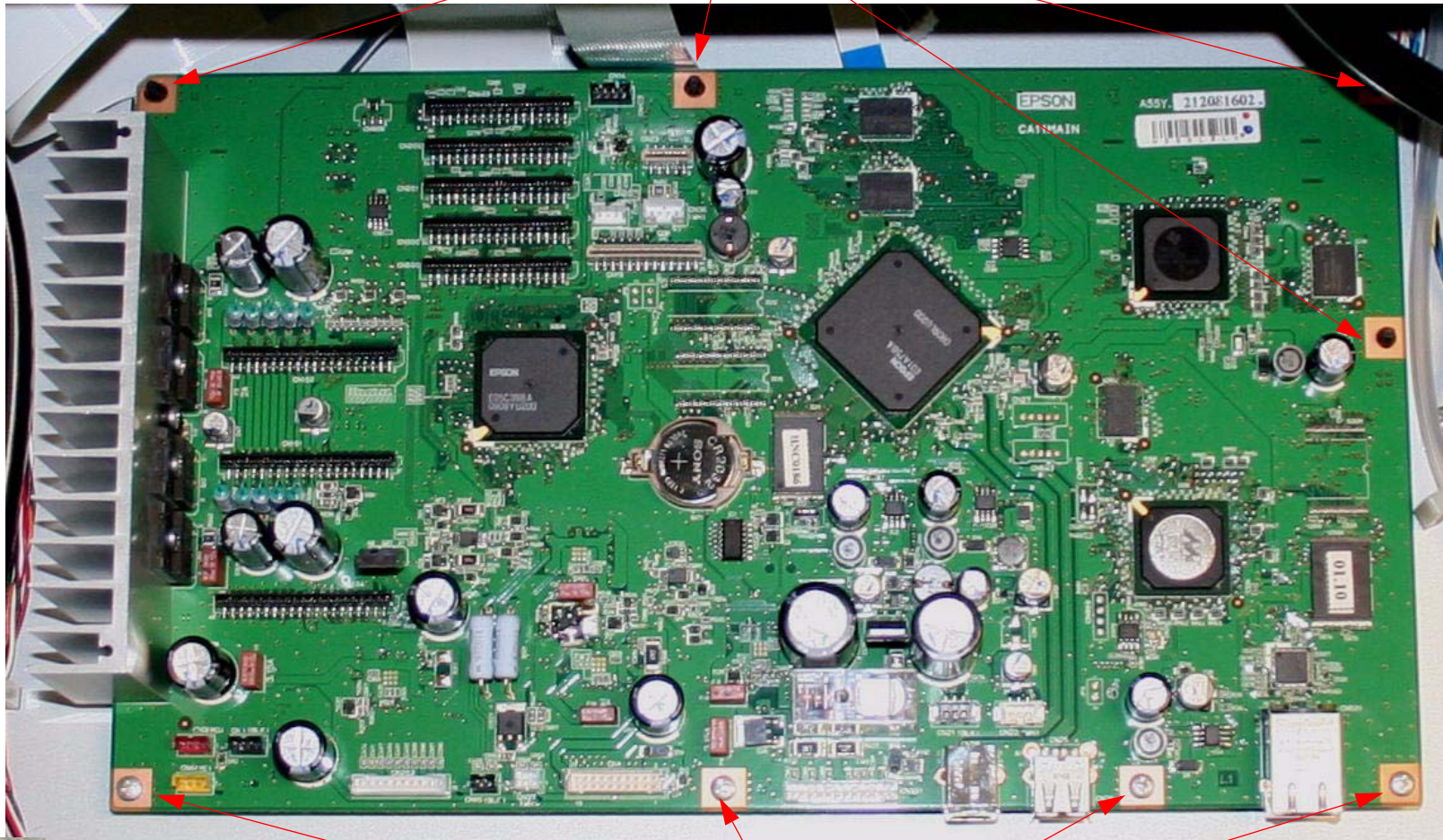
4. Unplug the **10 Foil Cables** that attach the **Main Board** to the **Printer**.



Unplug **10 Foil Cables** and **11 Wire Cables**.

5. Remove the **Main Board** from the **Printer**.

2. Release 4 **Interlocks**.



1. Remove 4 **Screws**.

3. Lift out the **Main Board**.



Board (Main) Installation

Note: 7900 Main Board Part # 2124160

Note: 9900 Main Board Part # 2124159

Main Board Installation (Overview)

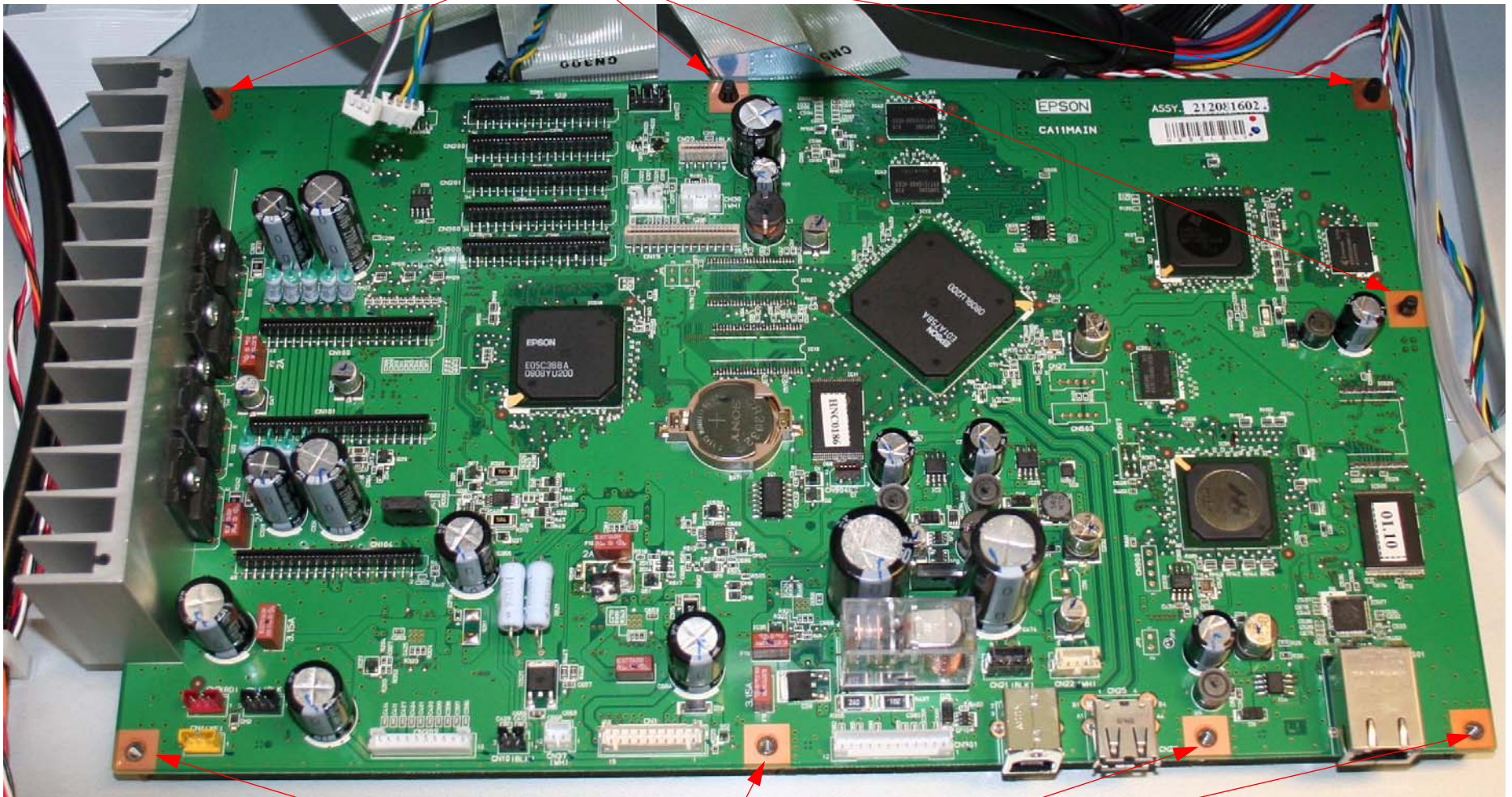
- Install the **Main Board**.
- Install the **Screws**.
- Plug in the **Cables**.
- Upload **Firmware**.
- Install the **Printer's Parameters**.
- Perform the **RTC&USBID Adjustment**.
- Install the **Rear Cover**.

Main Board Installation (Detail)

1. Compare the **New Main Board** to the **Old Main Board**. Verify that the **Components**, **Brackets**, and **Part Numbers** match.

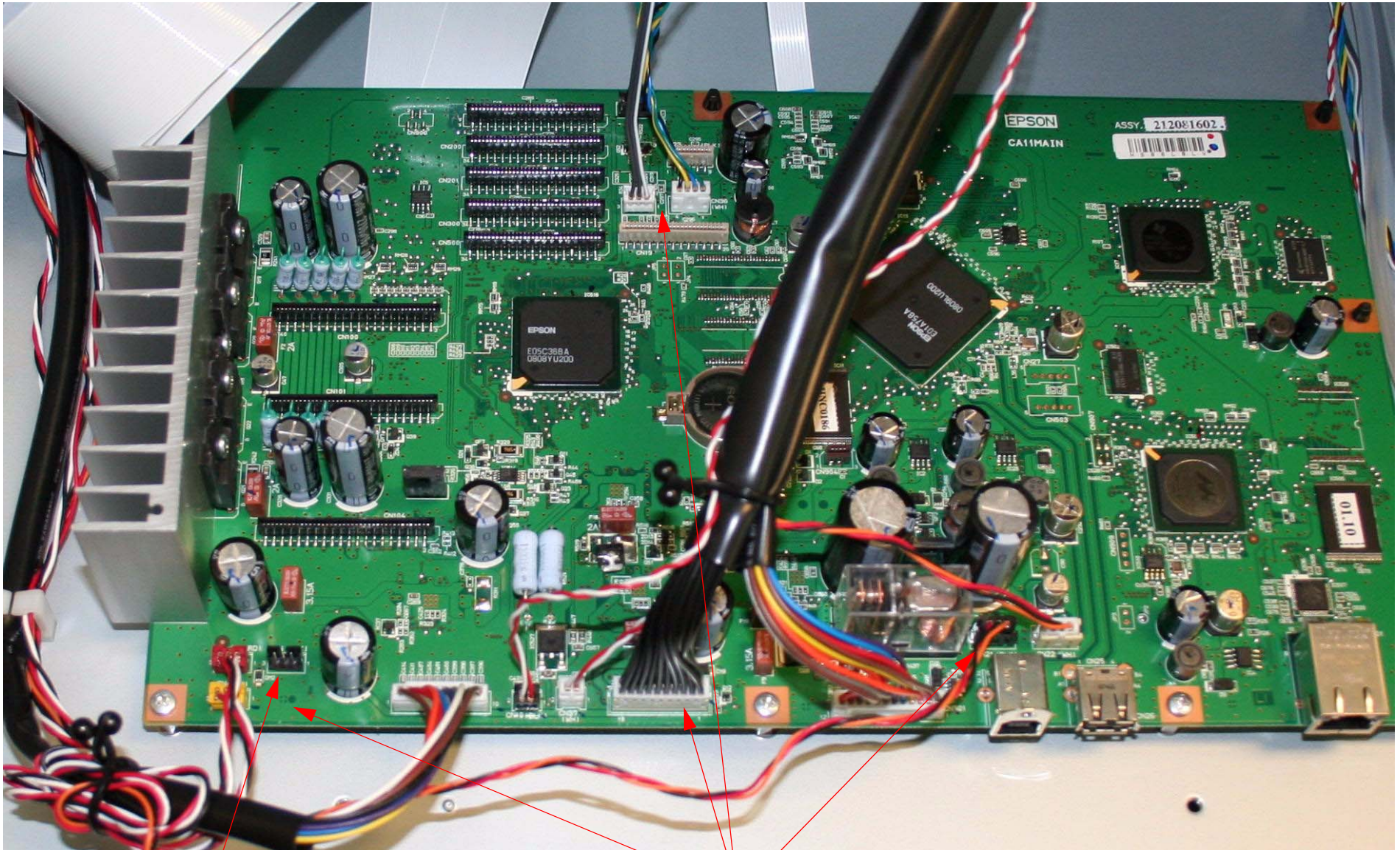
2. Install the **Main Board** into the **Printer**.

1. Drop in the **Main Board**.
2. Engage the **4 Interlocks**.



3. Install **4 Screws**.

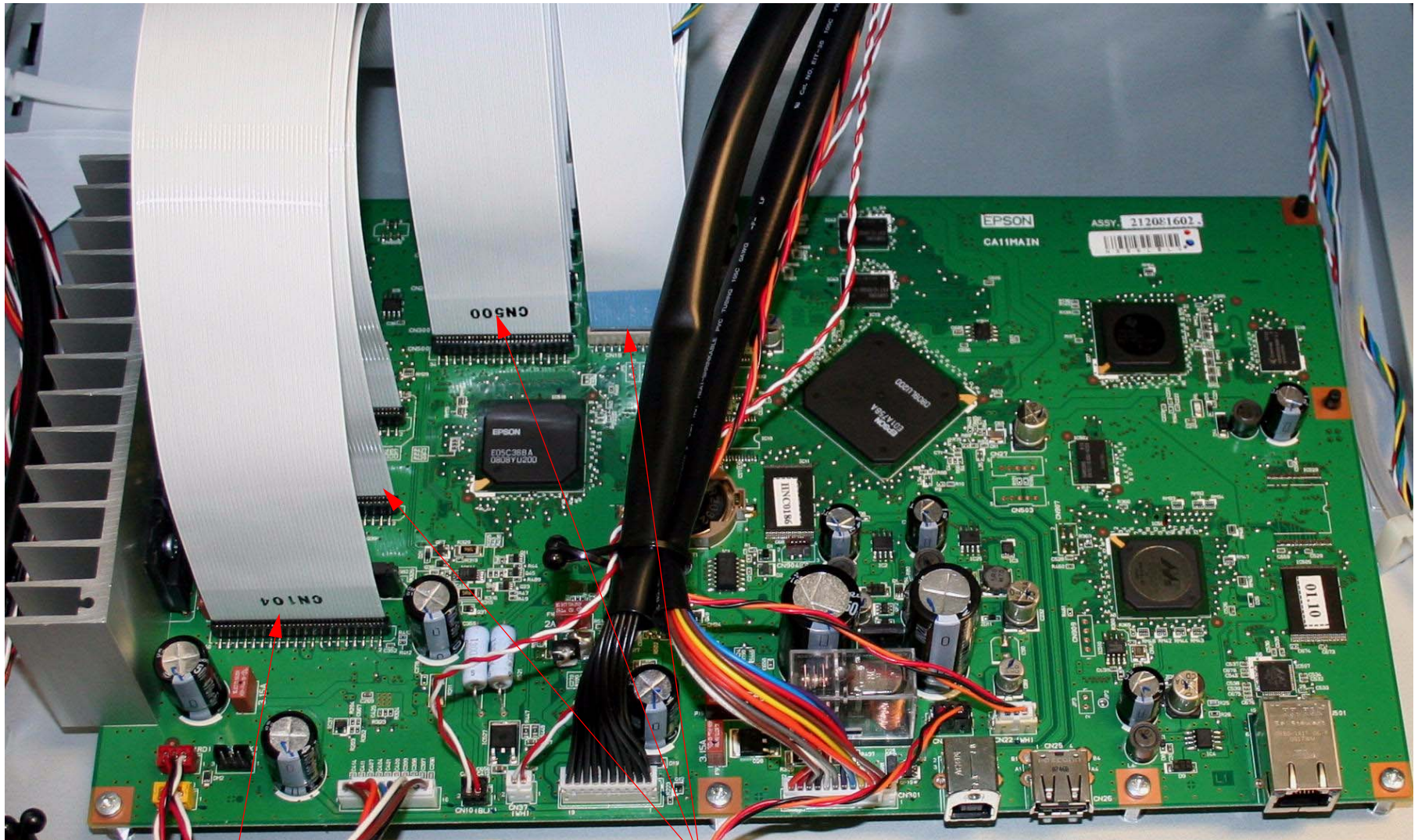
3. Plug in **11 Wired Cables** that attach the **Main Board** to the **Printer**.



Note: CN5 is not used.

Plug in 11 Wired Cables.

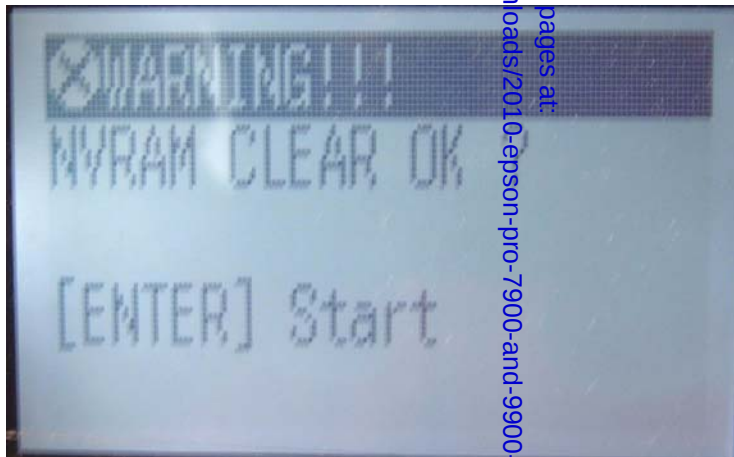
4. Plug in **10 Foil Cables** that attach the **Main Board** to the **Printer**. **Ensure that the Cables are fully seated (straight).**



Plug in **10 Foil Cables**.

Note: The Foil Cables have their Connector Number printed on them.

5. Install the **Rear Cover**.
6. Plug in and turn on the **Printer** in Firmware Download Mode (depress the **Up**, **Down**, **Left**, and **Menu** buttons, and turn on the power to the **Printer**).
7. Download the latest Firmware following the directions found in the *Firmware Update Procedure Using FWUpdate.exe* chapter located in the Reference section of the Field Guide.
8. New **Main Boards** (newer used **Boards**) will display this message. Follow the steps below.



Note: During the boot process after installing firmware, the Printer may display this message. It indicates that pressing the Enter Button will clear the NVRAM area. This NVRAM area will be overwritten when Parameters are installed in the following steps.

- 8.1 Press the **Enter** Button.
- 8.2 Immediately turn off the **Printer**, and proceed to Step 11.

Note: If the Printer is allowed to fully boot after clearing the NVRAM, the Printer will begin an "Initial Ink Charge". If it does, open an Ink Door to interrupt the "Initial Ink Charge", and turn the Printer off. Installing Parameters in the next step will cancel the "Initial Ink Charge".