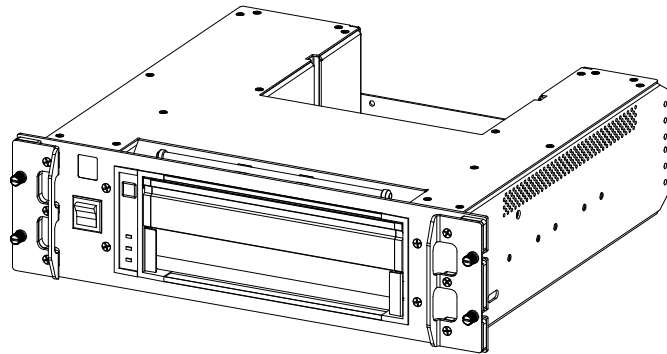




Base Part Number  
2011-0134 Rev. 8

Order Numbers  
2011-0134SUS  
2011-0134SUK  
2011-0134SCE

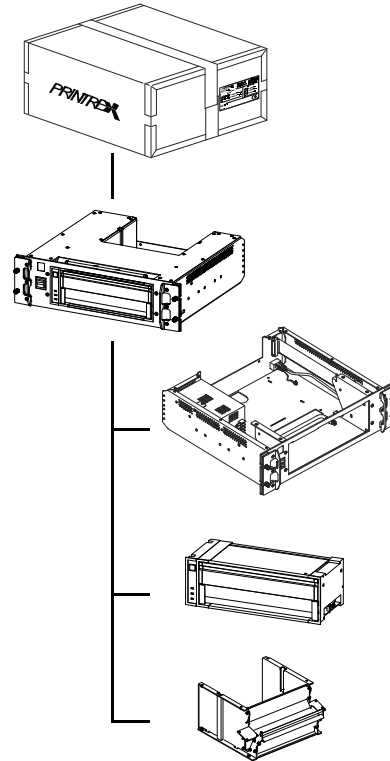
# SELF SERVICE REFERENCE



## Model 840DL/G Quadri-Form (QF) Chassis

### Table of Contents

- Overview ..... 2
- Model 840DL/G-QF Printer ..... 2  
2011-0134SUS  
2011-0134SUK  
2011-0134 SCE
- 840DL/G-QF Final Assembly ..... 2  
2011-0134 Rev. 8
- 500W QF Chassis Assembly ..... 3  
4030-0001 Rev. 7
- 840DL/G Mechanism Assembly ..... 4  
2111-0191 Rev. 2
- QF Fan Fold Guide Assembly ..... 5  
4040-0001 Rev. 2
- Key Part Listing ..... 5
- Form Sensor Calibration ..... 6
- Thermal Head Replacement ..... 7
- Limitation of Liability ..... 7



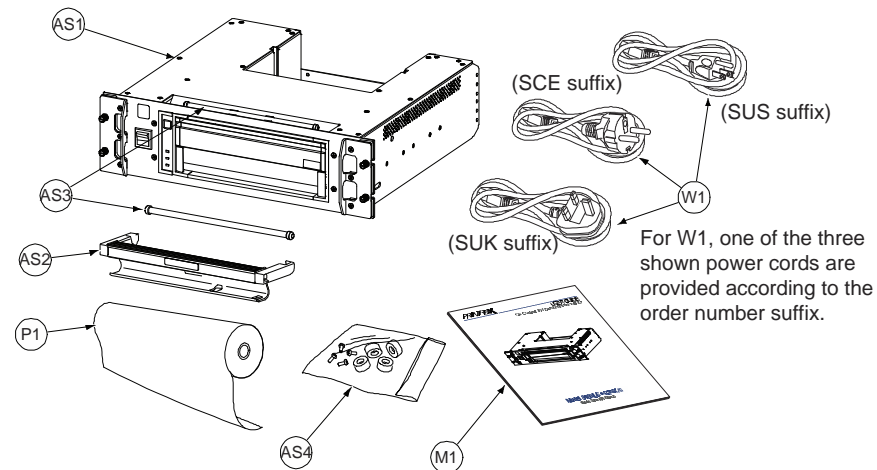
## Overview

Printrex recognizes that many of our customers' organizations employ service staff with advanced skills and knowledge of electromechanical equipment. These personnel are often qualified to perform the most common maintenance and repair tasks needed over the lifetime of Printrex products. Rather than describe all service procedures in complete detail, this document is intended as a quick reference for these individuals.

There is also a Key Part section that provides a quick list of the Most Common Replacement Parts, Additional Accessories and Supplies.

## 840DL/G-QF Printer

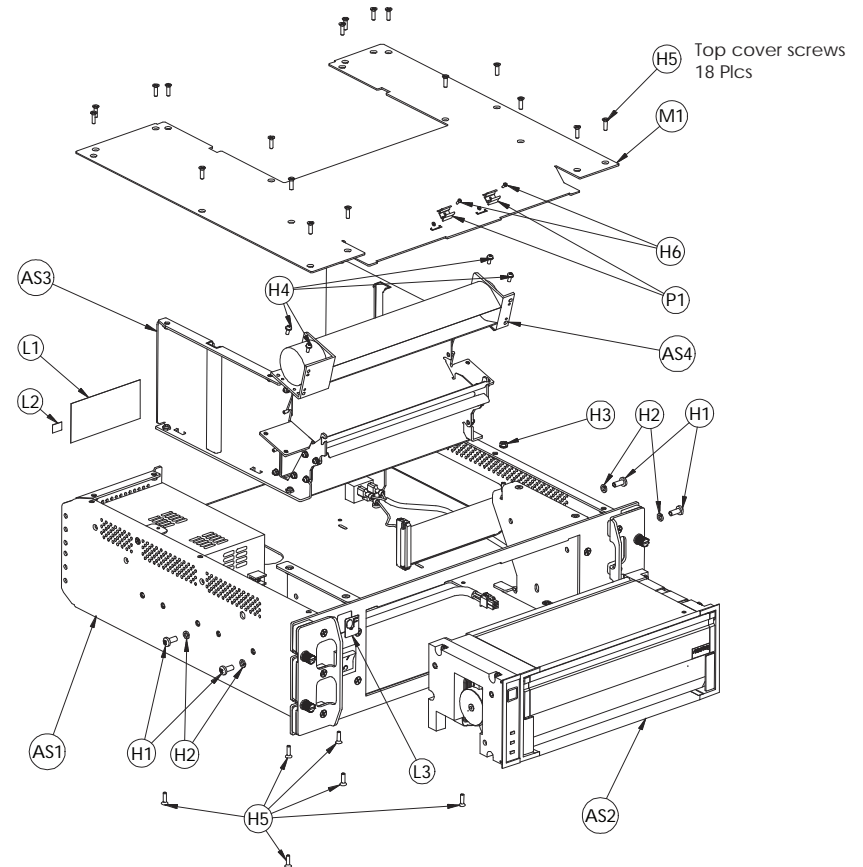
P/N's: 2011-0134SUS  
2011-0134SUK  
2011-0134SCE



Ref	Part No	Rev	Description	Qty	UOM
AS1	2011-0134	R8	FnlAsy,840DL/G-QF Final Assembly	1	EA
AS2	2111-0189	R1	SubAsy,Paper Holder, 8 3/4 Inch	1	EA
AS3	2012-0008	R2	SubAsy,Paper Rod, 8 3/4 Inch	2	EA
AS4	2012-0031	R1	SubAsy, QF Feet Kit, Kit of 4 Feet with Mounting Screws	1	EA
M1	1028-0049	R1	Man,QF Series User Guide	1	EA
P1	2316-0001	NR	Paper,80 Col,40 Mtr Roll	1	EA
W1	2237-0004	NR	Wire,Power Cord, Central Europe (for SCE suffix)	1	EA
W1	2237-0007	NR	Wire,Power Cord, United States (for SUS suffix)	1	EA
W1	2237-0061	NR	Wire,Power Cord, United Kingdom (for SUK suffix)	1	EA

## 840DL/G-QF Final Assembly

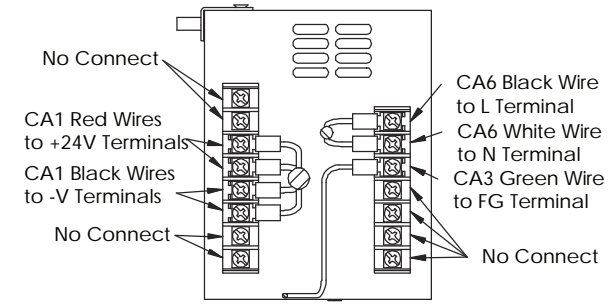
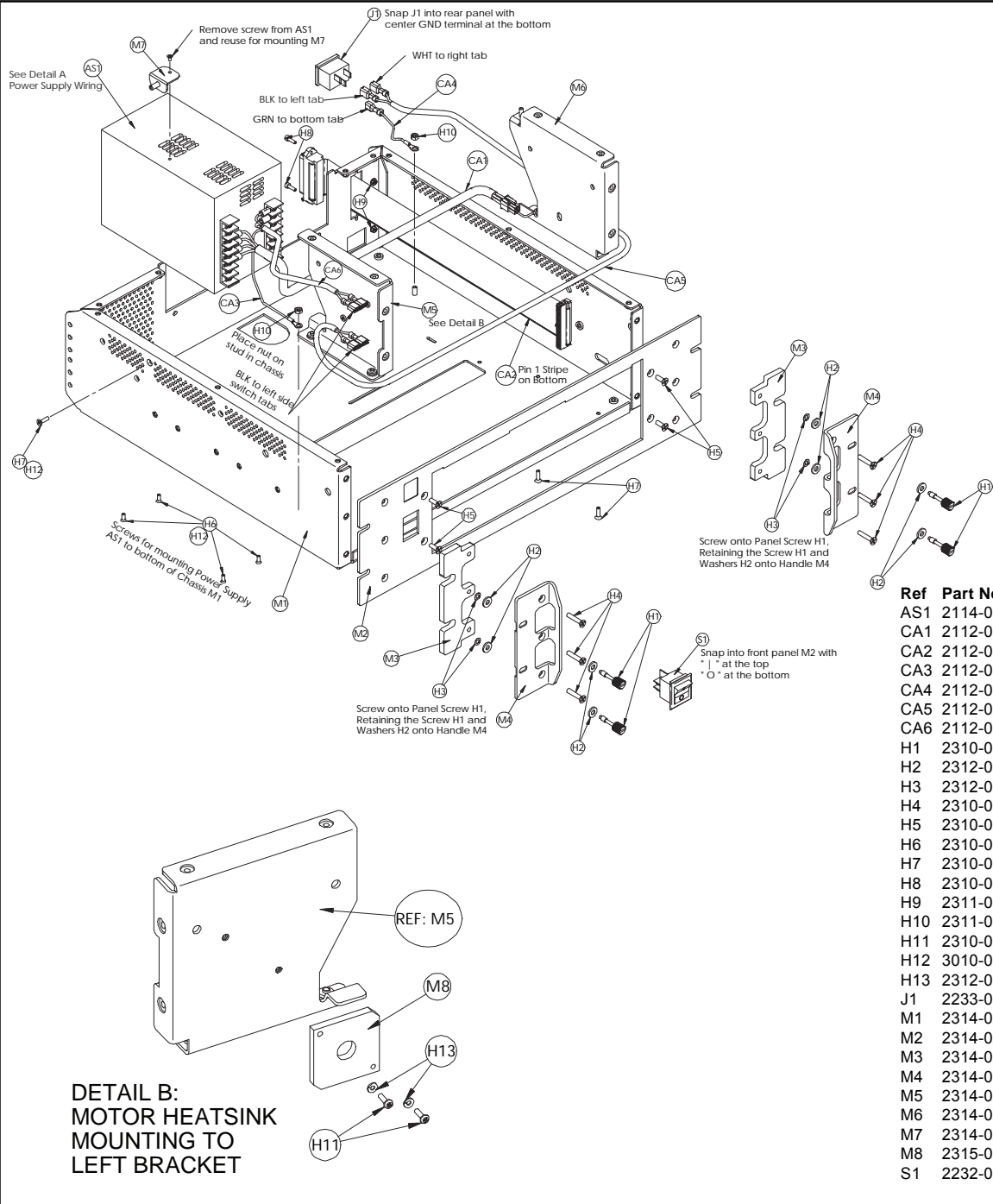
P/N: 2011-0134 Rev 8



Ref	Part No	Rev	Description	Qty	UOM
AS1	4030-0001	R7	ChassisAsy,QF 500W, 500 Watt P.S.	1	EA
AS2	2111-0191	R2	SubAsy,840DLG Mechanism, Standard	1	EA
AS3	4040-0001	R2	FFGuideSet,QF FF Guide, Fan Fold Paper Guide	1	EA
AS4	4041-0001	R2	FanSet,8 Cross Flow Fan	1	EA
H1	2310-0043	NR	Screw,M5x12MM,PanHd Philips, Zinc Plate	4	EA
H2	2312-0012	NR	Washer,No. 10 Split Lock	4	EA
H3	2311-0015	NR	Nut,M4 w/Kept Lock Washer, Steel/Zinc	1	EA
H4	2310-0077	NR	Screw,M3x8mm,Pan Phi SEMS, Int Tooth Lockwasher	4	EA
H5	2310-0074	NR	Screw,6-32x1/2",Flat Head	24	EA
H6	2310-0071	NR	Screw,M2x6 Pan Hd Phillip, Zinc	2	EA
L1	2411-0055	R1	Label,840-134 Chassis S/N, QF Rack Mount Quad Feed	1	EA
L2	2411-0098	R1	Label, Revision R8	1	EA
L3	2411-0056	R1	Label,QF Quad Feed, Front Panel	1	EA
M1	2314-0296	R2	StpMet,QF Top Cover	1	EA
P1	2313-0108	NR	Mold,Rod Holder 0.312 Dia	2	EA

# 500W QF Chassis Assembly

P/N: 4030-0001 Rev 7



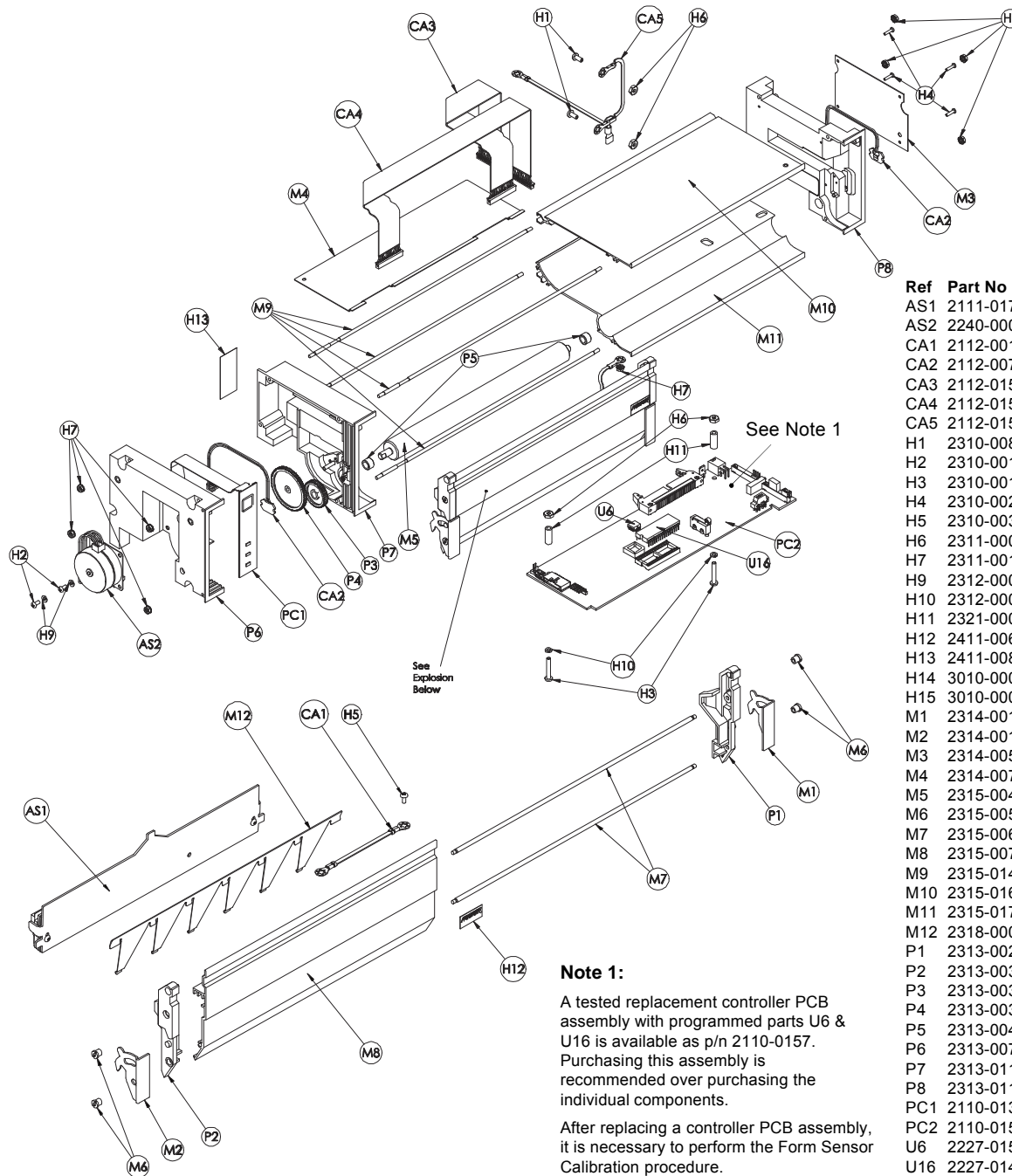
**Detail A:**  
Power Supply Wiring

**DETAIL B:**  
MOTOR HEATSINK  
MOUNTING TO  
LEFT BRACKET

Ref	Part No	Rev	Description	Qty	UOM
AS1	2114-0028	NR	OEM,Power Supply 24V 500W, DC Switch Mode, AC Input 1	1	EA
CA1	2112-0108	R1	Cable,840 Pwr Sup DC	1	EA
CA2	2112-0110	R2	Cable,840 Centronics	1	EA
CA3	2112-0131	R2	Cable,Power Supply Ground, Screw Terminal to Stud	1	EA
CA4	2112-0155	R4	Cable,Safety Earth Ground, AC Inlet to Chassis Stud	1	EA
CA5	2112-0163	R3	Cable, AC Pwr Input, Long, AC Inlet to Power Switch	1	EA
CA6	2112-0164	R2	Cable, AC Switched Power, Switch to Power Supply	1	EA
H1	2310-0082	NR	Screw,10-32 Captive 1 in., Style 2,Black Stainless S	4	EA
H2	2312-0040	NR	Washer,No.10 Plain Black, 0.437" OD, 0.062" Thick	8	EA
H3	2312-0041	NR	Washer,Captive 10-32 Size	4	EA
H4	2310-0073	NR	Screw,8-32x7/8" Flat Head, Phillips, Black Oxide	6	EA
H5	2310-0064	NR	Screw,8-32x1/2" Flat Cntr, 82 degree Phlips, Black A	4	EA
H6	2310-0070	NR	Screw,M3x8 Flat Hd. Zinc, Steel, 90 deg., Phillips	4	EA
H7	2310-0074	NR	Screw,6-32x1/2" Flat Head, No.2 Phillips, Zinc/Steel	3	EA
H8	2310-0041	NR	Screw,M3x10mm Socket Hd, Cap, Steel, Bright Zinc	2	EA
H9	2311-0016	NR	Nut,M3 w/Kept Lock Washer, Steel/Zinc	2	EA
H10	2311-0015	NR	Nut,M4 w/Kept Lock Washer, Steel/Zinc	2	EA
H11	2310-0026	NR	Screw,4-40x3/8,PnHd Phlips, Machine	2	EA
H12	3010-0004	NR	Supply,Loctite No. 222	5	DP
H13	2312-0008	NR	Washer,No. 4 Split Lock, Steel, Zinc Plate	2	EA
J1	2233-0091	NR	Conn,3 Term,IEC Pwr Inlet, Snap-in, 1/4" Fastons	1	EA
M1	2314-0284	R2	StpMet,QF Chassis Tray	1	EA
M2	2314-0283	R2	StpMet,QF Front Panel, Black Paint	1	EA
M3	2314-0301	R2	StpMet,QF Panel Spacer, Black	2	EA
M4	2314-0302	R2	StpMet,QF Handle, Black, For Captive Screws	2	EA
M5	2314-0290	R2	StpMet,QF Left Mech Brkt, Mechanism Mtg. Bracket	1	EA
M6	2314-0291	R2	StpMet,QF Right Mech Brkt, Mechanism Mtg. Bracket	1	EA
M7	2314-0292	R2	StpMet,QF 500W PS Brkt, Supply Mtg. Bracket	1	EA
M8	2315-0154	R1	MchMet,840 Motor Heatsink	1	EA
S1	2232-0024	NR	Switch,DPST,Rocker,Panel, 250VAC 12A	1	EA

# 840DL/G Mechanism

P/N: 2111-0191 Rev 2



Ref	Part No	Rev	Description	Qty	UOM
AS1	2111-0175	R1	SubAsy,8DLG Head,	1	EA
AS2	2240-0005	R5	Motor,Unipolar, 7.5 deg, 42mm PM Can w/Gear	1	EA
CA1	2112-0019	R1	Cable,Mech Door Gnd Strap, Connects Door & Top Shell	1	EA
CA2	2112-0074	R1	Cable,420 Door Switch	2	EA
CA3	2112-0150	R5	Cable,8DLG Head Power, 16 Conductor	1	EA
CA4	2112-0151	R5	Cable,8DLG Head Signal, 15 Conductor	1	EA
CA5	2112-0157	R3	Cable,Mech Ground N-Strap, Conn Rear of Shells & PCB	1	EA
H1	2310-0081	NR	Screw,6-32x5/16" Pan Head, Phillips, Steel with Zinc	2	EA
H2	2310-0016	NR	Screw,4-40x1/4,PnHd Phlps, Machine, Steel w/Zinc	2	EA
H3	2310-0019	NR	Screw,6-32x7/8,PnHd Phlps, Machine, Steel w/Zinc	2	EA
H4	2310-0029	NR	Screw,No. 2 x 3/8" BT, Self Tap Pan Hd Phillips	4	EA
H5	2310-0036	NR	Screw,4-40x1/4 Self Tapng, Pan Head Phillips	1	EA
H6	2311-0000	NR	Nut, 6-32 Hex, Steel, Zinc Plated	4	EA
H7	2311-0018	NR	Nut,4-40,Kept Lock Washer, External Teeth,Steel/Zinc	9	EA
H9	2312-0008	NR	Washer,No. 4 Split Lock, Steel, Zinc Plate	2	EA
H10	2312-0003	NR	Washer,No. 6, Split Lock	2	EA
H11	2321-0005	NR	Spacer,No. 6,1/4 ODx5/8, Alum	2	EA
H12	2411-0066	R1	Label,840DL/G Door Logo, Product Family Door Label	1	EA
H13	2411-0089	R2	Label,Mechanism S/N	1	EA
H14	3010-0003	NR	Supply,Silicon Grease, Clear Lubricant	2	DP
H15	3010-0006	NR	Supply,Loctite No. 425	4	DP
M1	2314-0011S	R1	StpMet,Right Latch, Silk Screened	1	EA
M2	2314-0012S	R1	StpMet,Left Latch, Silkscreened	1	EA
M3	2314-0053	R3	StpMet,Right Cable Cover	1	EA
M4	2314-0076	R2	StpMet,8 in Cable Tray, Dual Slot	1	EA
M5	2315-0046	R2	MchMet,8" Platen	1	EA
M6	2315-0059	R1	MchMet,Cap Nut	4	EA
M7	2315-0067	R3	MchMet,8 Door Spoke	2	EA
M8	2315-0072	R3	MchMet,8 Door Ext,Gnd Mod	1	EA
M9	2315-0143	R3	MchMet,8 Main Spoke, w/Gear Clearance	4	EA
M10	2315-0165	R1	MchMet,8QF Top Shell,Stud, Installed and Spot Grind	1	EA
M11	2315-0174	R1	MchMet,8-in DL Bot. Shell, Mod: Spot Grind Anodizing	1	EA
M12	2318-0003	R2	Spring,820 Head Pressure	1	EA
P1	2313-0029	R2	Mold,Door End, Right Side	1	EA
P2	2313-0030	R2	Mold,Door End, Left Side	1	EA
P3	2313-0033	R2	Mold,Platen Gear	1	EA
P4	2313-0034	R2	Mold,Idler Gear, 300 Res.	1	EA
P5	2313-0041	R2	Mold,Platen Bearing	2	EA
P6	2313-0071	R3	Mold,Switch End Plate, M5, inserts, High Temp	1	EA
P7	2313-0112	R1	Mold,Left End w/Plate, 300res,Pins, Magnet,Wear	1	EA
P8	2313-0113	R1	Mold,Right End w/Plate, M5, Pin, Magnet, Wear	1	EA
PC1	2110-0136	R1	PCAsy,Switch Panel, 1 switch, 3 LED	1	EA
PC2	2110-0155	R1	PCAsy,8DLG Altera 1K50QC, Controller w/o Memory	1	EA
U6	2227-0152	R18	ProglC,DLG 1K50Q Altera, FPGA Configurator	1	EA
U16	2227-0149	R14	ProglC,840DLG Controller, 1K50Q controller	1	EA

**Note 1:**  
 A tested replacement controller PCB assembly with programmed parts U6 & U16 is available as p/n 2110-0157. Purchasing this assembly is recommended over purchasing the individual components.  
 After replacing a controller PCB assembly, it is necessary to perform the Form Sensor Calibration procedure.

# QF Fan Fold Guide

P/N: 4040-0001 Rev 2

# Key Part Listing

## Most Common Replacement Parts

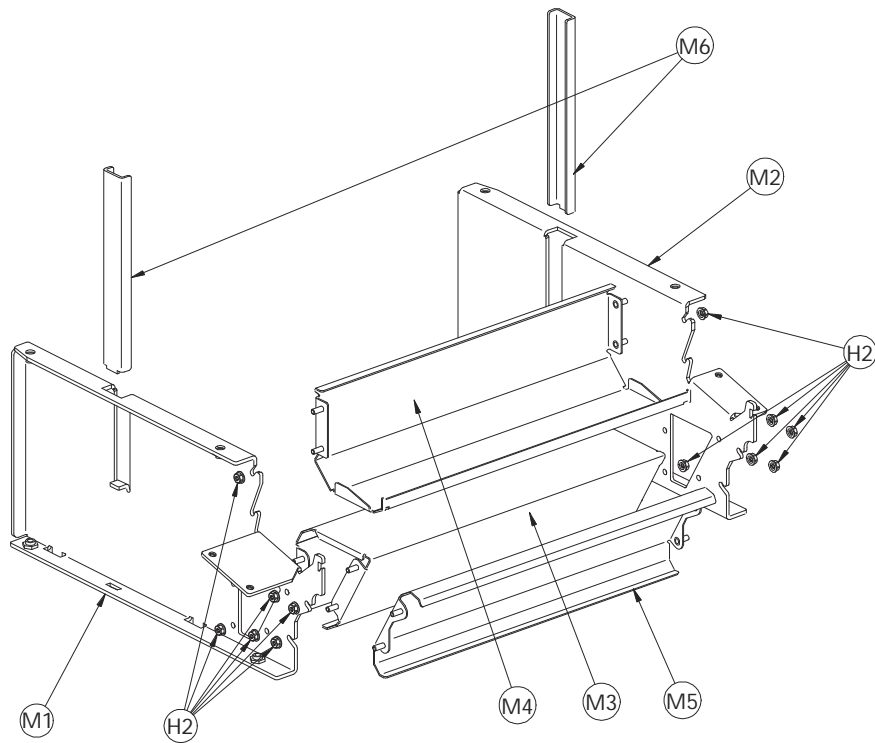
Description	Part No.
Controller PCB Assembly	2111-0157-R1
Head Power Cable	2112-0150-R5
Head Signal Cable	2112-0151-R5
Thermal Print Head Assembly	2111-0175-R1
Universal Power Supply, 24Vdc, 500W	2114-0028-NR

## Additional Accessories

Description	Part No.
Paper Roll Carrier (for 8 1/2 wide paper roll)	2111-0207
Paper Holder Rod (for 8 1/2 Carrier)	2012-0009
Paper Output Basket	2012-0027
USB Adapter Kit	2012-0030

## Supplies

Description	Part No.
Roll Paper (8 3/4 wide)	2316-0001
Roll Fan Fold Paper (8 3/4 wide x 6 1/4 sheets)	2316-0007
Fan Fold Paper (8 3/4 wide x 6 1/4 sheets)	2316-0014



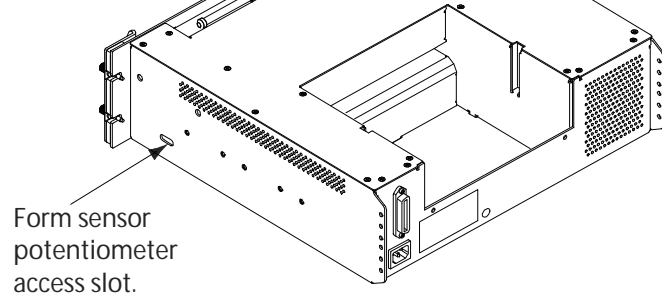
Ref	Part No	Rev	Description	Qty	UOM
H1	2310-0074	NR	Screw,6-32x1/2" Flat Head, No.2 Phillips, Zinc/Steel	4	EA
H2	2311-0016	NR	Nut,M3 w/Kept Lock Washer, Steel/Zinc	12	EA
M1	2314-0285	R3	StpMet,QF Left Guide, Paper Guide	1	EA
M2	2314-0286	R3	StpMet,QF Right Guide, Paper Guide	1	EA
M3	2314-0287	R2	StpMet,QF Middle Guide, Paper Guide	1	EA
M4	2314-0288	R2	StpMet,QF Top Guide, Paper Guide	1	EA
M5	2314-0289	R2	StpMet,QF Lower Guide, Paper Guide	1	EA
M6	2314-0295	R1	StpMet,QF Slot Cover, for Side Paper Guide	2	EA

# Form Sensor Calibration

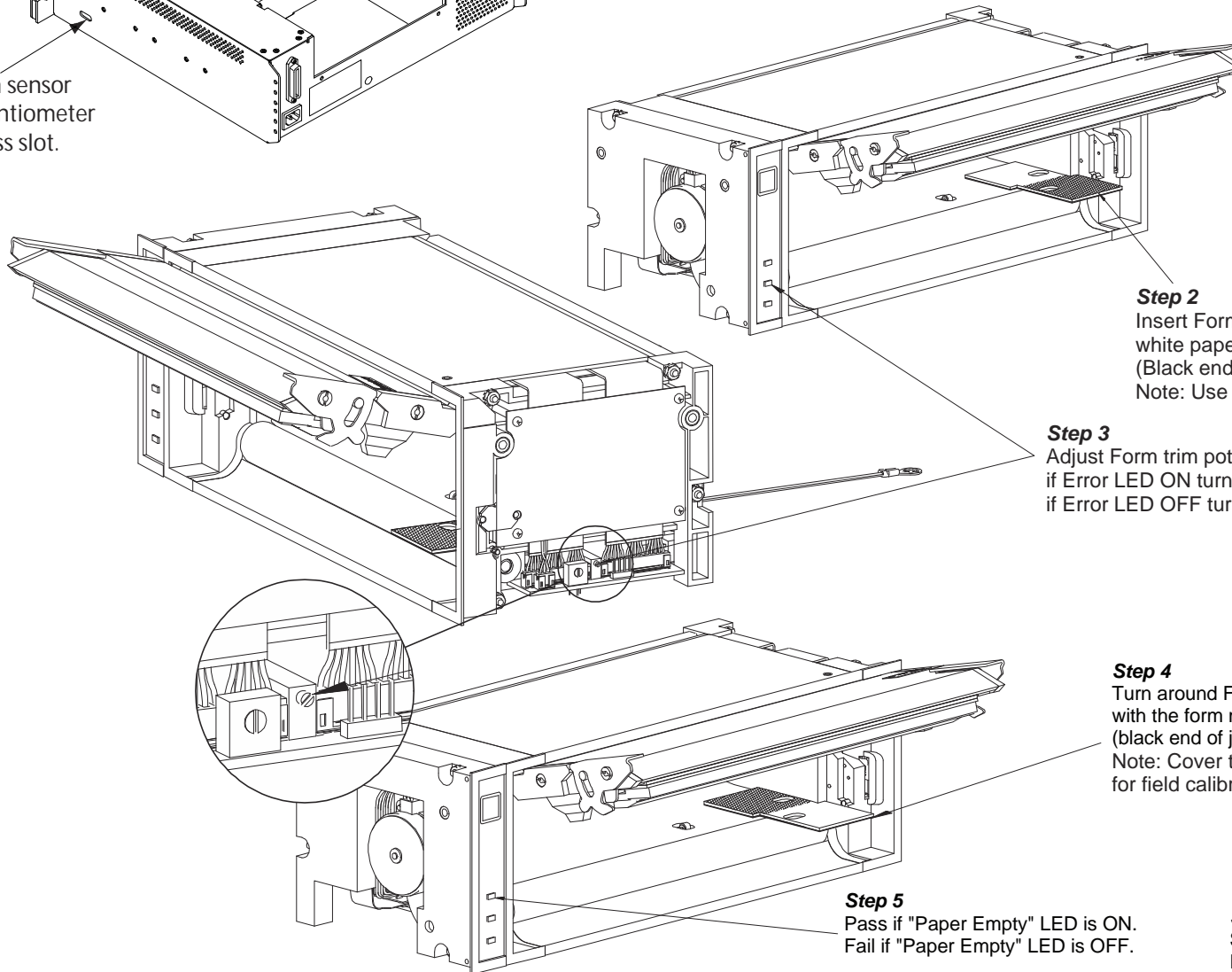
Process: P7517-01

The manufacturing process is shown in the figures below as a reference for calibrating the form sensor. The form sensor potentiometer is accessible without removing the printer mechanism (see Detail A, left). Note: Some early versions of the QF Chassis did not include the form sensor potentiometer access and in this case, the mechanism must be removed for calibration.

Detail: A



Form sensor potentiometer access slot.



**Step 1**  
Attach power supply.  
Open the door.  
Turn power "On" while holding the "Paper Advance" switch down.

**Step 2**  
Insert Form Cal Jig p/n 3012-0039 with white paper covering the form sensor. (Black end of jig turned outward)  
Note: Use white paper for field calibration.

**Step 3**  
Adjust Form trim pot until Error LED Flashes  
if Error LED ON turn pot Clockwise  
if Error LED OFF turn pot Counter-clockwise

**Step 4**  
Turn around Form Cal Jig p/n 3012-0039 with the form mark covering the form sensor. (black end of jig turned inward).  
Note: Cover the form sensor with a form marker for field calibration.

**Step 5**  
Pass if "Paper Empty" LED is ON.  
Fail if "Paper Empty" LED is OFF.

**Step 6**  
Switch off power.  
Remove Form Cal Jig.

This procedure describes the steps for replacing the thermal printhead assembly, p/n 2111-0175.

1. Unplug the printer power cord, turn the printer upside down and open the paper loading door.
2. Refer to Figure 1 (Desk Top chassis shown). Disconnect head cables.
3. This procedure is written from the perspective of a right handed person. A left hander may find it easier to work from the other end of the door. Remove one slotted cap nut, A, and loosen one cap nut, B, to allow the door end to flex. Bend the door end to release the retaining tab (C in Figure 2) on the head mounting plate, remove the head assembly and install the new assembly. See Figure 3.
4. Reattach the head cables. Put a drop of thread locking compound in the threads of the cap nuts to secure them to the spoke. Install and firmly tighten the cap nuts (A and B). The Loctite holds the cap nuts so it is not necessary to use high torque to get them tight.

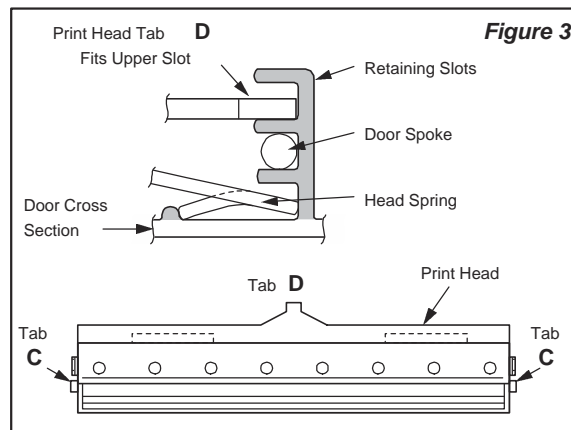
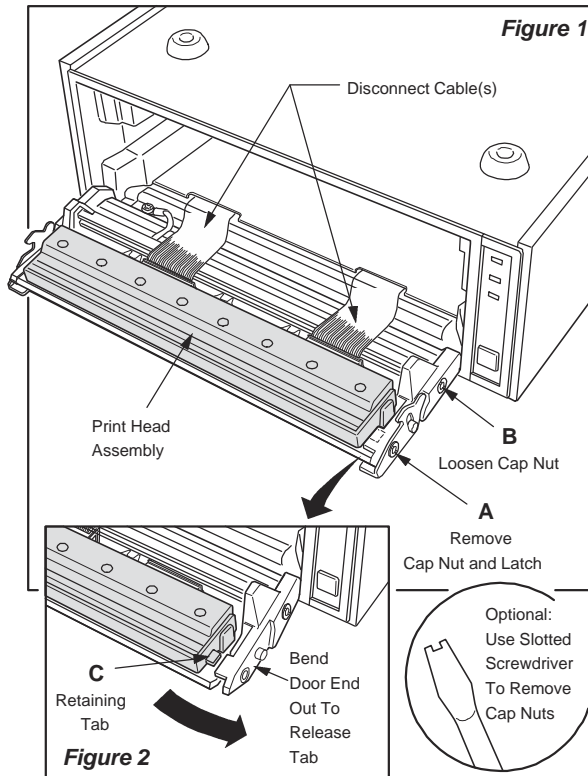
#### NOTES:

There are three retaining slots in the door (Figure 3). The head pressure spring is in the lowest slot, the top spoke holding the door assembly together is in the middle slot and the positioning tab, D, on the head mounting plate goes in the top slot.

The cap nuts are secured using a thread locking compound. Some of these compounds attack plastic so it is important to use one such as Loctite™ #425 or equivalent.

The cap nuts can be more easily removed using a slotted screw driver. If desired, this tool can be made in the field by filing or grinding a notch in a regular flat bladed screwdriver.

## Thermal Head Replacement Process: P7541-02



## Limitation of Liability

Only qualified individuals should attempt to perform service procedures. Products returned for repairs due to disassembly or service error may not be covered under warranty. Modifications of any kind to mechanical or electrical components may also void warranty coverage, as well as invalidate product certification by standards and / or compliance testing authorities.

Organizations and / or individuals authorizing and / or performing disassembly or modification of Printrex products agree to hold Printrex harmless of any damages or injury, and in no event will Printrex be liable for any direct, indirect, consequential, or incidental damages arising out of such disassembly or modification.

Information in this document is subject to change without notice and does not represent a commitment on the part of Printrex, Inc. No part of this manual may be reproduced or transmitted in any form or by any means, for any purpose other than the purchaser's personal use, without the expressed written permission of Printrex, Inc.

All rights reserved. Printed in the United States of America.

© Copyright 2014 by Printrex, Inc.

Document Number: 1028-0065 Rev 2