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# **FARGO**<sup>®</sup>

# HDP8500 Card Printer

#### SERVICE MANUAL

PLT-01583, 1.1

November 2013

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# **Liability Statement**

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#### **Revision History**

The revision number for this document will be updated to reflect changes, corrections, updates and enhancements to this document.

| Revision Control | Date          | Document Title                                  |
|------------------|---------------|---|
| Number           |               |   |
| Revision 1.1     | November 2013 | HDP8500 Service Manual                          |
|                  |               | Corrected printhead kit part number to 088934 & |
|                  |               | transfer arm to D940009                         |

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# **HDP8500 Parts Replacement**

The purpose of this section is to provide the technician with specific replacement procedures for the Card Printer. Please see the next page to review standard precautions (to take) while performing these replacement procedures.

| Step | Procedure  |
|------|--|
| 1    | Caution: Turn OFF the Printer and unplug the power cord from the Printer.   Danger: Wear proper eye protection to perform the procedures in this section.  |
| 2    | Reverse assembly steps to reassemble the Card Printer.   |
| 3    | Make note of how the wires are routed through the printer. There are tie clips to hold the wires in place.   |
| 4    | An electric screw driver is handy for removing the screws.   |
| 5    | Suggestion: Lay the printer on the front side for ease of accessing some parts.  |
| 6    | <b>Important:</b> These procedures can only be performed by authorized service personnel.  |
| 7    | NOTE: Print out the Advanced Setting Card for future reference.<br>If the main board or the printhead is replaced or if an EPROM error is displayed these<br>numbers will need to be added back into the Advanced Settings Options within the<br>driver.<br>From the LCD display select the TOOLS icon then select the DIAGNOSTIC icon. Find<br>the SELF TEST – PRINTER SETTINGS CARDS. Print out the Printer Setting and the<br>Laminator Settings keep for future use. |



# Safety Messages (review carefully)

| Symbol             | Critical Instructions for Safety purposes   |
|--------------------|---|
| Danger:            | Failure to follow these installation guidelines can result in death or serious          |
| $\mathbf{\Lambda}$ | injury.   |
| <b>Z</b> •\        | Information that raises potential safety issues is indicated by a warning               |
|                    | symbol (as shown to the left).  |
|                    | To prevent personal injury, refer to the following safety messages before               |
|                    | performing an operation preceded by this symbol.  |
|                    | To prevent personal injury, always remove the power cord prior to performing            |
|                    | repair procedures, unless otherwise specified.  |
|                    | To prevent personal injury, make sure only authorized service personnel                 |
|                    | perform these procedures.   |
| Caution:           | This device is electrostatically sensitive. It can be damaged if exposed to             |
|                    | static electricity discharges.  |
| <u> </u>           | Information that raises potential electrostatic safety issues is indicated by a         |
|                    | warning symbol (as shown to the left).  |
|                    | To prevent equipment or media damage, refer to the following safety                     |
|                    | messages before performing an operation preceded by this symbol.                        |
|                    | To prevent equipment or media damage, observe all established Electrostatic             |
|                    | Discharge (ESD) procedures while handling cables in or near the Circuit                 |
|                    | Board and Printhead Assemblies.   |
|                    | To prevent equipment or media damage, always wear an appropriate personal               |
|                    | grounding device (e.g., a high quality wrist strap grounded to avoid potential damage). |
|                    | To prevent equipment or media damage, always remove the Ribbon and Cards                |
|                    | from the Printer before making any repairs, unless otherwise specified.                 |
|                    | To prevent equipment or media damage, take jewelry off of fingers and hands,            |
|                    | as well as thoroughly clean hands to remove oil and debris before working on            |
|                    | the Printer.  |



## **Cover Removal / Replacement Procedures**

- Important: These procedures can only be performed by authorized service personnel.
- **Important:** Make note of the wire routing when moving wires for parts replacements. Clips are provided inside the printer for wires and tie clips are used to bundle wires. Keep wires away from moving parts.
- Caution: When replacing the Covers or any parts, do NOT pinch any wires.
- **Caution:** Please be careful not to force any of the snapping parts as they could break with too much pressure.
- Suggestion: Lay the printer on the front side for ease of accessing the parts.

#### **SAFETY CONCERNS:**

Safety glasses must be worn

#### ESD CONCERNS:

• ESD precautions are necessary when handling electronic assemblies





## **Reviewing the HDP8500 Covers**

The Covers must be removed in this sequence (order) to avoid damage to these parts. Reverse order to re-assemble.

- 1. Top/Rear Cover D940089
- 2. Front Panel Cover D940201-01
- 3. Input Cover D940092-02
- 4. Output Cover D940199-02







#### Remove/Replace the Rear/TOP Cover Assembly (D940089)

|      | Tools needed: T10 (Torx )Driver  |
|------|--|
|      | Estimated Time: 10 minutes   |
|      | Important: This procedure can only be performed by authorized service                |
|      | personnel.   |
| Step | Procedure  |
| 1    | <b>Caution:</b> Power off the Printer by unplugging the power cord from the Printer. |
| 2    | Remove the (8) screws (F000170) from the back side of the cover.                     |
|      | * When <b>replacing</b> the Rear Cover do not tighten this screw at this step.       |
| 3    | Remove the (5) screws (F000190) from the top of the rear cover.                      |
|      | * When <b>replacing</b> the Rear Cover do not tighten this screw at this step.       |
| 4    | Lift the cover up and back from the printer.   |
| -    |  |







### Remove/Replace the Front Panel Cover (D940201-01)

|      | Tools needed: Philip driver  |
|------|--|
|      | Estimated Time : 10 minutes  |
|      | Important: This procedure can only be performed by authorized service                              |
|      | personnel.   |
|      |  |
| Step | Procedure  |
| 1    |  |
| 2    | Caution: Power off the Printer by unplugging the power cord from the Printer.                      |
| 2    | Remove the (9) screws (F000231) from the front cover panel   |
|      | D940201-01   |
|      |  |
|      |  |
|      | F000231 (9)  |
|      |  |
|      |  |
|      |  |
|      | (D940201-01)   |
| 3    | Remove the 2 Door Centering Guides (D940292) from the Input Cover in order to have                 |
|      | clearance.   |
|      |  |
|      |  |
|      | Lift up the Front Cover Panel and off of the frame   |
| 4    | Reverse the instructions to re-assemble or install a new cover. Start all 0 screws first, and then |
| т    | tighten all 0 aproug down  |
|      | lighten all 9 screws down.   |



#### Remove/Replace the Input Cover (D940092-02)

|      | Tools needed: T10 Torx Driver, Philip driver   |
|------|--|
|      | Estimated Time: 10 minutes   |
|      | Important: This procedure can only be performed by authorized                        |
|      | service personnel.   |
|      |  |
|      | **Remove this cover if replacing the Bezel LCD Display Assembly                      |
|      | (D940088-01)   |
|      |  |
| Step | Procedure  |
| 1    | $\wedge$   |
|      | <b>Caution:</b> Power off the Printer by unplugging the power cord from the Printer. |
| 2    | Remove (1) screw (F000190) from the bottom BACK cover. (T10 driver)                  |
|      |  |
|      | F000170   Back View  |











| Step | Procedure  |
|------|--|
| 7    | There is a small TAB that fits the cover under the hopper frame. |
| 8    | Reverse the instructions to re-assemble or install a new cover.  |
|      | righten all the corollo aller the cover is completely attached.  |



#### Remove/Replace the Output Cover (D940199-02)

|      |                       | Tools needed: T10 Torx Driver, Philip driver                             |  |
|------|-----------------------|--|--|
|      |                       | Estimated Time: 10 minutes   |  |
|      |                       | Important: This procedure can only be performed by authorized service    |  |
|      |                       | personnel.   |  |
|      |                       |  |  |
|      |                       |  |  |
| Sten | Procedure             |  |  |
| 1    | <b>^</b>              |  |  |
|      | <b>/</b> 4            | ion. Dower off the Drinter by upplyaging the power cord from the Drinter |  |
| 2    |                       | W (E000170) from the bottom BACK cover. (T10 driver)                     |  |
| 2    | Kemove (1) sci        |  |  |
|      | F000170               |  |  |
|      |                       | Back View  |  |
|      | * When <b>replaci</b> | <b>ng</b> the Output Cover do not tighten this screw at this step.       |  |
| 3    | Remove (1) scr        | ew (F000170) from the bottom FRONT cover. (T10 driver)                   |  |
|      | Food                  |  |  |
|      | ^ When <b>rep</b>     | acing the Output Cover do not tighten this screw at this step.           |  |



| Step | Procedure   |  |
|------|---|--|
| 4    | Remove (2) screws (F000231) from the bottom Output Trim Cover (D940202-02). (Philip |  |
|      | Driver)   |  |
|      | * W/hen replacing the Output Course do not tighten this correct at this stop        |  |
| 5    | * When <b>replacing</b> the Output Cover do not tighten this screw at this step.    |  |
| 5    | P940199-02  |  |
| 6    | Reverse the instructions to re-assemble or install a new cover.                     |  |
|      | *Tighten all the screws after the cover is completely attached.                     |  |



#### Remove/Replace the Door Cover (D940090-01)

| Tools needed: T10 Torx Driver |                            | Tools needed: T10 Torx Driver   |
|-------------------------------|----------------------------|---|
|                               | Estimated Time: 10 minutes |   |
|                               |                            | Important: This procedure can only be performed by authorized service       |
|                               |                            | personnel.  |
|                               |                            |   |
| Step                          | Procedure                  |   |
| 1                             | A Ca                       | ution: Power off the Printer by unplugging the power cord from the Printer. |
| 2                             | Remove the (               | 2) screws (F000170) from the left and right side hinges.                    |
|                               |                            | F000170 (2)<br>F000170 (2)  |
|                               | * When <b>repla</b>        | Left Side HInge<br>cing the Door do not tighten this screw at this step.    |



| Step | Procedure   |
|------|---|
| 3    | Slide the Cover Hinge from the Printer.                         |
|      |   |
| 4    | Reverse the instructions to re-assemble or install a new door.  |
|      | *Tighten all the screws after the cover is completely attached. |
| 5    | The Foam Filter (D940140) may be replaced if necessary.         |
|      | D940140   |



#### Remove/Replace the Bezel LCD Display (D940088-01)

|      |                     | Tools needed: T10 Torx Driver,   |  |
|------|---------------------|--|--|
|      |                     | Estimated Time:  |  |
|      |                     | Important: This procedure can only be performed by authorized  |  |
|      |                     | service personnel.   |  |
|      | a = •               |  |  |
|      |                     |  |  |
| Sten | Procedure           |  |  |
| 1    |                     |  |  |
| I    | <b>/</b> 4          | Device off the Drivten burning the result of the result from the Drivten   |  |
| 2    |                     | Power off the Printer by unplugging the power cord from the Printer.   |  |
| 2    | Refer to. Refflove/ | replace the input Cover (D940200-02) to access the display.  |  |
| 3    | Remove the (2) so   | rews ( F000176)  |  |
|      | Disconnect the Dis  | splay Cable (D940264) from the LCD Display PCB.  |  |
|      | A DAG REAL          |  |  |
|      |                     | D940264  |  |
|      |                     |  |  |
|      |                     |  |  |
|      |                     |  |  |
|      |                     |  |  |
|      |                     |  |  |
|      |                     |  |  |
|      |                     | A Provide the second se |  |
|      |                     |  |  |
|      |                     |  |  |
|      |                     |  |  |
|      |                     |  |  |
|      |                     |  |  |
|      |                     |  |  |
|      | E000176 (2)         |  |  |
|      | In side View        |  |  |
|      |                     |  |  |
| 4    | Reverse the instru  | ctions to re-assemble or install a new LCD Display.  |  |
|      |                     |  |  |



### Remove/Replace the Cover Insert (D940204-02)

|      |  | Tools needed: T10 Torx Driver   |  |
|------|--|---|--|
|      |  | Estimated Time: 10 minutes  |  |
|      |  | Important: This procedure can only be performed by authorized service |  |
|      |  | personnel.  |  |
|      |  |   |  |
|      | Note: This is where the ANDON Light Upgrade is installed.                                      |   |  |
| Step | Procedure  |   |  |
| 1    | <b>Caution:</b> Power off the Printer by upplugging the power cord from the Printer            |   |  |
| 2    | Remove the (   | 1) screws (F000170) T10 (Torx )Driver,                                |  |
|      | The upper tab  | o fits into the frame slot  |  |
|      | 2 Remove the (1) screws (F000170) T10 (Torx )Driver,<br>The upper tab fits into the frame slot |   |  |



## **Main Printer Modules Removal**

#### Remove the Fan Box/Bracket Assembly (D940005)





| Step | Procedure   |  |
|------|---|--|
| 3    | Remove the 3 screws holding the Auxiliary Board (A940221-10) to the frame.              |  |
|      | Unplug the power connection 140069  |  |
|      |   |  |
| 4    | Remove the Ethernet/USB box.  |  |
|      | Remove two screws from the BOX base.  |  |
|      | F00191 (2)  |  |
|      | Pull the box forward and slide to the RIGHT then OUT.                                   |  |
|      | Doing this will release the box from the PCB board (Ethernet/ USB Connection ) directly |  |
|      | behind the box.   |  |
| 5    | Remove 2 screws from the Fan Bracket located at the base.                               |  |



| Step | Procedure  |
|------|--|
| 6    | Gently pull the hoses from the Printer.                |
|      |  |
| 7    | Disconnect the 2 Fan Cable from the Fan Box.           |
|      | disconnect 2 Fan wires                                 |
| 8    | Disconnect the MAG wires from the back of the Fan Box. |
|      |  |



| Step | Procedure  |  |
|------|--|--|
| 9    | Disconnect the wires from the tie wrap on the Fan Box.                             |  |
| 10   | Disconnect the Ribbon Cable from the D000445 Board (attached to the Fan Box Riser) |  |
| 11   | Remove the FAN BOX and BRACKET as one piece.                                       |  |
| 12   | Reverse the instructions to re-assemble.   |  |
|      | Refer to Appendix A for Cable Connection diagram.                                  |  |



#### Remove the Card Path (D940005)

|   | Tools needed: T10 Torx Driver                 |  |
|---|---|--|
| IL  | Estimated Time: 30 minutes                    |  |
|   | Preparation: Remove Covers                    |  |
|   | Remove the Fan Assembly                       |  |
|   | Important: This procedure can only be         |  |
|   | performed by authorized service personnel.    |  |
| and the second second                           | Note: Removing this assembly is required for  |  |
|   | many procedures.                              |  |
| Step Procedure                                  |   |  |
|   |   |  |
| <b>Caution:</b> Turn OFF the Printer at         | nd unplug the power cord from the Printer. Do |  |
| not allow any part of the metal Printer body to | o touch the Main Board.                       |  |
| 2 Remove 1 screw (F000177) that attaches        | the Card Path to the Main Chassis.            |  |
| F00177  |   |  |









| Step | Procedure   |  |
|------|---|--|
| 8    | When replacing the Card Path, align the Card Path to the Main Chassis |  |
|      |   |  |
| 9    | Reverse the instructions to re-assemble.                              |  |
|      | Refer to Appendix A for Cable Connection diagram.                     |  |



#### **Remove the Main Printer Chassis**

|      |   | Tools needed:T10 Torx DriverEstimated Time:30 minutesPreparation:Remove covers |
|------|---|--|
|      |   | Remove Fan Box/Bracket Assembly  |
| 10   |   | Remove the Card Path Assembly.   |
| Ļ    |   | performed by authorized service personnel.                                     |
|      |   | <b>Note:</b> Removing this assembly is required for                            |
|      |   | many procedures.   |
| Step | Procedure                                     |  |
| 1    | Caution: Power off the Printer by             | y unplugging the power cord from the Printer.                                  |
| 2    | Turn the printer over to access the baseplate |  |
|      | Remove the 3 screws (F000092)                 |  |







| Step | Procedure   |  |  |
|------|---|--|--|
| 5    | Disconnect the Film Sensor and Lam Lift Sensor cables from the Transfer Arm connection. |  |  |
| 6    | <text><text><text></text></text></text>   |  |  |



| Step | Procedure   |
|------|---|
| 7    | When replacing the Chassis line up the 3 square holes on the front frame and align the chassis into the notch on the frame. |
| 8    | Reverse the instructions to re-assemble.<br>Refer to Appendix A for Cable Connection diagram.                               |





# **Printer Board Removal**

#### Remove the Mainboard (A940234)

|      |  | Tools needed: T10 Torx Driver              |  |
|------|--|--|--|
|      |  | Estimated Time: 30 minutes                 |  |
|      |  | Preparation: Remove the Covers.            |  |
|      |  | Remove the Card Path.                      |  |
|      |  | Remove the Main Chassis.                   |  |
|      |  | Important: This procedure can only be      |  |
|      |  | performed by authorized service personnel. |  |
| Step | Procedure  |  |  |
| 1    |  |  |  |
|      | <b>Caution:</b> Power off the Printer by unplugging the power cord from the Printer.           |  |  |
|      | <b>Note:</b> The PCB Transition Station Board (D940171), PCB Station Interface Extension board |  |  |
|      | (D940170), and the PCB Flip Station Interface/ IO board (D940195) are connected to the         |  |  |
|      | Mainboard.   |  |  |
| 2    | Remove the Covers, Card Path and Main Chassis to access the Mainboard located on the           |  |  |
|      | BASE.  |  |  |
|      |  |  |  |


| Step | Procedure   |
|------|---|
| 3    | Remove the 8 screws(F000170) from the Mainboard.                      |
|      |   |
| 4    | Remove the PCB Cover (D940133)  |
|      |   |
|      | When replacing the cover verify the Flame Sheild (D940267) is seated. |
|      | Verify Flame Shield is seated in place                                |



| Step | Procedure  |
|------|--|
| 5    | Remove 1 screw (F000170) from the PCB station Transistion board ( D940171)         |
| 6    | Remove 4 screws (F000170) from the PCB Flip Station Interface & IO board (D940195) |
| 7    | Remove all cable connections.  |
| 8    | Lift off the Mainboard from the Base   |
| 9    | Reverse the instructions to re-assemble  |
|      | Refer to Appendix A for Cable Connection diagram.                                  |



### Remove/Replace the Auxiliary Board (A920221-10)

|      |                                     | Tools needed: T10 Torx Driver                          |
|------|-------------------------------------|--|
|      |                                     | Estimated Time: 15 minutes                             |
|      |                                     | Preparation: Remove Rear/Top Cover                     |
|      |                                     | Important: This procedure can only be performed by     |
|      |                                     | authorized service personnel.                          |
|      |                                     | Note: Removing this assembly is required for many      |
|      |                                     | procedures.  |
| Step | Procedure                           |  |
| 1    | Caution: Power off the I            | Printer by unplugging the power cord from the Printer. |
| 2    | Unplug the RTD Wire Cable, Heater   | Wire Cable, and Interconnect Cable (with small com     |
|      | board D940171) from the Auxiliary E | Board (A920221-10).                                    |
|      |                                     |  |



| Step | Procedure  |
|------|--|
| 3    | Remove the 3 screws holding the Auxiliary Board (A940221-10) to the frame. |
|      |  |
| 4    | When replacing the board insert the PCB into the tab of the base.          |
|      | Prove de la cadada   |
| 5    | Reverse the instructions to re-assemble.                                   |
|      | Refer to Appendix A for Cable Connection diagram.                          |



### Remove/Replace the USB Ethernet PCB (A910551)

|      |   | Tools needed: T10 Torx Driver  |
|------|---|--|
|      |   | Estimated Time: 30 minutes   |
|      |   | Preparation: Remove Top/Rear Covers.                                 |
|      |   | Important: This procedure can only be performed by                   |
|      |   | authorized service personnel.  |
| - N  |   |  |
| Step | Procedure   |  |
| 1    | Caution: Power of   | off the Printer by unplugging the power cord from the Printer.       |
| 2    | Remove the Ethernet/USB bo                                  | ox to access the USB/Ethernet PCB.                                   |
|      | Remove two screws from the                                  | BOX base.  |
|      | F000191 (2)   |  |
|      | Pull the box forward and slide                              | to the RIGHT then OUT.   |
|      | Doing this will release the box                             | <pre>c from the PCB board (Ethernet/ USB Connection ) directly</pre> |
|      | behind the box.   |  |
|      | Note: The Lam Power Cable                                   | routing.   |
|      | Route Lam Power<br>cable through<br>underneath the<br>Cover |  |



| Step | Procedure  |
|------|--|
| 3    | Lift up the cover from the USB PCB.                        |
| 4    | Unplug the wire connection and lift UP on the PCB(A910551) |
| 5    | Reverse the instructions to re-assemble.                   |



### **Card Path Procedures**

### Card Path Sensor (D910217)

|      |   | Tools needed: T10 Torx Driver                                       |
|------|---|---|
|      |   | Estimated Time: 30 minutes  |
|      |   | Preparation: Remove Rear/Top Cover.                                 |
|      |   | Remove the Card path.   |
|      |   | Remove Fan Box/Bracket Assembly                                     |
|      |   | Important: This procedure can only be performed by authorized       |
|      |   | service personnel.  |
| Step | Procedure                                       |   |
| 1    | Caution: F                                      | ower off the Printer by unplugging the power cord from the Printer. |
| 2    | There are 2 card sense                          | ors located on the Card Path.                                       |
|      | The Card Path Asssem                            | ably is removed to have access to remove the Wire from the          |
|      | sideplate.                                      |   |
|      |   |   |
| 3    | Remove 1 screw (F000<br>Lift up the bracket and | 0170) from the sensor bracket.<br>I replace the sensor.             |
|      | F000170   |   |



| Step | Procedure                                |
|------|--|
| 4    | <image/>                                 |
| 5    | Reverse the instructions to re-assemble. |



#### **Card Path - Roller Replacement Procedures**





| Step | Procedure   |
|------|---|
| 3    | TO REPLACE BOTTOM ROLLERS.  |
|      | Insert the D flat end into the grommet provided on the Sideplate.                     |
|      | Fit the bearing and E Clip into the slot provided on the other side of the Sideplate. |
| 4    |   |
|      | Bottom View   |
| 5    | <text><text></text></text>  |















| Step | Procedure  |
|------|--|
| 10   | TO REPLACE TOP ROLLERS. All Rollers follow the same procedure.     |
|      |  |
| 4.4  | Top View   |
|      |  |
|      | Fit the Bearing and the SPRING on the other side of the Sideplate. |
|      | Attach as shown below.   |
|      | (continued next page)  |

















### Card Path- Stepper Motor Assembly (D940257)

|      |                         | Tools needed: T10 Torx Driver                                  |
|------|-------------------------|--|
|      |                         | Estimated Time: 30 minutes                                     |
|      |                         | Preparation: Remove Rear/Top Covers.                           |
|      |                         | Remove the Fan Box/ Bracket                                    |
|      |                         | Remove the Card Path   |
|      |                         | Important: This procedure can only be performed by authorized  |
|      |                         | service personnel.   |
| Step | Procedure               |  |
| 1    | $\land$                 |  |
|      | Caution: Tu             | rn OFF the Printer and unplug the power cord from the Printer. |
| 2    | The Stepper Motor (D940 | 0257) is located underneath the Card Path Assembly.            |
|      |                         |  |
|      |                         |  |
|      |                         |  |
|      | 1                       |  |
| 3    | Remove the Cable from   | the Motor.   |
| 4    | Remove the E-Clip (1400 | 063) and Gear (D930106) from the shaft on the outer Sideplate. |
|      |                         | D930106<br>140063  |



| Step | Procedure  |
|------|--|
| 5    | Remove the 4 screws (F000170) screws from the Stepper Motor. |
|      | Remove the Gear covering the upper right screw. (not shown)  |
|      |  |
| 6    | Lift the Motor from the frame.                               |
|      | Wotor onto<br>Cardpath                                       |
| 7    | Reverse the instructions to re-assemble.                     |



### Card Path- Gear Motor (D900484-01)

|      |   | Tools needed: T10 Torx Driver                               |
|------|---|---|
|      |   | Estimated Time: 30 minutes                                  |
|      |   | Preparation: Remove Rear/Top Covers.                        |
|      |   | Remove the Fan Box/ Bracket                                 |
| 2    | L I   | Remove the Card Path  |
|      |   | Important: This procedure can only be performed by          |
|      |   | authorized service personnel.                               |
|      | A BOOK ST                                   |   |
| Step | Procedure                                   |   |
| 1    | $\mathbf{A}$                                |   |
|      | <b>Caution:</b> Turn OF                     | F the Printer and unplug the power cord from the Printer.   |
| 2    | Disconnenct the 2 wire cables               |   |
|      |   |   |
| 3    | Remove the Gears (D940279                   | & 810266) from the outer Sidplate to access the Motor Shaft |
|      | Gear. (D940252)                             |   |
|      | D940279       B10266 (2)         140048 (2) |   |



| Step | Procedure   |
|------|---|
| 4    | Remove the Gear ( D940252) and E-Clip (140063) from the motor post.                   |
| 5    | Remove 4 screws (F000193) to release the motor from the frame. Lift Motor up and out. |
| 6    | Reverse the instructions to re-assemble.  |



### **Main Chassis Procedures**

## Remove/Replace the Film Supply Motor (D900484-06), Ribbon Supply Motor (D900484-07), and RFID Board (A000365)

|      |   | Tools needed: T10 Torx Driver                             |  |
|------|---|---|--|
|      |   | Estimated Time: 30 minutes                                |  |
|      |   | Preparation: Remove the Covers.                           |  |
|      |   | Remove the Auxiliary board.                               |  |
|      |   | Remove the Fan Box/Bracket                                |  |
| 129  |   | Important: This procedure can only be performed by        |  |
|      |   | authorized service personnel.                             |  |
|      |   | Suggestion: Lay the printer on the front side for ease of |  |
| 7 m  |   | accessing the motors.                                     |  |
|      |   |   |  |
|      |   | IMPORTANT NOTE: When replacing the Film Supply            |  |
|      |   | Motor make note of the number listed on the label of the  |  |
|      |   | new motor. Add this number to the Advanced Settings in    |  |
|      |   | the Printer Driver TOOLBOX.                               |  |
| Step | Procedure   |   |  |
| 1    | $\mathbf{\Lambda}$  |   |  |
|      | Caution: Turn Of  | F the Printer and unplug the power cord from the Printer. |  |
|      | This procedure is used to replace the RFID Boards (A000365) is used for both Supply   |   |  |
|      | Motors and the Encoder Sensor attached to the motor as one piece                      |   |  |
| 2    | To remove Film Supply Motor or the Ribbon Supply Motor disconnect the wire connection |   |  |
|      | at the top of the motor.  |   |  |
| 3    | Remove the three (3) screws that hold the Motor to the Frame.                         |   |  |
| 4    | Remove the Motor.   |   |  |
|      | The Encoder Sensor is part of this assembly   |   |  |
| 5    | To replace the RFID the Motor must be removed.  |   |  |
|      | Disconnect the wire from the RFID Board and slide down and out.                       |   |  |
| 6    | Line up the screw holes. (Note: The Motor will only fit in one way.)                  |   |  |
| 7    | Reverse the instructions to re-assemble.  |   |  |



### Remove/Replace the Film Take-Up Motor (D900484-01) and Ribbon Take-Up Motor (D900484-01)



Tools needed: T10 Torx Driver Estimated Time: 20 minute The same procedure is used for both Motors. Preparation: Remove the Covers. Remove the Auxiliary board. Remove the Fan Box/ Bracket Important: This procedure can only be performed by authorized service personnel. Suggestion: Lay the printer on the front side for ease of accessing the motors. IMPORTANT NOTE: When replacing the Film Take-up Motor make note of the number listed on the label of the new motor. Add this number to the Advanced Settings in the Printer Driver TOOLBOX.

| Step | Procedure   |  |
|------|---|--|
| 1    | Caution: Turn OFF the Printer and unplug the power cord from the Printer.               |  |
| 2    | Detach the Sensor wire from the Motor. Applies to the Film Take-Up Motor and the Ribbon |  |
|      | Take-Up Motor   |  |
| 3    | Remove the four (4) screws that hold the Motor to the Frame.                            |  |
| 4    | Pull out the Motor.   |  |
| 5    | Replace the Film or Ribbon Take-Up Motor.   |  |
| 6    | Reverse the instructions to re-assemble. See the next page.                             |  |



# Remove/Replace the Headlift Motor (D910052) and Headlift Sensor (D910216)

| 1. 2 |   | Tools needed: T10 Torx Driver                     |  |
|------|---|---|--|
|      |   | Estimated Time: 30 minutes                        |  |
|      |   | Preparation: Remove the Rear/Top Covers.          |  |
|      |   | Remove the Fan Box/Bracket Assembly               |  |
|      |   | Important: This procedure can only be             |  |
|      |   | performed by authorized service personnel.        |  |
| 5    |   |   |  |
|      | and the second se | Suggestion: Lay the printer on the front side for |  |
|      | a de la companya de l   | ease of accessing the motors.                     |  |
| Step | Procedure   |   |  |
|      |   |   |  |
| 1    |   |   |  |
|      | <b>Caution:</b> Turn OFF the Printe   | r and unplug the power cord from the Printer.     |  |
| 2    | Detach the Sensor wire (D910216) from the top of the Headlift Motor (D910052).  |   |  |
|      |   |   |  |
|      | E N Same  | and I and I                                       |  |
|      |   |   |  |
|      |   |   |  |
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|      |   |   |  |
|      |   |   |  |



| Step                                     | Procedure  |
|--|--|
| 3  | Remove the one (1) screw that holds the Mount to the Frame. (Note: The Mount is flush          |
|  | with the Frame when properly fitted.)  |
| 1 screw<br>inside opening<br>Locking Tab |  |
|  | Pull out the Motor. Press the locking tab located on the right side of the Motor IN to release |
|  | the Motor.   |
|  |  |
| 4  | Disconnect the Headlift Sensor from the Harness.   |
|  | Leave the Sensor (D910216) in the Mount (if not replacing it).                                 |
| 5  | If you need to replace the Sensor use a small flathead screwdriver to release the Sensor.      |
|  | Move the flag from out of the Sensor area to clear the Sensor.                                 |
|  | a. Slide the Sensor out from the tabs.   |
|  | b. Replace it with the new Sensor and click it back into place.                                |
|  | (continued next page)  |



| 6 | Replace the Headlift Motor.  |
|---|--|
|   | Ensure the Shaft tab fits in to the hole provided in the Frame.  |
|   | Note: Turn the shaft so the FLAG is within the sensor, then insert.  |
| 7 | Powerse the instructions to re-assemble  |
| , | Reverse the instructions to re-assemble.         Caution:       Do not pinch the wires. Note how wires are feed through. |



### Remove the Print Stepper Motor (D910050)

|                   | and the second | Tools needed: T10 Torx Driver                               |  |
|-------------------|--|---|--|
| PG M              |  | Estimated Time: 30 minutes                                  |  |
|                   |  | Preparation: Remove Covers.                                 |  |
|                   |  | Remove the Fan Box/Bracket Assembly                         |  |
|                   | e con  | Remove the Card Path.                                       |  |
| No. of the second |  | Suggestion: Lay the printer on the front side for ease of   |  |
| 100               |  | accessing the motors.                                       |  |
|                   |  | Important: This procedure can only be performed by          |  |
|                   |  | authorized service personnel.                               |  |
| Step              | Procedure  |   |  |
| 1                 |  |   |  |
|                   | <b>Caution:</b> Turn C   | OFF the Printer and unplug the power cord from the Printer. |  |
| 2                 | Detach the Print Motor Cable from the Print Stepper Motor (D910050).   |   |  |
|                   | Detach the Print Motor Cable from the Print Stepper Motor (D910050).   |   |  |



| Step | Procedure   |  |  |
|------|---|--|--|
| 3    | Remove the 3 screws (F000177) that hold the Motor (D910050) to the Frame.   |  |  |
|      | Screws # 1 & 2 have washers ( 140040)   |  |  |
|      | F000177 (2)<br>140040 (2)<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1                     |  |  |
| 4    | Roll the Motor (D910050) in a downward angle CCW to release the Print Stepper Motor Belt (F000093) from the Pulley. |  |  |
| 5    | a. Check the Belts and Pulley for excessive wear.   |  |  |
|      | b. Replace the Belt (F000093) or the Pulley (D840888).  |  |  |
| 6    | a. If replacing the Gear, remove the clip that attaches the Gear to the Shaft.                                      |  |  |
|      | b. Replace it with the new Gear (D840888).  |  |  |
|      | c. Replace the clip on the Shaft.   |  |  |







### Remove the Card Path Step Mount Assembly (D940258)

| 0       |                                       | Tools needed: T10 Torx Driver                              |  |
|---------|---------------------------------------|--|--|
|         |                                       | Estimated Time: 30 minutes                                 |  |
|         |                                       | Preparation: Remove the Covers.                            |  |
|         | 0                                     | Remove the Card Path.                                      |  |
| and the | 0                                     | Suggestion: Lay the printer on the front side for ease of  |  |
|         | 0                                     | accessing the motors.                                      |  |
| P)      |                                       | Important: This procedure can only be performed by         |  |
| 2       |                                       | authorized service personnel.                              |  |
| Step    | Procedure                             |  |  |
| 1       | $\bigwedge$                           |  |  |
|         | Caution: Turn O                       | FF the Printer and unplug the power cord from the Printer. |  |
| 2       | Disconnect the Lam Motor Connection   |  |  |
|         | Z Disconnect the Lam Motor Connection |  |  |



| Step | Procedure   |
|------|---|
| 3    | Remove 2 screws (F000191) from the Mount.               |
|      | Lift out the Mount.                                     |
|      | F00191 (2)  |
| 4    | Replace if necessary                                    |
|      | Reverse Assembly to complete the replacement procedure. |
| 5    | Cable Routing shown.                                    |



### Remove/Replace the Lamination Mechanism (D940009) (Transfer Arm)

|           |   |           | Tools needed: T10 Torx Driver                     |
|-----------|---|-----------|---|
|           | 1   |           | Estimated Time: 30 minutes                        |
|           |   |           | Preparation: Remove Top/Rear Covers               |
|           | 2 Alla  |           | Remove the Fan Box/Bracket Assembly               |
|           |   |           | Important: This procedure can only be             |
| 1         |   |           | performed by authorized service personnel.        |
| Only the  | Motor and Sensor is field replaceable. For                  | or any    |   |
| other par | ts please replace complete assembly.                        |           |   |
| Step      | Procedure   |           |   |
| 1         |   | ter and   | upplug the power cord from the Printer            |
| 2         | IMPORTANT NOTE: Tilt the roller when                        | replacir  | ng back into the frame- <b>DO NOT scratch the</b> |
| _         | roller.   |           |   |
|           | This procedure is used to replace the M                     | lotor (D9 | 10072) and the Lift Sensor (D910216).             |
|           | OR to completely remove the Transfer                        | Arm Ass   | embly.  |
| 3         | Remove the Gear /Retaining Ring to ac                       | cess the  | e Transfer Arm.                                   |
|           | Remove the Gear /Retaining Ring to access the Transfer Arm. |           |   |



| 4       Disconnect the Lam Up/Down Motor Connection <i>i i</i> |
|--|
| 5       Disconnect the Heater Wire 1 ((J3) and the RTD 1 (J17) from the Auxiliary Board (A940221-10)   |
| 5 Disconnect the Heater Wire 1 ((J3) and the RTD 1 (J17) from the Auxiliary Board<br>(A940221-10)  |
| (A940221-10)   |
| $\Gamma_{\rm c}$ Demonstration (D) construction (E000477) that attack the Transfer Arms (D040000) to the Main  |
| 6 Remove the three (3) screws (F000177) that attach the Transfer Arm (D940009) to the Main   |
| Chassis Frame.   |
| Turn printer over to remove the bottom screw that holds the Transfer Arm to the base.  |
| F000177 (3)  |
|  |

### HID

| Step | Procedure  |
|------|--|
| 7    | IMPORTANT NOTE: Tilt the roller when replacing back into the frame- DO NOT scratch the |
|      | <u>rolle</u> r.  |
| 8    | Verify LAM CAM Postion when replacing the Arm  |
|      |  |
| 9    | Reverse the instructions to re-assemble.   |
|      | See below for the Motor (D910072) or Sensor (D910216) replacement.                     |



# Remove/Replace the Transfer Arm Motor (D910072) or Up/Down Sensor (D910216)

| Step       Procedure         1       Image: Caution: Turn OFF the Printer and unplug the power cord from the Printer.         2       This procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.  |
|---|
| Image: Step 1       Procedure         Image: Step 2       Caution: Turn OFF the Printer and unplug the power cord from the Printer.         Image: Step 2       This procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.  |
| Remove the Fan Box/Bracket Assembly.         Remove the complete Transfer Arm to access the motor and sensor.         Important: This procedure can only be performed by authorized service personnel.         Step       Procedure         1       Important: Turn OFF the Printer and unplug the power cord from the Printer.         2       This procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.         Important: Connector here       Fourigram (Connector here)   |
| Important:       This procedure can only be performed by authorized service personnel.         Step       Procedure         1       Important:         2       This procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.         Important:       Connector here   |
| Important:       This procedure can only be performed by authorized service personnel.         Important:       This procedure can only be performed by authorized service personnel.         Important:       This procedure         Important:       This procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.         Important:       This procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.   |
| Step       Procedure         1       Important: This procedure can only be performed by authorized service personnel.         2       Procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.         Important: This procedure is used to replace the Motor (D910072)       Important: This procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.  |
| Step       Procedure         1       Important: This procedure can only be performed by authorized service personnel.         2       Procedure is used to replace the Printer and unplug the power cord from the Printer.         2       This procedure is used to replace the Motor (D910072)<br>Unplug the Sensor wire from the top of the Motor.         3 screws (F000171) hold the motor to the assembly frame.         Important: Turn OFF the Printer and unplug the power cord from the Printer.  |
| Important:       This procedure can only be performed by authorized service personnel.         Step       Procedure         1       Important:       This procedure the printer and unplug the power cord from the Printer.         2       This procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.         Important:       Topological the power cord from the printer.  |
| Step       Procedure         1       Image: Caution: Turn OFF the Printer and unplug the power cord from the Printer.         2       This procedure is used to replace the Motor (D910072)<br>Unplug the Sensor wire from the top of the Motor.<br>3 screws (F000171) hold the motor to the assembly frame.         Image: Connector here       Image: Connector here         Image: F000171 (3)       Image: Connector here   |
| Step       Procedure         1       Image: Caution: Turn OFF the Printer and unplug the power cord from the Printer.         2       This procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.         Image: Imag   |
| 1       Image: Caution: Turn OFF the Printer and unplug the power cord from the Printer.         2       This procedure is used to replace the Motor (D910072)<br>Unplug the Sensor wire from the top of the Motor.<br>3 screws (F000171) hold the motor to the assembly frame.         Image: Connector bergin be |
| 2       Caution: Turn OFF the Printer and unplug the power cord from the Printer.         2       This procedure is used to replace the Motor (D910072)         Unplug the Sensor wire from the top of the Motor.       3 screws (F000171) hold the motor to the assembly frame.         Image: Connector here       Image: Connector here         Image: F000171 (3)       Image: Connector here         Image: F000171 (3)       Image: Connector here  |
| <ul> <li>2 This procedure is used to replace the Motor (D910072)</li> <li>Unplug the Sensor wire from the top of the Motor.</li> <li>3 screws (F000171) hold the motor to the assembly frame.</li> </ul>  |
| Unplug the Sensor wire from the top of the Motor.<br>3 screws (F000171) hold the motor to the assembly frame.   |
| 3 screws (F000171) hold the motor to the assembly frame.  |
| F000171 (3)   |
| F000171 (3)   |
| F000171 (3)   |
| F000171 (3)   |
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|   |
| (continued next page)   |






| Step | Procedure  |
|------|--|
| 4    | IMPORTANT NOTE: Tilt the roller when replacing back into the frame- DO NOT scratch the |
|      | roller.  |
|      | Final position before replacing the assembly.  |
|      |  |
| 5    | Reverse the instructions to re-assemble.   |
|      | Refer to Appendix A for Cable Connection diagram.                                      |



### Remove/Replace the Ribbon Sensor (D910556)

|      |                     | Tools needed: T10 Torx Driver                                     |
|------|---------------------|---|
|      |                     | Estimated Time: 30 minutes  |
|      | 1                   | Preparation: Remove the Covers.                                   |
|      | 語の語                 | Remove the Card Path  |
|      |                     | Remove the Fan Box Bracket  |
|      |                     | Remove the Main Chassis   |
|      |                     | Important: This procedure can only be performed by authorized     |
|      |                     | service personnel.  |
| Step | Procedure           |   |
| 1    |                     |   |
| 2    | Caution:            | I urn OFF the Printer and unplug the power cord from the Printer. |
| Z    | chassis frame       | chassis to access the Ribbon Sensor located on the bottom of the  |
|      | chassis frame.      |   |
|      |                     |   |
| 3    | Disconnect the wire | e from the PCB.   |
|      | Unclip the PCB from | m the plastic tabs.   |
|      |                     |   |
| 4    | Reassembly all par  | rts using reverse assembly process.                               |



# **Installing the Printhead**

|      |                   | Kit Part Number: 088934  |
|------|-------------------|--|
| A    |                   | Tools needed: T10 (Torx )Driver<br>Estimated Repair Time: 30 minutes           |
| 2.4  | 4                 |  |
|      |                   | Important: This procedure can only be performed by authorized service          |
|      |                   | personnel.   |
| Step | Procedure         |  |
| 1    | Cautio            | <b>n:</b> Power off the Printer by unplugging the power cord from the Printer. |
| 2    | Remove the Top    | and Rear Cover.  |
| 3    | Rear Cover (D94   | 0089)  |
|      |                   |  |
|      | There are 8 Torx  | screws on the back of the Printer.   |
|      |                   |  |
|      |                   |  |
|      | F000170 (8)       |  |
|      |                   | Back Cover has 8<br>screws   |
|      |                   |  |
| 4    | Remove the (      | 5) screws (F000190) from the top of the Rear Cover.                            |
|      |                   |  |
|      |                   |  |
|      |                   |  |
|      | 1 the second      |  |
|      |                   |  |
|      | Sitk T            | F000170 (5)  |
|      |                   |  |
|      | Lift up the Cover | in one piece.  |
|      | Disconnect the C  | over Open Sensor.  |
|      | Set aside to acce | ss the Printhead area.   |



| Step | Procedure  |
|------|--|
| 5    | Unplug the RTD Wire Cable, Heater Wire Cable, and Interconnect Cable (with small com |
|      | board D940171) from the Auxiliary Board (A920221-10).                                |
|      |  |
| 6    | Remove the 3 screws holding the Auxiliary Board (A920221-10) to the frame.           |
|      | <image/>   |
|      |  |



| Step | Procedure   |
|------|---|
| 7    | Remove the Ethernet/USB box.  |
|      | Remove two screws from the BOX base.  |
|      | F00191 (2)  |
|      | Pull the box forward and slide to the RIGHT then OUT.   |
|      | Doing this will release the box from the PCB board (Ethernet/ USB Connection ) directly behind the box. |
| 8    | Remove the FAN BOX and BRACKET as one piece   |
| 9    | Remove 2 screws from the Fan Bracket located at the base.   |



| Step | Procedure  |
|------|--|
| 10   | Gently pull the hoses from the Printer.                |
| 11   | Disconnect the 2 Fan Cable from the Fan Box.           |
| 12   | Disconnect the MAG wires from the back of the Fan Box. |



| Step | Procedure  |
|------|--|
| 13   | Disconnect the wires from the tie wrap on the Fan Box.                             |
| 14   | Disconnect the Ribbon Cable from the D000445 Board (attached to the Fan Box Riser) |



| Step | Procedure  |
|------|--|
| 15   | The Printhead Motor Mount (D910052) is now accessible.                                   |
|      |  |
| 16   | Remove the Printhead Motor Mount (D910052).  |
|      | Remove the one (1) screw that holds the Motor Mount to the Frame, as shown below. (Note: |
|      | The Mount should be "flush" with the Frame when properly fitted.)                        |
|      |  |



| Step | Procedure  |
|------|--|
| 17   | Remove the ground strap of the Printhead.  |
|      | F00177<br>F000177<br>Ground Cable  |
| 18   | Unplug the Printhead Motor Mount Connectors.   |
|      | Disconnect         Disconnect |



| Step | Procedure   |
|------|---|
| 19   | Lift out the Printhead Motor Mount assembly.                  |
| 20   | Carefully lift out the complete Printhead Assembly (D910515). |



| Step | Procedure   |
|------|---|
| 21   | Complete the replacement by doing the following steps. See below for details.   |
|      | <ul> <li>Replace the complete Printhead Assembly. IMPORTANT NOTE: Locate the<br/>Printhead Resistance value stamped on the printhead BEFORE installing. This VALUE<br/>is needed for step 26</li> </ul> |
|      | b. Replace the Printhead cable and ground strap.  |
|      | c. Replace the Printhead Motor Mount (D910052).   |
|      | <b>Caution:</b> When replacing the Printhead Assembly, ensure that the Printhead surface does not get scratched by any other Printer parts  |
| 22   | Fit the Frame Mount pin into the slot, provided within the Printer Frame.   |
|      | (Important: Verify the mount pin is solidly fitted into the hole, as shown below.)  |
|      | Display – Frame Mount Pin   |
|      | Display – Print Platen Roller Slot and Frame Mount Pin  |
|      | (continued next page)   |





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| Step | Procedure   |
|------|---|
| 24   | Careful when replacing the Printhead Motor Mount (D910052)  |
| 25   | Replace Fan Box and all cables, Ethernet/USB Box, and Auxiliary Board.<br>Replace Covers in reverse assembly.<br>You have completed this procedure. |
| 26   | Open the Driver Toolbox then Advanced Settings. Change/verify the Printhead Resistance value. This new value is stamped on the new printhead.       |



# **Flipper Table Remove/Replace Procedures**



In order to access the Flipper Module please remove the Rear/Top Cover, the Front Panel, and the Output Cover.

Refer to the procedures for:

- 1. Top/Rear Cover D940089
- 2. Front Panel Cover D940201-01
- 3. Output Cover D940199-02



### Remove/Replace the Output Roller Assembly (D910404)

|      |   | Tools needed:                                  |
|------|---|--|
|      |   | Estimated Time: 30 minutes                     |
|      |   | Preparation: Remove Rear/Top Covers.           |
|      |   | Remove the Front Panel                         |
|      |   | Remove the Output Cover.                       |
|      |   | Important: This procedure can only be          |
|      |   | performed by authorized service personnel.     |
| Step | Procedure   |  |
| 1    | Caution: Turn OFF the Print   | er and unplug the power cord from the Printer. |
| 2    | Unwind the Flipper Sensor Bundle Cable  | from the top of the Output Roller Assembly.    |
|      | Caution: Turn OFF the Printer and unplug the power cord from the Printer.<br>Unwind the Flipper Sensor Bundle Cable from the top of the Output Roller Assembly. |  |



| Step | Procedure  |
|------|--|
| 3    | The Output Roller Assembly (D910404) clips into the two (2) slots on either side of the Frame.<br>Gently pull the Assembly from the Sensor side Frame just enough for the Assembly to be<br>pulled out from its slots.<br>It is not necessary to remove any other parts.<br>TABS FIT INTO SLOTS ON<br>THE SIDEPLATE<br>THE SIDEPLATE |
| 4    | Reverse the instructions to re-assemble.   |



#### Remove/Replace the Flipper Output Roller (D900123)

|      | $\sim$   | Tools needed: Philip driver, E-Clip<br>Estimated Time: 30 minutes  |
|------|--|--|
|      |  | Preparation: Remove Rear/Top Covers.   |
|      |  | Remove the Front Panel   |
|      |  | Remove the Output Cover.   |
| 6 V  |  | <b>Important:</b> This procedure can only be performed by  |
| -    |  | authorized service personnel.  |
|      |  |  |
|      |  |  |
| Step | Procedure  |  |
| 1    |  |  |
|      | Caution: Turn C  | FF the Printer and unplug the power cord from the Printer.   |
| 2    | Remove the Lower Idler Pull  | ey screw/washer to release the belt and have access to the   |
|      | Roller Main Pulley.  |  |
|      | CAUTION: Do not touch the  | e board with the Screwdriver.  |
|      | This board (4 corner screws  | ) may be removed for better access.  |
|      | 019  |  |
|      |  | Main Pulley<br>D850190   |
|      | 0 6309   |  |
|      | 161  | and and and a second se |
|      |  |  |
|      |  |  |
|      | Depond 241   |  |
|      | (C) Water and the second secon |  |
|      |  |  |
|      | State State  |  |
|      |  |  |
|      |  |  |
|      |  |  |

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| Step | Procedure  |
|------|--|
| 3    | Remove the E-Clip from the Sensor side of the Flipper Table Shaft and the bushing (760343).<br>NOTE: the bushing has a flat side that fits into the frame. |
| 4    | Remove the E-Clip from the Motor side and the bushing.   |
| 5    | Remove the Output Roller Assembly (D910404) from the Motor side.   |
|      | NOTE: Roller shaft is longer on the Motor side.  |
| 6    | Reverse the instructions to re-assemble.   |



## Remove/ Replace the Table or Flip Home Sensor (D900249)

| alt a |  | Tools needed: 10 Torx drive;                                       |
|-------|--|--|
|       |  | Estimated Time: 30 minutes   |
|       |  | Preparation: Remove Rear/Top Covers.                               |
| A     |  | Remove the Front Panel   |
| les   | -  | Remove the Output Cover.   |
|       |  | This Sensor bundle connects to J3 on the Flipper Main Board. The   |
|       | the second   | Sensor bundle contains three (3) optical Sensors used for the Card |
|       |  | Input Sensor, Flipper Home Sensor and Table Sensor. All three      |
|       |  | Sensors must be replaced at the same time if one Sensor is         |
|       |  | damaged.   |
|       |  | Important: This procedure can only be performed by authorized      |
|       |  | service personnel.   |
| Step  | Procedure  |  |
| 1     | $\wedge$   |  |
|       | <b>Caution:</b> Turn OFF the Printer and unplug the power cord from the Printer. |  |
| 2     | Disconnect the wire bundle from the J3 connection.                               |  |
| 3     | a. Unwind the wire bundle to reach the Sensors.                                  |  |
|       | b. Unclip the wires from the holder Mounts.                                      |  |
| 4     | Remove the two (2) screws that hold each Sensor to the Frame.                    |  |
| 5     | Observe where each Sensor goes. (Note: Each wire is labeled for placement.)      |  |
| 6     | Replace the Sensor bundle.   |  |
| 7     | Reverse the instructions to re-assemble.   |  |



### Remove/ Replace the Flipper Motor (D900523)

|                          | Tools needed: T10 Torx Driver  |  |
|--------------------------|--|--|
| -                        | Estimated Time: 30 minutes   |  |
| /                        | Preparation: Remove Rear/Top Covers.   |  |
| 1                        | Remove the Front Panel   |  |
| Remove the Output Cover. |  |  |
|                          | Important: This procedure can only be performed by authorized                    |  |
| 2                        | service personnel.   |  |
| Step                     | Procedure  |  |
| 1                        | <b>Caution:</b> Turn OFF the Printer and unplug the power cord from the Printer. |  |
| 2                        | Disconnect the cable (D900251) from the top of the Stepper Motor.                |  |
| 3                        | Remove three (3) screws from the Motor to the Frame.                             |  |
| 4                        | Replace the Motor.   |  |
| 5                        | Connect the cable to Motor (top).  |  |
| 6                        | Reverse the instructions to re-assemble.   |  |



### Remove/ Replace the Card Feed Motor (D900524)

| Tools needed:         Philip screwdriver |   |  |
|--|---|--|
| 1  | Estimated Time: 30 minutes  |  |
|  | Preparation: Remove Real/Top Covers.  |  |
| 15 10/ 17                                | Remove the Front Panel  |  |
|  | Remove the Output Cover.  |  |
| 0  | Important: This procedure can only be performed by authorized                         |  |
|  | service personnel.  |  |
|  |   |  |
| Step                                     | Procedure   |  |
| 1  | <b>Caution:</b> Turn OFF the Printer and unplug the power cord from the Printer.      |  |
| 2  | Disconnect the cable (D900251) from the bottom of the Stepper Drive Motor.            |  |
| 3  | Remove the Main Board by pulling from the four (4) corners out. (Note: No screws hold |  |
|  | the Board. Four (4) pressure tabs hold the Board.)                                    |  |
|  |   |  |
|  | <b>Caution:</b> Be careful not to break the Board.                                    |  |
| 4  | Remove the two (2) screws that hold the Motor base to the Frame.                      |  |
| 5  | Replace the Motor/ Bracket.   |  |
| 6  | Reconnect the wires at the Motor (bottom).  |  |
| 7  | Reverse the instructions to re-assemble.  |  |



### Remove/Replace the Flipper Main Board (A000394)

|  |   | Tools needed: T10 Torx Driver,        |
|--|---|---------------------------------------|
| a constant and a const |   | screwdriver.                          |
|  |   | Estimated Time: 30 minutes            |
|  | OTHER DISCOUNTS IN THE REAL                           | Preparation: Remove Rear/Top          |
|  |   | Covers.                               |
| al la la   |   | Remove the Front Panel                |
|  |   | Remove the Output Cover               |
|  | LEHAMOUN  | Important: This procedure can only    |
|  |   | be performed by authorized service    |
|  |   | personnel.                            |
| Step   | Procedure   |                                       |
| 1  | Caution: Turn OFF the Printer and unpluc              | g the power cord from the Printer.    |
| 2  | Disconnect the cable (D900251) from the Board at J9.  |                                       |
| 3  | Disconnect the cable (D900249) from the Board at J3.  |                                       |
| 4  | Disconnect the Ribbon cable (D900214) from the Mair   | n Board at J1.                        |
| 5  | Disconnect the Ribbon cable (D900215) from the Mair   | n Board at J2.                        |
| 6  | Remove the Main Board by pulling from the four (4) co | orners out. (Note: No screws hold the |
|  | Board. Four (4) pressure tabs hold the Board.)        |                                       |
|  | <b>Caution:</b> Be careful not to break the Board     | d.                                    |
| 7  | Replace the Main Board.                               |                                       |



| Step | Procedure                                |
|------|--|
| 8    | Reconnect the cables.                    |
|      | See Ribbon Cable routing below.          |
|      | D91021         J                         |
| 9    | Reverse the instructions to re-assemble. |



### Remove/Replace the Accessory Board (A000451)

|                          |  | Tools needed: T10 Driver                              |
|--------------------------|--|---|
| CC UMITICAN GC DM-STREAM |  | Estimated Time: 30 minutes                            |
|                          |  | Preparation: Remove Rear/Top Covers.                  |
|                          |  | Remove the Front Panel                                |
|                          | Pane save<br>Pane save<br>Pane backmankets | Remove the Output Cover                               |
|                          |  | Important: This procedure can only be performed       |
|                          |  | by authorized service personnel.                      |
|                          |  |   |
|                          |  |   |
| Step                     | Procedure                                  |   |
| 1                        | $\mathbf{\Lambda}$                         |   |
|                          | <b>Caution:</b> Turn OFF the Pri           | nter and unplug the power cord from the Printer.      |
| 2                        | Disconnect the Ribbon cables from the      | Main Board ( J1 & J2) and from the Accessory Board    |
|                          | (J2 & J4).                                 |   |
| 3                        | Use a long Torx screwdriver to remove      | the four (4) screws that attach the Board to the base |
|                          | plate. Work from the top of the Flipper    | Table.  |
| 4                        | Replace it with the new Accessory Boa      | rd (A000451)  |
| 5                        | Reconnect the cables.                      |   |
| 6                        | Reverse the instructions to re-assemble.   |   |



# Lamination Module Remove/Replace Procedures

Important: These procedures can only be performed by authorized service personnel.

Use this procedure for the replacements of all parts. All Covers must be removed to access the parts within the lamination module. All media must be removed for these procedures.

The Lamination Module may be completely removed from the Printer for ease of access.



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### HID

| Step | Procedure   |
|------|---|
|      | Remove Covers   |
| 4    | Remove 6 screws from the Rear cover (D940073-02).   |
|      | Remove 5 screws from the Top cover.         Image: Constraint of top cover. |
| 5    | Remove 6 screws from the Rear cover (D940073-02).   |
| 6    | Remove 5 screws from the Front cover (D940222-01)   |



| Step | Procedure   |
|------|---|
| 7    | Remove 2 screws from the Output cover (D940226-02). |
| 8    | Lift covers off frame and set aside.                |
|      |   |



#### Remove/Replace the Cleaning Roller (D940203) Cleaning Output Assembly





| Step | Procedure   |  |  |
|------|---|--|--|
| 3    | The long end goes to the RIGHT Side.  |  |  |
|      | Ensure the flat on the Bearing (D940169) is aligned with the flat hole in the sideplate. $ u$ |  |  |
|      | Remove the gear and clip 140048 to replace the roller   |  |  |
|      | 740363  |  |  |
| 4    | Reverse the instructions to re-assemble.  |  |  |



#### Remove/Replace the Cleaning Roller Idler (D940102)

#### **Cleaning Output Assembly**









## **Remove/Replace the Roller Transport Idler (D940108)**

#### **Cleaning Output Assembly**

|      |   | Tools needed: E-Clip                          |  |  |
|------|---|---|--|--|
|      |   | Estimated Time: 30 minutes                    |  |  |
|      |   | Preparation: Remove the Lamination Module     |  |  |
|      |   | Covers.                                       |  |  |
|      |   | Important: This procedure can only be         |  |  |
|      |   | performed by authorized service personnel.    |  |  |
|      |   |   |  |  |
| Step | Procedure   | ·   |  |  |
| 1    | Caution: Turn OFF the Printer                                   | r and unplug the power cord from the Printer. |  |  |
| 2    | 2 Remove the Retaining Rings (140062) from inside the card path |   |  |  |
|      |   |   |  |  |
|      |   | Top View                                      |  |  |



| Step | Procedure  |
|------|--|
| 3    | Remove the retaining ring(140062) and washer (F000450) |
|      | Release the spring from the tab (D940254)              |
|      |  |
|      | Continued next nage                                    |
|      | (continued next page)                                  |







## Remove/Replace the Film Mark Sensor (D920155) Upper and Lower

| a    |  | cols needed: Needle Nose Pliers  |
|------|--|--|
|      |  | stimated Time: 30 minutes  |
|      |  | reparation: Remove the Covers.   |
| V    | In   | <b>portant:</b> This procedure can only be performed by authorized service       |
| C    | pe   | ersonnel.  |
| K X  |  | 920155 is located on the CenterPlate Exit D920027                                |
| 4    | - Contraction of the second se |  |
|      |  |  |
| Step | Procedure  |  |
| 1    | A Caution:   | Turn OFF the Printer and upplug the power cord from the Printer                  |
| 2    | Remove the Covers.   |  |
| _    |  |  |
| 3    | Disconnect the cable (D920155) from the Main Board at location J26 for the lower Sensor and  |  |
|      | J27 for the upper Se   | nsor.  |
| 4    | Remove the Upper and Lower Take-Up Motors for clearance to access the Sensors. See   |  |
|      | Replacing the Take-  | up Motor (D920118).  |
| 5    | For the Upper Senso  | or remove the metal Roller (D920137) by snapping it up and out from the          |
|      | front side Frame peg   | hole. ( <b>Note:</b> Use needle nose pliers to grab the Sensor/cable and pull it |
|      | out.)  |  |
|      | Upper Peel<br>Shafts<br>D920137  |  |
## HID









#### Remove/Replace the Lamination Module Main Board (A940221)

|      | Tools needed: 10T Torx driver;  |  |  |  |  |  |  |
|------|---|--|--|--|--|--|--|
|      | Estimated Time: 30 minutes  |  |  |  |  |  |  |
| 1    | Preparation: Remove the Covers.   |  |  |  |  |  |  |
|      | Important: This procedure can only be performed by                                    |  |  |  |  |  |  |
|      | authorized service personnel.   |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |
| Step | Procedure   |  |  |  |  |  |  |
| 1    | Caution: Turn OFF the Printer and unplug the power cord from the Printer.             |  |  |  |  |  |  |
| 2    | Remove all the Covers.  |  |  |  |  |  |  |
|      | (Note: You do not need to remove the printer body to access the Main Board.)          |  |  |  |  |  |  |
| 3    | Disconnect the cables from the Main Board.  |  |  |  |  |  |  |
|      | Disconnect the Power Supply from the board.   |  |  |  |  |  |  |
|      | Ensure all cables are labeled for reconnecting.                                       |  |  |  |  |  |  |
| 4    | Remove the 5 screws (F000170) that hold to Board to the base. 1 screw holds the Power |  |  |  |  |  |  |
|      | Supply Cover.   |  |  |  |  |  |  |
|      | D940137<br>Connect Power<br>Supply into<br>PCB  |  |  |  |  |  |  |



| Step | Procedure   |
|------|---|
| 5    | Replace it with the new Main Board.               |
| 6    | Reconnect the cables.                             |
|      | Refer to Appendix A for Cable Connection diagram. |



## Remove/Replace the Stepper Motor Assembly (D930413) and Belt (F000428)

|      |   | Tools needed: T10 Torx Driver  |  |  |  |  |  |
|------|---|--|--|--|--|--|--|
|      |   | Estimated Time: 30 minutes   |  |  |  |  |  |
|      |   | Preparation: Remove the Covers.  |  |  |  |  |  |
|      |   | Important: This procedure can only be performed by authorized                          |  |  |  |  |  |
|      |   | service personnel.   |  |  |  |  |  |
| •    | <b>.</b>  |  |  |  |  |  |  |
| Step | Procedure   |  |  |  |  |  |  |
| 1    | Caution: Tu                                       | urn OFF the Printer and unplug the power cord from the Printer.                        |  |  |  |  |  |
| 2    | Remove the Covers.                                |  |  |  |  |  |  |
| 3    | Disconnect the Stepper                            | Motor cable (D900625) from the top of the Motor  |  |  |  |  |  |
| 4    | Remove the 3 Torx scre<br>screws that attaché the | ews (F000169) that attach the Motor to the Frame, and remove the 2 gears to the frame. |  |  |  |  |  |
| 5    | Lift the Motor Assembly                           | from the frame to access the belt and the motor screws.                                |  |  |  |  |  |
| 6    | Remove the Belt (F0004                            | 428) from the Motor.   |  |  |  |  |  |
|      | Replace as needed.                                |  |  |  |  |  |  |



| Step | Procedure   |  |  |  |  |  |  |  |  |
|------|---|--|--|--|--|--|--|--|--|
| 7    | The self adjusting Spring (F000332) will fall out. (Note: This will be replaced when the new  |  |  |  |  |  |  |  |  |
|      | Motor is installed.)  |  |  |  |  |  |  |  |  |
| 8    | Install the new Motor. Loosely install the four (4) screws. Work the Belt (F000428) back onto the   |  |  |  |  |  |  |  |  |
|      | Motor Shaft.  |  |  |  |  |  |  |  |  |
| 9    | a. Insert the self adjusting Spring (F000332) into the hole (provided from the front).  |  |  |  |  |  |  |  |  |
|      | b. Tighten the four (4) screws (F000169). Allow the self-adjusting spring to hold the Motor in  |  |  |  |  |  |  |  |  |
|      | place.  |  |  |  |  |  |  |  |  |
|      | Image: specific constraints of the specific constraints |  |  |  |  |  |  |  |  |
| 10   | Reverse the instructions to re-assemble.  |  |  |  |  |  |  |  |  |



## Remove/Replace the Upper and Lower Take-up Motor (D920189)

|      | Tools needed:  |  |  |  |  |  |  |  |
|------|--|--|--|--|--|--|--|--|
|      | Estimated Time: 30 minutes   |  |  |  |  |  |  |  |
|      | Preparation: Remove the Covers.  |  |  |  |  |  |  |  |
|      | Important: This procedure can only be performed by authorized                                      |  |  |  |  |  |  |  |
|      | service personnel.   |  |  |  |  |  |  |  |
|      | The same part number is used for both the Single and Dual  |  |  |  |  |  |  |  |
|      | Lamination Modules. The Single Laminator uses one (1) Motor. The                                   |  |  |  |  |  |  |  |
|      | Dual Laminator uses two (2) Motors. Both Motors use cable  |  |  |  |  |  |  |  |
|      | D920153.   |  |  |  |  |  |  |  |
| Step | Procedure  |  |  |  |  |  |  |  |
| 1    | $\land$  |  |  |  |  |  |  |  |
|      | <b>Caution:</b> Turn OFF the Printer and unplug the power cord from the Printer.                   |  |  |  |  |  |  |  |
| 2    | Remove the Covers.   |  |  |  |  |  |  |  |
| 3    | Disconnect the cable (D920153) from the top of the Motor.  |  |  |  |  |  |  |  |
| -    |  |  |  |  |  |  |  |  |
| 4    | Hold the Motor in one hand and the Shaft in the other. Push it in and turn the Motor to release it |  |  |  |  |  |  |  |
|      | from the Frame.  |  |  |  |  |  |  |  |
|      | The (lower) Motor for the SINGLE Lamination is removed by turning it clock-wise to release         |  |  |  |  |  |  |  |
|      | it and counter clock-wise to replace it. Refer to Display A in this procedure.                     |  |  |  |  |  |  |  |
|      | The (upper) Motor for the DUAL Lamination Module is removed by turning it counter                  |  |  |  |  |  |  |  |
|      | clock-wise to release and clock-wise to replace it. Refer to Display B in this procedure.          |  |  |  |  |  |  |  |
| 5    | • Display C shows the cutout area to place the Motor (into) before turning it to lock it in place. |  |  |  |  |  |  |  |
|      | See the display page in this procedure.  |  |  |  |  |  |  |  |
|      | • Display D shows wire routing configuration. See the display page in this procedure.              |  |  |  |  |  |  |  |
|      |  |  |  |  |  |  |  |  |
|      | <b>Caution:</b> Do not pinch the wires.  |  |  |  |  |  |  |  |





Display A (Lower Motor): See Step 4 in this procedure.

Display B (Upper Motor): See Step 4 in this procedure.





Display C: See Step 5 in this procedure.



Display D: See Step 5 in this procedure.



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## Remove/Replace the Rewind Motor (D900406) Gear (D920170)

|      | Tools needed: Small flathead screwdriver; a hook tool for                                   |  |  |  |  |  |  |  |
|------|---|--|--|--|--|--|--|--|
|      | O-Ring.   |  |  |  |  |  |  |  |
| C    | Estimated Time: 30 minutes  |  |  |  |  |  |  |  |
| 0    | Preparation: Remove the Covers  |  |  |  |  |  |  |  |
| 6    | Important: This procedure can only be performed by  |  |  |  |  |  |  |  |
|      | authorized service personnel.   |  |  |  |  |  |  |  |
| Step | Procedure   |  |  |  |  |  |  |  |
| 1    |   |  |  |  |  |  |  |  |
|      | <b>Caution:</b> Turn OFF the Printer and unplug the power cord from the Printer.            |  |  |  |  |  |  |  |
| 2    | Remove the Covers.  |  |  |  |  |  |  |  |
| 3    | Disconnect the cable (D920153) from the top of the Motor.                                   |  |  |  |  |  |  |  |
| 4    | Disconnect the wire bundle from the holding clip. (Note: Observe how the wires are routed.) |  |  |  |  |  |  |  |
| 5    | Disconnect the Encoder Sensor cable (D920147) from the Encoder Sensor Board (A000126).      |  |  |  |  |  |  |  |
|      | (Note: This cable is located toward the bottom of the Rewind Mount.)                        |  |  |  |  |  |  |  |
|      | Unsnap the Encoder Sensor (A000126) from the Rewind Motor Frame. (Note: This will           |  |  |  |  |  |  |  |
|      | make it easier for reassembly.)   |  |  |  |  |  |  |  |
|      | See the display on the next page.   |  |  |  |  |  |  |  |
| 6    | Unclip the Rewind Mount from the top. (Note: The top tab must be lifted slightly to release |  |  |  |  |  |  |  |
|      | the Motor Frame.)   |  |  |  |  |  |  |  |
|      | Be careful NOT to bend the metal Encoder wheel. (Note: The Encoder Sensor must clear        |  |  |  |  |  |  |  |
|      | the Encoder Wheel when removing it.)  |  |  |  |  |  |  |  |
|      | See the display on the next page.   |  |  |  |  |  |  |  |

#### Remove/Replace the Rewind Motor (D900406) and Gear (D920170) (cont.)

| Step | Procedure  |
|------|--|
| 7    | Reverse the instructions to re-assemble.   |
|      | a. Line up the bottom of the Rewind Motor on the tabs.   |
|      | b. Snap the top rewind Motor to the Frame into the tab provided.                               |
|      | c. Replace the Sensor by (1) inserting the tab into one of the two (2) holes on the Sensor and |
|      | by (2) snapping it onto the 2nd tab.   |





### Remove/Replace the RFID Board for the Rewind Motors (A000365-01); Printer Mount

| 7A5C0 | 19/02                                      | Tools needed: T10 Torx Driver  |  |  |  |  |  |  |
|-------|--|--|--|--|--|--|--|--|
|       |  | Estimated Time: 30 minutes   |  |  |  |  |  |  |
| 0-    | F  | Preparation: Remove the Covers.                                      |  |  |  |  |  |  |
| 1     |  | Important: This procedure can only be performed by authorized        |  |  |  |  |  |  |
|       |  | service personnel.   |  |  |  |  |  |  |
| Step  | Procedure                                  |  |  |  |  |  |  |  |
| 1     | Caution: Turn OF                           | F the Printer and unplug the power cord from the Printer.            |  |  |  |  |  |  |
| 2     | Remove the Ribbon Rewind M                 | Notor, the Gear (D920170) and Encoder Wheel (810492) See             |  |  |  |  |  |  |
|       | Replacing the Rewind Motor (D900406).      |  |  |  |  |  |  |  |
| 3     | Disconnect the cable from the RFID Board.  |  |  |  |  |  |  |  |
| 4     | Remove the two (2) screws (F               | 000177) from the RFID Board. ( <b>Note:</b> Slide the Board out from |  |  |  |  |  |  |
|       | the Frame.) See Display A in               | n this procedure.  |  |  |  |  |  |  |
| 5     | Replace it with the new RFID I             | Board. (Note: This Board will slide into slots on the left side.)    |  |  |  |  |  |  |
| 6     | Reconnect the cables. ( <b>Note:</b> J20.) | The top Board connects to J19. The bottom Board connects to          |  |  |  |  |  |  |
| 7     | Replace the Ribbon Rewind M                | Notor. Reverse the instructions to re-assemble. Refer to Display A   |  |  |  |  |  |  |
|       | below.                                     |  |  |  |  |  |  |  |



#### Remove/Replace the RFID Board for the Rewind Motors (A000365-01)

Display A: See Step 4 in this procedure.





#### Remove/Replace the Lamination Head (D920022) and (D920023)

|      |   | Tools needed: T10 Torx Driver                        |  |  |  |  |  |  |
|------|---|--|--|--|--|--|--|--|
|      |   | Estimated Time: 30 minutes                           |  |  |  |  |  |  |
|      |   | Preparation: Remove the Covers                       |  |  |  |  |  |  |
|      |   | Important: This procedure can only be performed by   |  |  |  |  |  |  |
|      |   | authorized service personnel.                        |  |  |  |  |  |  |
|      |   | This part is sold as one assembly which includes the |  |  |  |  |  |  |
|      |   | Film LED (A000454) Head Lift Sensor (E000186)        |  |  |  |  |  |  |
|      |   | Thermocouple RTD (A000449) and the wires.            |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |  |
| Step | Procedure   |  |  |  |  |  |  |  |
| 1    | $\land$   |  |  |  |  |  |  |  |
|      | <b>Caution:</b> Turn OEE the Printer and upplug the power cord from the Printer |  |  |  |  |  |  |  |
| 2    | Remove the Covers.  |  |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |  |
| 3    | Remove the gear to access the Lamin   | nation assembly                                      |  |  |  |  |  |  |
| 1    | Disconnect the coble from the Motor (   | top)   |  |  |  |  |  |  |
| 4    |   | ιο <i>μ</i> .  |  |  |  |  |  |  |
| 5    | Disconnect the wires from the Main Board.                                       |  |  |  |  |  |  |  |
| 6    | Deverse the instructions to re-   | le (Neter The wires are reuted in a specific way     |  |  |  |  |  |  |
| Ø    | Reverse the instructions to re-assemble   | me. (Note: The wires are routed in a specific way    |  |  |  |  |  |  |
|      | around the pegs, provided on the Frame.)  |  |  |  |  |  |  |  |





## Remove/Replace the Hopper Full Sensor (D940295)

|              |                        | Tools needed: T10 Torx Driver;                                   |  |  |  |  |  |  |  |
|--------------|------------------------|--|--|--|--|--|--|--|--|
| LED1 E 18745 |                        | Estimated Time: 15 minutes                                       |  |  |  |  |  |  |  |
|              |                        | Preparation: Remove the Covers.                                  |  |  |  |  |  |  |  |
| 1886         |                        | Important: This procedure can only be performed by authorized    |  |  |  |  |  |  |  |
|              |                        | service personnel.   |  |  |  |  |  |  |  |
| Step         | Procedure              |  |  |  |  |  |  |  |  |
| 1            | Caution:               | Turn OFF the Printer and unplug the power cord from the Printer. |  |  |  |  |  |  |  |
| 2            | Remove 1 screw (FC     | 000169) that holds the sensor to the frame.                      |  |  |  |  |  |  |  |
|              | Disconect the wire cat | ble D940344 from J22.  |  |  |  |  |  |  |  |
|              |                        |  |  |  |  |  |  |  |  |
| 3            | When replacing the se  | ensor, verify it does not touch the roller.                      |  |  |  |  |  |  |  |



# **Appendix A Board & Wire Connections**

Mainboard (A940234) Cable Connection – Main Chassis



Image shown is Printer Main Chassis wire connections to the Mainboard.



## Mainboard (A940234) Cable Connection -Keypad/LED cable (D855013)





## Mainboard (A940234) Cable Connection –Power Cable





Mainboard (A940234) Cable Connection – Card Path Film Transfer Fan, Pick Sensor, Flattener Up/Down Sensor, Lam Motor (D940213)



| LABEL TABLE           |               |  |  |  |  |  |  |
|-----------------------|---------------|--|--|--|--|--|--|
| LOCATION TO CONNECTOR | LABEL TEXT    |  |  |  |  |  |  |
| P1                    | PICK SNR      |  |  |  |  |  |  |
| P2                    | FLAT U/D SEN  |  |  |  |  |  |  |
| P3                    | FILM TRAN FAN |  |  |  |  |  |  |
| P4                    | LAM MTR       |  |  |  |  |  |  |
| JPI                   |               |  |  |  |  |  |  |
|                       | Mainboard     |  |  |  |  |  |  |
|                       |               |  |  |  |  |  |  |

D940213



## Auxiliary Board (A920221-10) Cable Connection





#### Lamination Module Mainboard connection





#### Lamination board Hopper Full Sensor connection



#### Lamination board Card Sensor connection



## Lamination Module Cable Routing



Gather all wires together and secure with tie wrap (140069)

|    | 2 3   | 4            | 5                     |                      | 6  | 7                 | 8  | 9                     | 10                                     |                                     |                                    | 12                            |
|----|---|--------------|-----------------------|----------------------|--|-------------------|--|-----------------------|--|-------------------------------------|------------------------------------|-------------------------------|
| ſ  | 60060'  | ITEM OT      | Y ITEM NUMBER         | TYPE                 | DESCRIPTION                                  |                   | ]  | ·                     |  |                                     |                                    |                               |
|    | FIRED   | 1 4          | 130284                | PART                 | WASHER SHOULDER 9/6                          | 4 L.245 OD        | -  |                       |  |                                     |                                    |                               |
| G  | DELEVCED  | 2 2          | 130951                | PART                 | WASHER-SPRING.269ID.4                        | 230D.006THK       |  |                       |  |                                     |                                    | G                             |
|    | RELEASED  | 4 3          | 140040                | PART                 | RETAINING RING-EXT C                         | .25 IN SHFT       | -  |                       |  |                                     |                                    |                               |
| ľ  | NOT PRODUCTION VALID W/O STAMP ABOVE  | 5 21         | 140062                | PART                 | RETAINING RING-EXT E                         | .250 IN SHFT      | 1  |                       |  |                                     |                                    |                               |
| ŀ  |   | 7 6          | 760343                | PART                 | BEARING - DRIVE ROLLE                        | .188 IN SHFT<br>R | -  |                       |  |                                     |                                    |                               |
| _  |   | 8 3          | 760363                | PART                 | BEARING - CAM SHAFT                          |                   |  |                       |  |                                     |                                    | -                             |
|    |   | 9 2          | 80266<br>A000i25      | ASSEMBLY             | ASY-PCB S3 SENSOR-I                          | DRIVE             | -  |                       |  |                                     |                                    |                               |
|    |   | II 9         | D400008               | PART                 | GEAR-MAIN_PLASTIC                            |                   | ]  |                       |  |                                     |                                    |                               |
| _  |   | 13 1         | D900484-04<br>D910112 | PART                 | GEAR-72X56 TOOTH                             |                   | -  |                       |  |                                     |                                    | _                             |
| ۲I |   | 14 2         | D9I0I2I               | PART<br>ASSEMBLY     | ROLLER INPUT IDLER                           | 076               |  |                       |  |                                     |                                    | F                             |
|    |   | F 16 1       | D9I0295               | PART                 | ROLLER-CARD IDLER                            | n 3.3             | _  |                       |  |                                     |                                    |                               |
|    |   | 17 1         | D930375               | PART<br>ASSEMBLY     | GEAR 0.8 MODULE 50 T                         | оотн              |  |                       |  |                                     |                                    |                               |
|    |   | 10 Z         | D940098               | ASSEMBLY             | ASY-ROLLER FLATTENER                         |                   | -  |                       |  |                                     |                                    |                               |
|    |   | 20 2         | D940099               | ASSEMBLY             | ASY-ROLLER TRANSPORT                         |                   |  |                       |  |                                     |                                    |                               |
|    |   | 21 2<br>22 2 | D940102               | PART                 | ROLLER CLEANING IDLER                        |                   | -  |                       |  |                                     |                                    |                               |
|    |   | 23 1         | D940I05               | PART                 | ROLLER TRANSFER                              | 50                | -  |                       |  |                                     |                                    |                               |
| _  |   | 25 4         | D940108               | PART                 | HUB ROLLER                                   | 24                | 1  |                       |  |                                     |                                    |                               |
|    |   | 26           | D940/21               | ASSEMBLY             | SIDEPLATE REAR CARDP                         | ATH               | -  |                       |  |                                     |                                    |                               |
|    |   | 28 1         | D940i23               | ASSEMBLY             | SIDEPLATE-HOPPER REAL                        | 2                 |  |                       |  |                                     |                                    |                               |
|    |   | 29 1         | D940l24               | ASSEMBLY<br>ASSEMBLY | SIDEPLATE-CROSS CART                         | RIDGE             | -  |                       |  |                                     |                                    |                               |
|    |   | 31 1         | D940i43               | ASSEMBLY             | SIDEPLATE-FRONT CART                         | WALL              | -  |                       |  |                                     |                                    | L                             |
|    |   | 32           | D940I45               | ASSEMBLY             | PLATE-CARDPATH FLAT                          | ΔΤ                | -  |                       |  |                                     |                                    |                               |
|    |   | 34 1         | D940l47               | PART                 | BRACKET-GUIDE SNR FTR                        | 2                 | -  |                       |  |                                     |                                    |                               |
|    |   | 35 1         | D940I48               | PART<br>ASSEMBLY     | BRACKET-GUIDE CARD F                         | IR III            |  |                       |  |                                     |                                    |                               |
| пΙ |   | 37 1         | D940150               | PART                 | BRACKET-GUIDE INPUT                          |                   | -  |                       |  |                                     |                                    |                               |
| "  |   | 38 1         | D940I5I               | PART                 | BRACKET-GUIDE REAR IN                        | PUT               |  |                       |  |                                     |                                    |                               |
|    | 35 1 D940/48 PART BRACCT - GUIDE CARD FTR   36 1 D940/99 ASSEMBLY BRACCT - GUIDE FART BRACCT - GUIDE FART   37 1 D940/50 PART BRACCT - GUIDE FART BRACCT - GUIDE FART   38 1 D940/50 PART BRACCT - GUIDE FART INPUT   39 1 D940/52 PART BRACCT - GUIDE FART INPUT   40 1 D940/55 PART SFRICE FART   41 1 D940/55 PART POST CEAR ILLER   42 2 D940/56 PART SFRICE FART |              |                       |                      |  |                   |  |                       |  |                                     |                                    |                               |
|    |   | 41 1         | D940I65               | PART                 | POST GEAR IDLER                              | PANS              | -  |                       |  |                                     |                                    |                               |
| _  |   | 43 9         | D940169               | PART                 | BEARING315 DIA D-SH                          | APE               | t Vif                                    | -W IS I O(            | CATED ON                               | PAGE                                | TWC                                | ) _                           |
|    |   | 44 2         | D940I77-0I<br>D940I79 | PART                 | BRACKET-LOCK CARTRID                         | ЭЕ<br>VPUT        | -  |                       |  |                                     |                                    |                               |
|    |   | 46 4         | D940245               | PART                 | GUIDE CARTRIDGE CLEAN                        | IING              |  |                       |  |                                     |                                    |                               |
|    |   | 47 1         | D940252<br>D940254    | PART                 | GEAR IDLER 42T-0.8 MI<br>SPRING-TORSION      | DULE              | -  |                       |  |                                     |                                    |                               |
| сl |   | 49 1         | D940257               | ASSEMBLY             | ASY-STEPPER-SHUTTLE                          |                   |  |                       |  |                                     |                                    | С                             |
|    |   | 50 1         | D940258<br>D940266    | ASSEMBLY<br>ASSEMBLY | ASY-STEPPER MOTOR MO<br>ASY-SHUTTLE FRAME    | DUNT              | -  |                       |  |                                     |                                    |                               |
|    |   | 52 1         | D940271               | PART                 | ROLLER PINCH IDLER                           |                   |  |                       |  |                                     |                                    |                               |
|    |   | 53 1         | D940279<br>D940365    | ASSEMBLY             | GEAR 85 TH 48 PH D S<br>COVER ROLLER TRANSFE | HAFT              |  | MOVED VIEW TO PAGE T  | WO, REPLACED D810040                   |                                     |                                    |                               |
|    |   | 55 2         | D940378               | ASSEMBLY             | ROLLER SHUTTLE                               |                   |  | ITH D910295, REPLACED | D940184 WITH MDP-001                   | 97 EMIN-00688                       | 30-JULY-13                         |                               |
|    |   | 56 I<br>57 I | D940380<br>D940403    | ASSEMBLY             | ASY SHAFT SCREW LEAD                         | <u> </u>          | ΙΙΙΕΤ                                    | REMOVED D930106 4     | ND D940167, ADDED                      | EMN-00560                           | 18-APR-13                          | DBC/TB                        |
|    |   | 58 6         | F000i68               | PART                 | SCREW-M3X4_TPH_ZP_SE                         | M                 | 1  | REPLACED D940380 WI   | US AND FUUUSS6<br>TH A D940271 REMOVED |                                     |                                    | <u> </u>                      |
|    |   | 60 21        | F000169               | PART                 | SCREW-M3X5_TPH_ZP_SE<br>SCREW-M3X6_TPH_ZP_SE | M                 |  | 9X D940I6I. REPLACE   | 2X F000192 AND IX                      | C20194                              | 12-JUNE-12                         | TGG/TGG                       |
| В  |   | 61 4         | F000171               | PART                 | SCREW-M3X8_TPH_ZP_SE                         | M                 |  | F000191 WIT           | H F000170.                             | 5001                                | DATE                               | B                             |
|    |   | 62 5         | F000191<br>F000192    | PART                 | SCREW-M3X5 TPH ZP TA<br>SCREW-M3X6 TPH ZP TA | PTITE             | DRAWN BY                                 | DATE I                | ORD                                    | ECO#                                | DATE                               | DRA/ENG                       |
|    |   | 64 4         | F000193               | PART                 | SCREW-M3X.5X8 TPH ZP                         | TAPTITE           | а на | 29-Jun-II             |  |                                     | ONFIDENTIAL A                      |                               |
|    |   | 66 2         | F000358               | PART                 | CABLE TIE TWIST LOCK                         | . 1.000 x .040    |  |                       |  | confidential and                    | proprietary info                   | ormation,<br>oublished.       |
|    |   | 67 6         | F000408               | PART                 | BALL PLUNGER                                 |                   |  |                       |  | disseminated or<br>third party reci | disclosed to u<br>pients (or just: | nintended<br>"third parties") |
|    |   | 69 I         | F000430               | PART                 | BUSHING-6 ID X 8 OD                          |                   |  |                       |  | ビ or used for an<br>permission from | y purpose, with<br>HID GLOBAL C    | out written<br>ORPORATION.    |
|    |   | 70           | F000536               | PART<br>ASSEMPL Y    | WASHER .465 X.250 X                          | OIS NYLON         | SCALE                                    | DESCRIPTION           | l                                      |                                     |                                    |                               |
|    |   | 72 2         | L00603                | PART                 | LABEL-LOCK                                   |                   |  | D                     |  | ASY-01                              |                                    | тн '/у .                      |
| A  | ENGINEERING LISE ON Y   | F 73 I       | MDP-00197             | PART                 | PLATE-INPUT-PAN                              |                   |  |                       | ASSY PART NUM                          |                                     |                                    |                               |
| ŀ  | DRAWING FILE ENGINEERING MODEL NAME   | MODEL TYPE   |                       |                      |  |                   | ASSY                                     |                       |  |                                     |                                    |                               |
|    | D940005 D940005   | 5 ASSEM      |                       |                      |  |                   |  |                       | K3 D940                                | 005                                 | <u>U</u> 94                        | 0005                          |
|    | 2 3   | 4            | 5                     |                      | 6  | 7                 | 8  | 9                     | 10                                     |                                     |                                    | 12                            |







|          | IO       |    | II                             | 12           |   |  |  |  |
|----------|----------|----|--------------------------------|--------------|---|--|--|--|
| I NUMBER | TYPE     | Di | ESCRIPTION                     | '            |   |  |  |  |
| 87       | PART     | W  | WASHER .1251DX.2350DX.040NYLON |              |   |  |  |  |
| 78       | PART     | Cl | AMP-CBL MWSEB-3-01A            | -RT          | G |  |  |  |
| )IO      | PART     | RE | TAINING RING-EXT E             | .313 IN SHFT |   |  |  |  |
| )40      | PART     | W  | ASHER 3MM FLAT                 |              |   |  |  |  |
| )62      | PART     | R  | TAINING RING-EXT E             | .250 IN SHFT |   |  |  |  |
| )63      | PART     | RE | TAINING RING-EXT E             | .188 IN SHFT |   |  |  |  |
| 082      | PART     | BE | ELT 105 GRV 125 W MXI          | L            |   |  |  |  |
| 343      | PART     | BE | EARING - DRIVE ROLLE           | R            |   |  |  |  |
| :53      | PART     | BF | RUSH-STATIC DISSIPAT           | IVE          |   |  |  |  |
| 66       | PART     | GE | AR-CARD TRANSPORT I            | DRIVE        | F |  |  |  |
| 621      | PART     | W  | ASHER-ENCODER WHEEL            | SUPPORT      |   |  |  |  |
| 0394     | PART     | A  | ASY PCB DTCIOO FLIP STATION    |              |   |  |  |  |
| 033      | PART     | P  | POST-PLTN_DRIVE_IDLER          |              |   |  |  |  |
| 00       | PART     | Ρι | PULLEY-MAIN                    |              |   |  |  |  |
| 0280     | PART     | GE | EAR-72X36-TOOTH MOL            | DED          |   |  |  |  |
| 0196     | PART     | BF | RACKET-MOTOR                   |              |   |  |  |  |
| 0205     | ASSEMBLY | A  | ASY-FLIPPER TABLE              |              |   |  |  |  |
| 0235     | PART     | S  | TEPPER MTR BRACKET             |              | E |  |  |  |
| 0241     | PART     | Ρl | JLLEY-IDLER                    |              |   |  |  |  |
| 0249     | ASSEMBLY | A  | SY-CBL-FLIPPER SENSO           | RS           |   |  |  |  |
| 0251     | ASSEMBLY | A  | ASY-CBL- MOTORS                |              |   |  |  |  |
| 0271     | PART     | BE | EARING-OIL IMP .313 X          | .150 L       |   |  |  |  |
| 0287     | PART     | Ρl | JLLEY-36 GRV 125 W N           | IXL          |   |  |  |  |
| 0523     | ASSEMBLY | A  | SY STP MTR CARD DRIV           | νE           |   |  |  |  |
| 0524     | ASSEMBLY | A  | SY MOTOR FLIP TABLE            |              |   |  |  |  |
| 214      | ASSEMBLY | A  | SY-CBL-FLPER-UPSTREA           | M            |   |  |  |  |
| 235      | ASSEMBLY | S  | DEPLATE FLIP BACK              |              |   |  |  |  |
| 236      | ASSEMBLY | S  | DEPLATE FLIP FRT               |              |   |  |  |  |
| 404      | ASSEMBLY | A  | ASY OUTPUT ROLLER FLIP         |              |   |  |  |  |
| 0326     | PART     | R  | DLLER-FLIPPER OUTPUT           | HIGH COF     |   |  |  |  |
| 0169     | PART     | S  | CREW-M3X5_TPH_ZP_SEM           | N            |   |  |  |  |
| 0171     | PART     | S  | CREW-M3X8_TPH_ZP_SEM           | N            |   |  |  |  |
| 0191     | PART     | S  | CREW-M3X5 TPH ZP TA            | PTITE        |   |  |  |  |
|          |          |    |                                |              | С |  |  |  |



|                                 | 10                                  |                              |  |   |   | 12  |   |  |  |  |  |  |
|---------------------------------|-------------------------------------|------------------------------|--|---|---|---|---|--|--|--|--|--|
| 1 NUMBER                        | TYPE                                | DESCRIPTION                  |  |   |   |   |   |  |  |  |  |  |
| 060                             | PART                                | PASS THROUGH CONNECTOR 4 POS |  |   |   |   |   |  |  |  |  |  |
| 607                             | PART                                | RIVET DIA094 X .125 BAA      |  |   |   |   |   |  |  |  |  |  |
| )65                             | PART                                | RETAI                        | RETAINING RING-EXT E .156 IN SHFT  |   |   |   |   |  |  |  |  |  |
| )69                             | PART                                | TIE W                        | /RAP 4.00"L  | X 0.10"\  | N   |   |   |  |  |  |  |  |
| 219                             | PART                                | BEARI                        | NG - RBN RC  | DLLER   |   |   |   |  |  |  |  |  |
| 0268                            | PART                                | BEARI                        | NG-HEATER  |   |   |   |   |  |  |  |  |  |
| 2146                            | ASSEMBLY                            | ROLLE                        | R-LAMINATI   | ON  |   |   | 1 |  |  |  |  |  |
| 072                             | ASSEMBLY                            | ASY-N                        | MOTOR LAM CAM  |   |   |   |   |  |  |  |  |  |
| 62 ASSEMBLY BRACKET-LAM SUPPORT |                                     |                              |  |   |   |   |   |  |  |  |  |  |
| 0163                            | 33 PART BRACKET-LAM ARM             |                              |  |   |   |   |   |  |  |  |  |  |
| )166                            | PART BRACKET-LAM XTRA               |                              |  |   |   |   |   |  |  |  |  |  |
| 0167                            | PART                                | SHAFT                        | -LAM   |   |   |   |   |  |  |  |  |  |
| )216                            | ASSEMBLY                            | ASY-C                        | BL 070048  | SENSOR  | 3.5"  |   |   |  |  |  |  |  |
| 0320                            | ASSEMBLY                            | ASY H                        | EATER CART   | RIDGE 24  | 4 VC  | )C 90W  |   |  |  |  |  |  |
| 0348                            | PART                                | BRACK                        | ET LAM SWI   | VEL   |   |   | E |  |  |  |  |  |
| 0423                            | PART                                | BRACK                        | ET-LAM BAL   | ANCE  |   |   |   |  |  |  |  |  |
| -00043                          | ASSEMBLY                            | MBLY ASY-RTD KAPTON WITH SS  |  |   |   |   |   |  |  |  |  |  |
| 0171                            | PART                                | PART SCREW-M3X8_TPH_ZP_SEM   |  |   |   |   |   |  |  |  |  |  |
| 0190                            | PART SCREW_M3X4_TPH_TAPTITE         |                              |  |   |   |   |   |  |  |  |  |  |
| 0415                            | PART SPRING-EXT L8IO X D375 X WDO48 |                              |  |   |   |   |   |  |  |  |  |  |
| 0417                            | PART                                | SCREV                        | V M3X.5X6 T  | PH ZP T.  | AP S  | SEM   |   |  |  |  |  |  |
| 0962                            | PART                                | TAPE                         | - UHMW-PE  | 1.33" X .   | 375'  | 1   |   |  |  |  |  |  |
|                                 |                                     |                              |  |   |   |   |   |  |  |  |  |  |
|                                 |                                     |                              |  |   |   |   |   |  |  |  |  |  |
|                                 |                                     |                              |  |   |   |   |   |  |  |  |  |  |
|                                 |                                     |                              |  |   |   |   | С |  |  |  |  |  |
| 043 WAS D                       | 910409                              |                              | EMN-00595  | 26-APR-   | -13   | JAR/JAR   |   |  |  |  |  |  |
| 23 WAS IX<br>NOTES AND          | D9I0I65.<br>VIEW                    |                              | C20478   | 16-Aug-   | 12  | PGU/PGU   |   |  |  |  |  |  |
| 910164 WITH                     | H D940348                           |                              | C20164   | 3I-MAY-   | 12  | DBC/MW  | R |  |  |  |  |  |
| RECORD                          |                                     |                              | ECO# DATE DRA/ENG  |   |   |   |   |  |  |  |  |  |
| Part                            | of HID Global                       |                              | HID GLOBAL C<br>INFORMATION<br>confidential and<br>which may not<br>disseminated or<br>third party rec<br>or used for ar | ONFIDENTIA<br>This docume<br>I proprietary<br>be duplicat<br>disclosed<br>ipients (or j | L ANI<br>nt co<br>infor<br>ed, pu<br>to uni<br>ust: " | D PROPRIETARY<br>ntains<br>mation,<br>ublished,<br>intended<br>'third parties")<br>ut written |   |  |  |  |  |  |
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|    |                             | 2  | 3           | 4             | 5   | 6               | 7          | 8        |        | 9            |                 | 10                |  | 12   |
|----|-----------------------------|--|-------------|---------------|---|-----------------|------------|----------|--------|--------------|-----------------|-------------------|--|--|
| ſ  | 60060'                      |  |             |               |   |                 | · · · · ·  |          | ITEM   | QTY ITEM NU  | MBER            | TYPE              | DESCRIPTION  |  |
| _  |                             |  |             |               |   |                 |            |          | 1      | 2 130951     |                 | PART              | WASHER-SPRING,269ID,4  | 230D.006THK  |
| G  | <b>BELE</b>                 | ' A CI   | FD          |               |   |                 |            |          | 2      | 7 140048     |                 | PART              | RETAINING RING-EXT C   | .25 IN SHET  |
|    | NLLL                        |  |             |               |   |                 |            |          | 3      | 4 140062     |                 | PART              | RETAINING RING-EXT E   | 250 IN SHFT  |
|    | NOT PRODUCTION VALU         | ) w/o st   | AMP ABOVE   |               |   |                 |            |          | 4      | 1 140069     |                 | PART              | TIE WRAP 4.00"L X 0.0  | o"w  |
|    |                             | _  |             |               |   |                 |            |          | 5      | 1 220082     |                 | PART              | BELT-105 GRV 125 W MXI   | _  |
|    | ( 14                        |  |             |               |   |                 |            |          | 6      | 1 810265     |                 | PART              | GEAR-PLATEN CARD DRIN  | /E   |
|    | $\succ$                     |  |             |               | (16)  |                 |            |          | 7      | 4 810266     |                 | PART              | GEAR-CARD TRANSPORT  | DRIVE  |
|    | /                           | ~  |             |               | Γ   |                 |            |          | 8      | 2 D850I90    |                 | PART              | PULLEY-MAIN  |  |
| F  |                             | ( 2  | 26)         | )             |   |                 |            |          | 9      | 4 D900046    | 5               | PART              | SHAFT BUSHING  | F  |
|    |                             | $\rightarrow$  | (33         | ) (21         |   |                 |            |          | 10     | I D920015    |                 | PART              | ROLLER- INPUT  |  |
|    |                             |  | $\sim$      |               | (25)  | $\bigcirc$      |            |          | 1      | I D920022    |                 | ASSEMBLY          | ASY LAM HEAD TOP   |  |
|    |                             | /  |             |               | $\downarrow \qquad \qquad$ | $\frown$        |            |          | 12     | I D920023    |                 | ASSEMBLY          | ASY LAM HEAD BOTTOM  |  |
|    |                             | /  |             |               | /   | ( 30 ) /        |            |          | 13     | 2 D92019-0   | CI              | PART              | ROLLER- FEED HIGH COF  |  |
|    |                             | a / .  |             |               | /   | $\gamma / \sim$ | $\bigcirc$ |          | 14     | I D920134    |                 | ASSEMBLY          | ASY-CARTRIDGE-LAM-TOP  | 2  |
|    |                             |  |             |               | /   | / / (29)        | (32)       |          | 15     | I D920135    |                 | ASSEMBLY          | ASY-CARTRIDGE-LAM-BO   | гтом   |
| E  |                             | and the second sec | SAR         |               |   | $// \gamma_{c}$ | $\sim$     |          | 16     | 4 D920137    |                 | PART              | SHAFT- LAM PEEL  | E  |
|    |                             | \$6/2  |             |               |   | ///(23          |            |          | 17     | 2 D920I47    |                 | ASSEMBLY          | ASY-CBL-ENC-SNR  |  |
|    |                             |  |             | L             |   |                 |            |          | 18     | 2 D920153    |                 | ASSEMBLY          | ASY-CBL-HEADLIFT MOTO  | ORS  |
|    |                             | / 196  |             |               |   |                 | / ( II )   |          | 19     | I D920168    |                 | PART              | TENSIONER-BELT   |  |
|    |                             |  |             |               |   | / / /           |            |          | 20     | I D920175    |                 | ASSEMBLY          | ASY-CBL-RFID   |  |
|    |                             |  | h h h       |               |   |                 |            |          | 21     | I D920218    |                 | PART              | ROLLER-INPUT-FLIPSIDE  |  |
|    |                             |  |             |               |   | 1-04            |            |          | 22     | I D9304II-0  | 03              | ASSEMBLY          | ASY - CENTERPLATE EX   | T HDP8500 L2   |
| рΙ | (15)                        |  |             |               |   |                 |            |          | 23     | I D9304I3    |                 | ASSEMBLY          | ASY - STEPPER DRIVE L  | AM C   |
|    |                             |  | / 1         | 1- 3          |   |                 |            |          | 24     | I D930414-   | 02              | ASSEMBLY          | ASY - FRONT SIDEPLATE  | L2   |
|    | 24                          |  |             |               | STEL ON   |                 |            |          | 25     | I D930415-   | 02              | ASSEMBLY          | ASY- REAR SIDEPLATE L  | 2  |
|    |                             |  |             |               | A Core /  |                 |            | D        | 26     | 2 D94030I    |                 | PART              | KNOB- GEAR TRAIN LAM   |  |
| _  |                             |  |             | 4             | THE THE   |                 |            |          | 27     | I D940305    | ,               | ASSEMBLY          | ASY - CENTERPLATE INF  | PUT  |
|    | (                           | $\prec$  |             |               | >•eap / / / / \ \ \   |                 |            |          | 28     | I E000508    | 3               | PART              | FERRITE-SNAP ON  |  |
|    | ( 2                         | 7)   |             |               |   |                 |            |          | 29     | I F000156    |                 | PART              | SPACER-NYLON .257 X .  | 500 X .062   |
|    |                             |  |             |               |   |                 |            |          | 30     | 4 F000178    |                 | PART              | SCREW-#4-20X.375_TPH_  | ZP_PLAS  |
|    |                             |  |             |               | / / / \   | $\backslash$    |            |          | 31     | 6 F000i82    |                 | PART              | SCREW-#4-20X.500_TPH.  | _ZP_PLAS   |
|    |                             |  | (13)        |               |   |                 |            |          | 32     | 3 F000463    | 5               | PART              | SCREW-4-20X438 TPH Z   | P PLAS   |
|    |                             |  | $\bigcirc$  |               |   | $\backslash$    |            |          | 33     | I F000562    |                 | PART              | WASHER PTFE .50 ID X   | .69 OD X .030 THK  |
| _  |                             |  |             |               |   | $\backslash$    |            |          |        | ł            |                 |                   |  |  |
|    |                             |  |             |               | ′ (+)  \  |                 |            |          |        |              |                 |                   |  |  |
|    |                             |  | (           |               |   | $\sim$          |            |          | TCI    | REMO         |                 | 330621            | FMN-00272 04   | 1-JAN-13 CAR/RE  |
|    |                             |  | (           | $\frac{3}{3}$ |   | (5)             | (6)        | В        | F      | EMOVED D9304 | I-02. A         | ADDED D9304       | HI-03 C20093 8-  | MAY-12 DBC/JS  |
| вI |                             |  |             | (19)          |   |                 |            | VER REV  | /      |              | RECOR           | )                 | ECO#   | DATE DRA/ENG   |
|    |                             |  |             | 0             |   | L               |            | DRAWN BY | DATE   |              |                 |                   | HID GLOBAL CONF  |  |
|    |                             |  |             |               | R   | (2)             |            | DBC      | 21-Mar |              | $ \rightarrow $ |                   | B INFORMATION This confidential and pro                                  | document contains<br>prietary information,                                     |
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|    |                             |  |             |               |   |                 |            |          |        | DESCRIPTIO   | NC              |                   | pormaatori rittii Filb   |  |
|    |                             |  |             |               |   |                 |            | SCALE    | SIZE   |              |                 |                   | MA I YZA   |  |
| A  | FNGINE                      | FRING LISE C   | NI Y        |               |   |                 |            | 0.200    |        | PROJECT      |                 | ASSY PAR          |  |  |
| ŀ  | DRAWING FILE ENGINEERING MO | DEL NAME   |             | MODEL TYPE    |   |                 |            | ASSY     | DW     | G            |                 | z                 | 040027   |  |
| L  | D940023                     |  | D940023     | ASSEM         |   | C C             | 7          |          |        | -            | - K3            |                   | 19400231   | 0940023  |
|    |                             | 2  | 3           | 4             | 5   | 6               | 1          | Ø        |        | 9            |                 | IU                |  |  |

|   |                  | 2                     | 3               | 4                                      | 5          | 6              | 7          | 8            | 9        |                | 10            |   | 12   |               |
|---|------------------|-----------------------|-----------------|--|------------|----------------|------------|--------------|----------|----------------|---------------|---|--|---------------|
|   | FARGO            | •                     |                 | _                                      |            |                |            |              | ITEM QTY | ITEM NUMBER    | TYPE          | DESCRIPTION                                   |  |               |
| ~ |                  |                       |                 | (15) (22)                              |            |                |            |              | 1 1      | 130951         | PART          | WASHER-SPRING.269ID                           | .4230D.006THK  | < _           |
| 0 | I RF             | UEAS                  | HD I            |  | $\frown$   |                |            |              | 2 2      | 140048         | PART          | RETAINING RING-EXT (                          | .25 IN SHFT  |               |
|   |                  |                       |                 | / (23)                                 | (24)       |                |            |              | 3        | 760363         | PART          | BEARING-CAM_SHAFT                             |  |               |
|   | NUT PRUDULTIU    | IN VALID W/U S        | TAMP ADUVE      |  | $\gamma$   |                |            |              | 4 2      | A000365        | ASSEMBLY      | ASY PCB RFID ANTENN                           | А  |               |
| - |                  |                       | $\wedge$        | / / /                                  | /          |                |            |              | 5 I      | D840889        | PART          | PULLEY-FHT-I, 80 TOC                          | ЭТΗ  |               |
|   |                  |                       |                 |  |            |                |            |              | 6 2      | D900484-06     | ASSEMBLY      | ASY, GEARMOTOR                                |  |               |
|   |                  | ~ ~ ~                 |                 |  | /          |                | $\frown$   |              | 7 2      | D900484-07     | ASSEMBLY      | ASY, GEARMOTOR                                |  |               |
| F |                  |                       |                 | 5.   /                                 |            | (2)            | (8)        |              | 8 1      | D910050        | ASSEMBLY      | ASY-BRACKET PRINT S                           | TEPPER   | F             |
|   |                  |                       |                 |  | L'         | $\smile$       | $\gamma$   |              | 9        | D9I0052        | ASSEMBLY      | ASY PRINTHEAD MOTO                            | R MOUNT  |               |
|   |                  | $\langle     \rangle$ |                 |  |            | /              |            | 9            | 10 I     | D910109        | PART          | ROLLER - PRINT PLAT                           | EN   |               |
|   |                  |                       |                 |  |            | /              | $\square$  | /            | 11       | D910140        | PART          | BRACKET STIFFENER                             |  |               |
|   |                  |                       |                 |  |            |                | $\sim$     |              | 12 2     | D9I02I8        | ASSEMBLY      | ASY-CBL EOOO467 SN                            | 3.5  |               |
|   |                  |                       |                 |  |            | (10)           |            |              | I3 I     | D910515        | ASSEMBLY      | ASY PRINTHEAD FAN C                           | :00L   |               |
| _ |                  |                       |                 | V///////////////////////////////////// |            | $\gamma$ / $c$ |            |              | I4 I     | D9I0556        | ASSEMBLY      | ASY-CBL COLOR RIBBO                           | IN SENSOR  |               |
| E |                  |                       |                 | ₽¶¶                                    |            | / / ("         | )    🌒     |              | 15 I     | D9400l2        | ASSEMBLY      | ASY-FILM CARTRIDGE                            |  | £             |
|   |                  |                       |                 |  |            | / T            |            |              | 16 I     | D9400I3        | ASSEMBLY      | ASY-RIBBON CARTRIDG                           | E  |               |
|   |                  |                       | 1               |  |            |                | APA        |              | 17 2     | E000508        | PART          | FERRITE-SNAP ON                               |  |               |
| _ |                  | -                     | Ψ               |  |            |                |            | $\bigcirc$   | I8 I     | E000939        | PART          | IND FERRITE SNAP ON                           | 8.2MM  |               |
|   |                  |                       |                 |  |            |                |            | ( 7 )        | 19 7     | F000177        | PART          | SCREW-#4-20X.3I3_TPH                          | I_ZP_PLAS  |               |
|   |                  |                       |                 |  |            | The seas       |            | $\downarrow$ | 20 3     | F00035I        | PART          | CABLE TIE TWIST LOO                           | Ж  |               |
| D |                  |                       |                 |  | V          |                |            |              | 21 14    | F000463        | PART          | SCREW-4-20X438 TPH                            | ZP PLAS  | D             |
|   | LOCATION: LOOO   | 953—                  |                 |  |            |                |            | $\sim$       | 22       | L000822        | PART          | LABEL-WARNING-CRUSH                           |  |               |
|   |                  |                       |                 |  |            |                |            | E .          | 23       | L000953        | PART          | LABEL-WARNING-HOT                             |  |               |
|   |                  |                       | •               | CATION: LOUO822                        | 630)       |                |            |              | 24       | MDP-00205      | ASSEMBLY      | ASY FRAME MECHANISM                           | Λ  |               |
|   |                  |                       |                 | ~~ (4)                                 |            | and a          |            |              |          |                |               |   |  |               |
|   | l ° n            | T 🚺 🛆 🖗               |                 |  |            |                |            |              |          |                |               |   |  |               |
|   |                  |                       |                 | စ္႐ုိ                                  |            | $\backslash$   |            |              |          |                |               |   |  |               |
| С |                  | A ST A                | I /     @       |  |            |                |            | ( ( 10)      |          |                |               |   |  | C             |
|   |                  |                       |                 | <u></u>                                |            |                |            | ( and        |          |                |               |   |  |               |
|   |                  |                       |                 |  |            | THE DE         | (20)       | À.           |          |                |               |   |  |               |
| - |                  |                       |                 |  |            | MARK           |            | 7            |          |                |               |   |  |               |
|   |                  |                       |                 |  |            | John C.        | r /        | G            | REPLA    | CED DRAWING IN | I AGILE       | EMN-01124 30-                                 | SEP-13 DBC/I   | 'DBC          |
|   |                  |                       |                 |  | (13)       | L              |            | E            | REPLACED | D940155 WITH 1 | MDP-00205     | EMN-00545 21-                                 | APR-13 MJW/I   | 'MJW          |
| в |                  |                       |                 | <u> </u>                               | $\bigcirc$ | ( 9 )          |            | D            | REMOVED  | D940325, ADDE  | D D910109     | EMN-00392 19-                                 | FEB-13 DBC/  | /тв В         |
| _ |                  |                       |                 |  |            | $\bigcirc$     | $\bigcirc$ |              | F I      | RECORD         |               | ECO# [  | DATE DRA/  | 'ENG          |
|   |                  |                       |                 |  |            |                |            | CAR 26       | 5-Jan-10 |                |               | HID GLOBAL CONFID                             | ENTIAL AND PROPR   | RETARY        |
|   | NOTES:           |                       |                 |  |            |                |            | DIM          |          | 701E           | 36            | which may not be d                            | rietary information,<br>plicated, published,                       |               |
|   | I. NO CAF        | BLES ARE DISPLAYED    | FOR DRAWING CLA | RITY.                                  |            |                |            |              | inch     | Part o         | of HID Global | third party recipients<br>or used for any put | osed to unintended<br>(or just: "third par<br>pose, without writte | rties")<br>an |
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|   |                  |                       |                 |  |            |                |            | SCALE SIZE   |          |                |               |   |  |               |
| A |                  | ENGINEERING LISE      | ONLY            |  |            |                |            | 0.300        | B PRO    | JECT I         | ASSY PART N   | IUMBER   ITEM NUMB                            |  | <u> </u>      |
|   | DRAWING FILE ENC | SINEERING MODEL NAME  | D040070         | MODEL TYPE                             |            |                |            | ASSY [       | DWG      | דק             | na.           | 40236   | N94027   | 36            |
| l | 0940236          | 2                     | .3              |  | 5          | 6              | 7          | 8            | 9        | 1.3            | 0             |   | 12   |               |
|   | · · · · ·        | ۲                     | 1               | 1 '                                    |            |                |            | 0            |          | 1              | ~             |   |  |               |







|                      | 10   | 2                                 |                        |            |                 |           |   |  |  |  |  |
|----------------------|--|-----------------------------------|------------------------|------------|-----------------|-----------|---|--|--|--|--|
| 1 NUMBER             | TYPE   | DESCRIPTION                       |                        |            |                 |           |   |  |  |  |  |
| 07                   | PART   | RIVET DIA094 X .125 BAA           |                        |            |                 |           |   |  |  |  |  |
| )65                  | PART   | RETAINING RING-EXT E .156 IN SHFT |                        |            |                 |           |   |  |  |  |  |
| )69                  | PART   | TIE WRAP 4.00"L X 0.10"W          |                        |            |                 |           |   |  |  |  |  |
| 219                  | PART   | BEARING - RBN ROLLER              |                        |            |                 |           |   |  |  |  |  |
| 0268                 | PART   | BEARING-HEATER                    |                        |            |                 |           |   |  |  |  |  |
| 0146                 | ASSEMBLY   | ROLL                              | ER-LAMINA <sup>-</sup> | тіс        | N               |           |   |  |  |  |  |
| 072                  | ASSEMBLY   | ASY-MOTOR LAM CAM                 |                        |            |                 |           |   |  |  |  |  |
| 162                  | ASSEMBLY   | BRAC                              | KET-LAM S              | UPF        | PORT            |           | F |  |  |  |  |
| 163                  | PART   | BRAC                              | KET-LAM A              | RM         |                 |           |   |  |  |  |  |
| 164                  | PART   | BRAC                              | KET LAM S              | WI         | VEL             |           |   |  |  |  |  |
| 165                  | PART BRACKET-LAM BALANCE   |                                   |                        |            |                 |           |   |  |  |  |  |
| 166                  | 6 PART BRACKET-LAM XTRA  |                                   |                        |            |                 |           |   |  |  |  |  |
| 167                  | PART SHAFT-LAM   |                                   |                        |            |                 |           |   |  |  |  |  |
| 172                  | ASSEMBLY   | HEAT                              | er cartrii             | DGE        | 24 VDC 6        | OW        |   |  |  |  |  |
| 216                  | ASSEMBLY   | ASY-                              | CBL 07004              | 8 9        | SENSOR 3.5      |           | Ε |  |  |  |  |
| 00043                | ASSEMBLY   | ASY-                              | RTD KAPTO              | N١         | WITH SS         |           |   |  |  |  |  |
| 0171                 | PART   | SCRE                              | W-M3X8_TP              | 'H_2       | ZP_SEM          |           |   |  |  |  |  |
| 0190                 | PART   | SCRE                              | W_M3X4_TF              | РΗ_        | TAPTITE         |           |   |  |  |  |  |
| 0415                 | PART   | SPRIM                             | NG-EXT L810            | ЗΧ         | (D375 X W       | D048      | - |  |  |  |  |
| 0417                 | PART   | SCRE                              | W M3X.5X6              | ΤF         | PH ZP TAP       | SEM       |   |  |  |  |  |
| 0962                 | PART   | TAPE                              | - UHMW-P               | ΕI         | .33" X .375     | - ''<br>) | Π |  |  |  |  |
|                      |  |                                   |                        |            |                 |           |   |  |  |  |  |
|                      |  |                                   |                        |            |                 |           | С |  |  |  |  |
| 43 WAS D9            | 10409  |                                   | EMN-0059               | 5          | 26-APR-13       | JAR/JAR   |   |  |  |  |  |
| 9 WAS D9IC           | )383   |                                   | CI6079                 |            | OI-DEC-08       | TGB/MJL   |   |  |  |  |  |
| EV BUMP              |  |                                   | CI6I03                 | 6103 17-00 |                 | CAR/CAR   |   |  |  |  |  |
| RECORD               |  |                                   | ECO#                   |            | DATE            | APPR      | В |  |  |  |  |
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