# Technical Tips - INSERT HEAD Module
# MaxiMailer – Service Engineers' Technical Tips Documentation – Jan 2007

**The following documentation describes all MaxiMailer field issues and corrective actions.**
**Please refer to these documents before any service or maintenance is conducted.**
**Items highlighted thus are Jan 2007 additions.**

| **INSERT HEAD Module** (1430, 1431, and variants) | | | | | | |
|---|---|---|---|---|---|---|
| Technical Tip Number | Page Number | Main Area - INSERT HEAD (1430, 1431, and variants) | Date Effective from | Date Effective to | Technical Bulletins (if applicable) | Mandatory (✓) |
| | 1-6 | **Field Options Summary Table** | | | | |
| A-1 | 1-9 | Motor Drive Belts and Pulley jumping / making noise. | Oct 03 | Jan 05 | - | ✓ |
| A-2 | 1-10 | Loose Pins on Pawl Chain sprocket causing loss of drive. | Oct 03 | June 04 | - | ✓ |
| A-3 | 1-11 | Misaligned insert Kicker Pawls causing insertion crashes. | Oct 03 | Jan 06 | - | ✓ |
| **A-3A** | **1-11** | **Misaligned insert Kicker Pawls causing insertion crashes – Jan 2007 Updates** | **Jan 07** | **-** | | **FIELD OPTIONS** |
| A-4 | 1-12 | Polycord Belt stretching causing motor stalls (Error Codes 8 & 32). | Oct 03 | July 04 | - | ✓ |
| A-5 | 1-12 | Insert Fingers fouling causing insert crashes. | Oct 03 | Sept 05 | - | ✓ |
| A-6 | 1-13 | Special Finger Options for high windows and deep throat (>23mm). | - | Optional | - | FIELD OPTIONS |
| A-7 | 1-14 | Wetter Guide for insertion area to prevent insertion crashes. | - | Optional | - | FIELD OPTIONS |
| A-8 | 1-14 | Wetter Leaks. | Oct 03 | May 04 | TB1420/101 | ✓ |
| **A-8A** | **1-15** | **Wetter Leaks – Jan 2007 Updates (see TT A-17A)** | **Jan 07** | **-** | **-** | ✓ |

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| | | | | | | |
| A-9 | 1-16 | Crashing of inserts with vertical window envelopes. | - | Optional | - | FIELD OPTIONS |
| A-10 | 1-15 | Envelope crashes at deskew rollers. | Oct 03 | Sept 04 | - | ✓ |
| A-11 | 1-15 | Noise from loose pins on gears. | Oct 03 | Sept 04 | - | ✓ |
| A-12 | 1-16 | Collate Pocket Issues when running wide and narrow inserts. | - | Optional | - | FIELD OPTIONS |
| **A-12A** | **1-17** | **Wide finger kit (A3287A – 2007 updates)** | **Jan 07** | **-** | **-** | **FIELD OPTIONS** |
| A-13 | 1-18 | Envelope opener stop breaking (C4360A). | Oct 03 | Aug 04 | - | ✓ |
| A-14 | 1-18 | Red Loctite on Operating Handles that have become loose. | Oct 03 | Mar 04 | - | ✓ |
| A-15 | 1-18 | Wetter and Finger solenoids plunger wear causing insertion and wetter crashes. | Oct 03 | Jan 05 | - | ✓ |
| A-16 | 1-18 | Clutch Pins falling out during running causing loss of drive. | Oct 03 | Aug 05 | - | ✓ |
| **A-16A** | **1-18** | **Clutch Pin (G0167P) – Jan 2007 Updates** | **Jan 07** | **-** | | **FIELD OPTIONS** |
| A-17 | 1-18 | Wetter Sensor getting wet resulting in Wetter Jam (Errors 36,37 or 38). | Oct 03 | July 05 | - | ✓ |
| **A-17A** | **1-20** | **Wetting – Jan 2007 Updates** | **Jan 07** | **-** | | **✓** |
| A-18 | 1-22 | Insertion Crashes | Oct 03 | June 05 | - | ✓ |
| **A-18A** | **1-28** | **Insertion Crashes – Jan 2007 Updates** | **Jan 07** | **-** | | **-** |
| A-19 | 1-37 | Belts jumping erratically on Head Upper clam | Oct 03 | Jan 05 | - | ✓ |

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|---|---|---|---|---|---|---|
| Technical Tip Number | Page Number | Main Area - INSERT HEAD (1430, 1431, and variants) | Date Effective from | Date Effective to | Technical Bulletins (if applicable) | Mandatory (✓) |
| | | assembly (A7041A). | | | | |
| A-20 | 1-37 | Envelope Shim on Flap Grip Roller Assembly (A7072A) installed incorrectly. | Oct 03 | Jan 05 | - | ✓ |
| **A-20A** | **1-37** | **Flap Grip Roller assembly (A7072A)- Jan 2007 Updates** | **July 06** | **-** | **-** | **FIELD OPTIONS** |
| A-21 | 1-39 | Feed shaft assembly - pin becoming loose. | Oct 03 | Jan 05 | - | ✓ |
| A-22 | 1-40 | Sealer Closer Assembly (A7046A) - black tape fitted to prevent light affecting sensor. | - | Optional | - | FIELD OPTIONS |
| A-23 | 1-41 | Cover Interlocks – AC Motor Fails to Stop on opening of the covers. | - | Feb 06 | 1420/100 | ✓ |
| A-24 | 1-42 | Engineers' Trim List Procedure. | Oct 05 | - | - | ✓ |
| A-25 | 1-43 | Operators to be advised on Cleaning Sensors. | Jan 05 | - | - | ✓ |
| A-26 | 1-43 | Motor Stall Error 08. | Oct 03 | June 05 | - | ✓ |
| A-27 | 1-44 | Envelope Deskew Sensor needs cleaning error. | Jan 05 | Feb 06 | - | ✓ |
| A-28 | 1-45 | Error 56 (version 3) - Excessive Current | Oct 05 | | - | - |
| A-29 | 1-46 | Power Supply 26V low (error 1054 on version 3). | Oct 05 | | - | - |
| A-30 | 1-47 | MaxiMailer Installation Instructions | - | - | - | - |
| A-31 | 1-47 | MaxiMailer Plus Installation Instructions | - | - | - | - |
| A-32 | 1-47 | Version 3 downloading guidelines document | - | - | - | - |
| A-33 | 1-47 | Error 60 (version 3) - sensor stuck low | Oct 05 | - | - | - |
| A-34 | 1-48 | Shipping Modules separately | April 05 | - | - | - |
| A-35 | 1-48 | F1375A 25T pulleys – now all plastic | Oct 03 | Jan 05 | - | - |
| A-36 | 1-49 | Flap catches on the Envelope Opener | - | - | - | - |

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| **A-36A** | **1-50** | **Flap catches on the Envelope Opener – Jan 2007 Update** | **Jan 07** | **-** | **-** | **FIELD OPTIONS** |
| A-37 | 1-50 | Upgrading MaxiMailer to MaxiMailer Plus | - | - | - | - |
| A-38 | 1-50 | Error 57 (Version 3)- 5v supply low | Oct 05 | - | - | - |
| A-39 | 1-50 | Plug and Play with version 3 | Oct 05 | - | - | - |
| A-40 | 1-50 | Roller Cleaning Fluid | July 05 | - | - | ✓ |
| A-41 | 1-51 | MaxiMailer Software/ Firmware versions | - | - | - | - |
| **A-41A** | **1-55** | **MaxiMailer Software/ Firmware versions Jan 2007 Updates** | **Jan 07** | | | **-** |
| A-42 | 1-59 | Saving jobs and machine settings | Jan 05 | - | - | - |
| A-43 | 1-61 | Envelope flap catches on the Sealer Ski (B7464A) when running in No Seal Mode | - | - | - | - |
| A-44 | 1-62 | Envelope crashing at Reversing / Closing | - | - | - | - |
| A-45 | 1-63 | Downloading via the head | Jan 05 | - | - | - |
| A-46 | 1-64 | MaxiMailer Plus PC Set-up Instructions | - | - | - | - |
| **A-47** | **1-64** | **New Torque Head Fixings** | **July 06** | **-** | **-** | **-** |
| **A-48** | **1-65** | **New style Rolling Backstop and Field Options** | **Jan 07** | **-** | **-** | **FIELD OPTIONS** |
| **A-49** | **1-65** | **Slow-down-clutch 03 clutch 'over-heating'/'failing to pull in** | **July 06** | **-** | **-** | **✓** |
| **A-50** | **1-66** | **Envelope too Short Error** | **Jan 06** | **-** | **-** | **-** |
| **A-52** | **1-66** | **Gear vibration noise (squeaking gears)** | **Sept 06** | **-** | **-** | **FIELD OPTIONS** |

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| A-53 | 1-66 | Franker Link Compatibility | - | - | - | - |
| A-54 | 1-66 | Spare Kit Part numbers | - | - | - | - |
| A-55 | 1-67 | Increased envelope opening for Insertion – Field Option Only | Jan 07 | - | - | FIELD OPTIONS |
| A-56 | 1-70 | Miscellaneous Jan 2007 improvements | Jan 07 | - | - | - |
| A-57 | 1-77 | MaxiMailer ribbon cable sets now available as separate items | Jan 07 | - | - | - |
| | | | | | | |

## Field Options Summary Table

| Part Number | Relevant Assembly Number | Option | | Application | Qty required | Description |
|---|---|---|---|---|---|---|
| D0052A | N/A | Jog Tyre |  | Envelope Feeder, Insert feeder | 2-off (fitted on the outer wheels). | These tyres are standard on the envelope feed and are used to provide improved grip and drive. |
| C8194A | A7267A | Slotted Feed Tyre |  | Envelope Feeder, Insert feeder | 6-off | This feed wheel has advantages when feeding inserts with a powdery finish. |
| D0037A | A7268A | Silicon Feed Tyre |  | Envelope Feeder, Insert feeder | 6-off | These provide added grip on certain glossy stationery. |
| C8193A | A7269A | Roller HI-GRIP EPDM |  | Envelope Feeder, Insert feeder | 6-off | These provide high grip on certain glossy stationery. |

| Part Number | Relevant Assembly Number | Option | | Application | Qty required | Description |
|---|---|---|---|---|---|---|
| D0059A | A7271A | Coated Silicon Feed Wheel |  | Envelope Feeder, Insert feeder | 6-off | These provide high grip on certain glossy stationery. |
| A7217A (B1864S cover) | A7217A | Pre-feed Assembly |  | Envelope Feeder | 1-off | This assembly can be fitted to improve the pickup of propeller cut envelopes.<br>Note. B1864S cover must be fitted with this assembly. |
| See description for details | | Deep Throat Centre Fingers |  | Head | | See Tech Tip Note A-18 sub note 10 for details. |
| See description for details | | High Window Fingers | None | Head | | See tech Tip Note A-6 for details. |

| Part Number | Relevant Assembly Number | Option | | Application | Qty required | Description |
|---|---|---|---|---|---|---|
| B7941A | - | Wetter Guide |  | Head – ref section A-7 | 1 | To reduce insertion crashes where the clearance between depth of envelope and depth of insert pack is small. |
| | A3287A | Wide collate pocket and fingers | See tech tip note A-12 | Head | 1 | See tech tip note A-12 for details. These are fitted to reduce insertion crashes when running a mixture of wide and narrow inserts |
| **C8203A** | **-** | **Feed Roller** | **30-35IRHD** | **Envelope Feeder, Insert feeder** | **6-off** | **Softer compound than the standard rollers. May be better pick up reliability for certain materials.** |

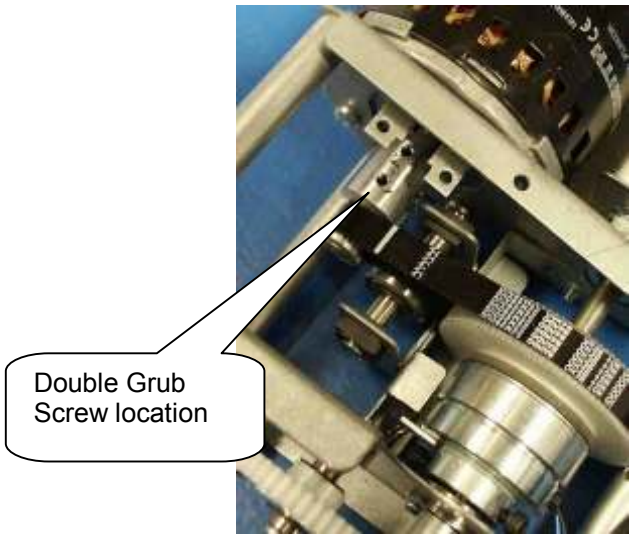
## A-1. Motor Drive Belts and Pulley jumping and making noise

**Problem resolved on machine (effective from June 05).**

On machines pre June 05 **the Main Motor STS Belt (F5112A)** jumped on the pulley & idler assemblies causing a bumping noise from this area during running.

If this problem occurs on machines pre June 05, then the immediate field fix is to ensure the **idler bridge (B7420A)** shear buttons are located as illustrated below. Also, a very light smear of grease can be applied on the toothed side of the belt that will help until the belt settles in.
For a permanent fix, it is recommended a new **Primary Drive assembly A7068A (220V) or A7069A (110)** be fitted with all modifications.

Also, on machines (pre June 05) there have been instances where the **motor pulley F1372A (220v) and F1373A (110v)** became loose resulting in loss of drive and motor stalls. The corrective actions for this problem is to retrofit a double grub screw pulley **F1372A (220v), issue 2 or F1373A (110v) issue 2,** onto the modified Primary Drive assemblies.

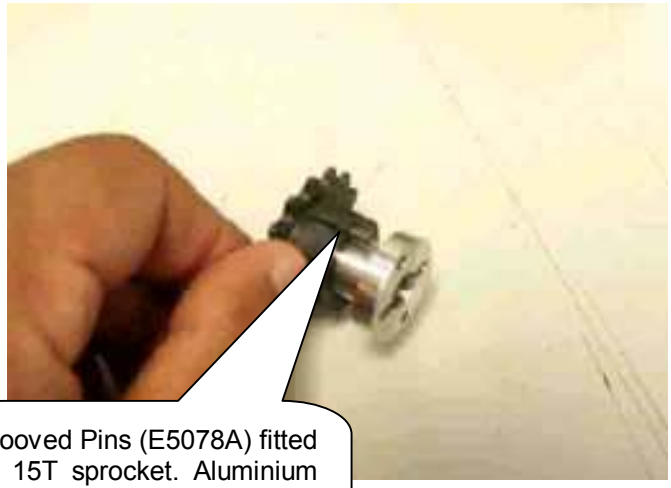



## A-2. Loose Pins on Pawl Chain Sprocket

**Problem resolved on machine (effective from June 04).**

Grooved pins (E5078A) can fall out on 15T Pawl Chain Sprocket (F3044A).

These pins should be an interference fit. If not, it is suggested that the sprocket and pins are changed. For a field fix, Cyanoacrylate adhesive (Loctite 603 Green) can be used to secure the pins in place.
Please Note that the pins should be fitted into the sprocket first then the aluminium hub pushed on after.



Grooved Pins (E5078A) fitted on 15T sprocket. Aluminium hub pushed on after. Use loctite to secure the pins in place.

## A-3. Misaligned Kicker Pawls – See A-3A for 2007 updates

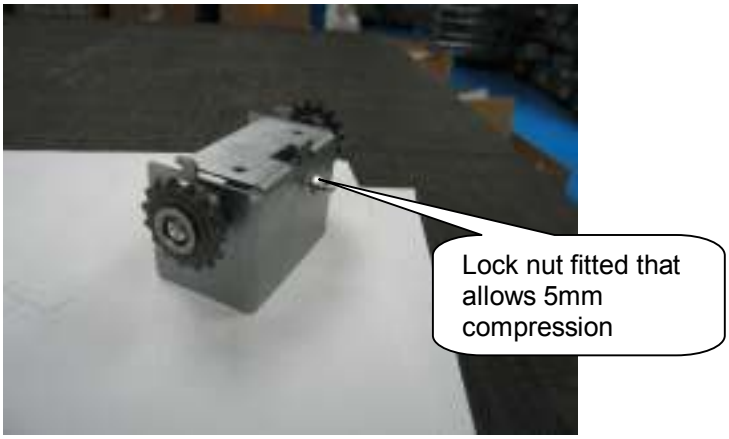
**Problem resolved on machine (effective from Jan 06).**

**Insert Kicker Pawls (B1818A)** are misaligned and cause a jam in the insertion area.
The contributory factors and corrective actions are:-

1) Pawl link can lift above the centre panel **(B7468A)** page 4A-2 item 26 on one side only, causing the pawl chain to jam and jump. This has now been fixed by reforming the centre panel. If you find this problem order a new centre panel.

2) Wetter beam bounce – now eliminated by firmware upgrade (V4.0.0.12 or V3.4.0.12 **onwards**) that keeps the Solenoid Up ON for longer.

**3) Certain types of crashes cause the pawls to jump – in firmware version (V4.0.0.12 Dongle or V3.4.0.12 Pre-dongle onwards) the Insert pawls will now only move from the pause position when the wetter is home and the trailing edge of the envelope is seen at the wetter output sensor.**
Note if a M4 lock nut is fitted onto the Sprocket Bracket Assembly (A7059A) as shown below – ensure this is slackened off.




4) Pawl brake not working or pawl bracket broken – refer to Tech tip note A-18

**Additional Checks:**

5) Distorted chain end links causing the chain to ride up on the sprocket.
6) Stiff chain links causing the chain to ride up on the sprocket.
7) Idler sprockets not free-running on either fixed shaft or sprung shaft (or both) – Must remove this assembly and clean during a PM. Ref TT note A3A sub note b for further actions.

**A-3A. Misaligned Kicker Pawls Jan 2007 updates -** There have been a number of mechanical changes that have been implemented in this area to improve the general reliability of the pawl track, these include:-

**a) Sprocket Shaft C9264A** – removal of grooves to improve fatigue strength.

**b) Sprocket Idler Shaft and Spigot** C9418A and P2052A – increased bore clearance for sprocket to prevent mechanism binding onto shaft.

**c) Ensure Tech Tip A3 is fully implemented.**

## A-4. Polycord Belt – causing Motor Stalls (Error Codes 8 & 32)

**Problem resolved on machine (effective from July 04) – also Read Tech Tip A-26.**

Intermittent **error codes 8 & 32** which indicate a jam but there is not (False Alarm). The tension of the Polycord can cause this problem - check the belt length **is 930 mm Max.**

## A-5. Insert Fingers

If the Insertion fingers are not returning cleanly after insertion – then the following areas should be checked:-

## Clutch Pin (G0079A)

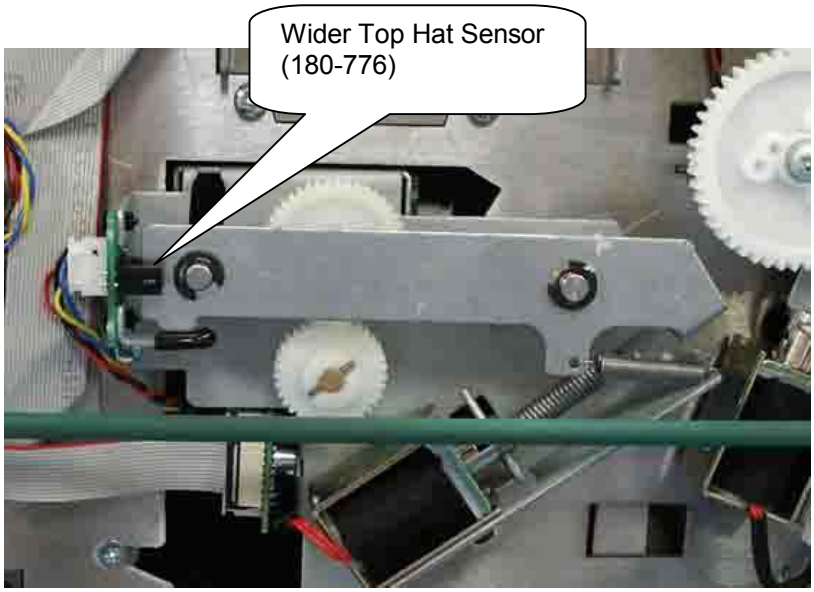
This pin can work loose if fitted incorrectly and introduce skew in the solenoid plunger causing the plunger to bind.

By pushing the pin home fully and fitting a small cable tie across the two pin legs it stops the pin from moving outwards.

## Finger bar Fouling on top hat sensor.

**Problem resolved on machines (effective from July 05) – also Read Tech Tip A-26.**

Check that the wide top hat sensor (part number **180-776)** is fitted and the flag is centralised in top hat as it returns to rest position.
Note this sensor is not compatible (expect with the wetter home) for use in other areas.



## A-6. Special Fingers for Insertion Problems – Field Option

There are 2 'special' versions of insertion fingers, **Deep Throat Centre Fingers and High Window Fingers.** Refer to the Finger Replacement Instructions below for the best fitting practice.

**Deep Throat Fingers – see tech tip note A-18A sub note 10.**

**High Window Fingers**

These may be required for some specific US envelopes.

The High Window fingers are used in place of the standard outer fingers. They are 5mm longer and are fitted with the tip high points *inboard.* These fingers are specifically designed for envelopes with windows positioned very close to the flap crease *and* outer edge. For this application Standard fingers will inevitably catch the window edge as they enter the envelope throat. The High Window fingertip has a start position *on* the window and will therefore will not catch it.
All high window envelopes should be fully trialled before acceptance, as some versions of high window envelopes will not run with either Standard fingers or High Window fingers.
Parts required are:

| | | |
|---|---|---|
| 1x | B9071A | High Window Finger LH |
| 1x | B9070A | High Window Finger RH |
| 2x | E5055A | 3.5mm D1500 'E' Clip (spare for use on finger pin) |
| 1x | E5074A | 3mm x 8 long dowel pin (see fitting instructions) |

**Finger Replacement Instructions**

a) Remove Drives Side Cover - 3 screws, Remove Operator Side Cover (below Control Panel Assembly) – 3 screws. Remove Control Panel Assembly (disconnect 2 ribbon cables and remove 5 screws).

b) Remove Envelope Feeder Assembly (disconnect ribbon cable and interlock connector, remove 6 screws).

c) Replace fingers with alternatives. It is better to do this one at a time.
The technique is to remove the small circlip then use a 3 diameter x 8 long pin to push out the finger pin (this short pin then ensures that the small spring stays in place on the finger body),
Replace with the new finger (make sure the spring tang goes through the rectangular hole in the finger) and use the finger pin to push the 3dia x 8 pin out. Retain with small circlip.
Check that the new fingers are assembled correctly and they rotate freely on the finger pins.

d) If fitting Deep Throat Centre Fingers, attach plastic extension strip to underside of Envelope Deflector Plate on Envelope Feeder Assembly.

e) Replace Envelope Feeder Assembly (ensure that it is seated correctly into the main chassis) and covers.

## A-7. Wetter Guide for insertion area – Field Option

A **Wetter Guide B7941A** can be fitted to the Sealer Cover assembly when clearance between pack length and envelope depth is outside specification (6mm min.) - which can cause insertion problems. Early units will require the addition of 2 fixing holes to fit the part. Drill Plate D114_326A can be used as a drilling guide.

Filled envelopes can ride up over the wetter beam if the insert pawls are set to push the pack right into the bottom of the envelope. The cause is that the envelope flap is still gripped when the pack hits the bottom of the envelope causing the envelope to pivot upwards and flip over the top of the wetter beam. This can be mistakenly diagnosed as a miss-insertion caused by non-entry of fingers.
For some out of specification applications, for example, a thick pack into an envelope with insufficient clearance, the fitting of a Wetter Guide can resolve the problem. Some Canadian applications may be particularly vulnerable to the problem as Canadian '#9' envelopes are 4" deep giving less than 3mm clearance when inserted into a '#10' envelope (4 1/8" deep).
This field fix should only be used when it is evident that adjusting the Insert in Envelope Position in the GUI 'advanced menu' cannot solve the problem. This is because, using the insertion pawls to cram insert packs into an envelope will put additional loads onto the machine mechanisms and may result in premature failure of some components.

## A-8. Wetter Leaks

**Implement TB1420/101, Tech Tip A-15, A-17and A-17A**.
The following are notes from the TB.

There have been some occurrences of fluid leaks in the wetter system as follows:

1. **Leak from the drainpipe connector on Wetter Reservoir B7480A.** Early units had a potential problem where the 'O' ring seal did not seat correctly and was susceptible to damage on assembly. The connector and its nut have been re-designed to prevent this. If leaking is being experienced here, replace with the following parts: Pipe Connector P2216A (issue B or later), Drain Nut P2217A (issue B or later) & 'O' Ring E0169A.

2**. Leak from the float switch on the Wetter Reservoir.** The rubber-sealing washer for the float switch should be assembled on the *inside* of the reservoir. There has been an instance on an early unit where the rubber washer was assembled incorrectly on the outside of the reservoir.

3. **Excess wetter fluid carrying through from the wetter tank foam** can drip down the rear face of the tank and migrate by capillary action along the Tank Channel to the Overflow Pipe. After a period of time drips form at the head of the Overflow Pipe and can drop down onto the Wetter Reservoir and into the base of the unit. Excess fluid problems can be caused by:

> **a). Incorrect specification of wetter foam fitted to centre section of Wetter Tank** (supply error). If the incorrect grade of foam is fitted then excess fluid is drawn up to the wetting surface. Overwetting and fluid carry-through results in excess fluid dripping down the rear face of the Wetter Tank and accumulating in the Tank Channel. It can then drip into the base of the unit. The correct foam has a larger cell construction recognisable by a pitted rather than a smooth appearance. Replacement parts: Wetter Foam Edge G0135A (x2), Wetter Foam Centre G0136A (x1).
>
> **b). Incorrect setting of the Wetter Beam 'down' position**. The Wetter Beam should be set so that it does not contact the wetted foam - ideally it should be set with a nominal 1mm gap between the base of the Wetter Beam and the top of the Wetter Foam. The gap is set by adjusting the 2 Wetter Adjust Plates (R2191A) on either side of the wetter section.
> A Wetter Setting Block C7403A is available. This is placed in the Tank Channel and used to set the correct 'down' position of the Wetter Beam.

The Overflow Pipe C3482A has been re-designed to direct any drips from the Tank Channel back into the Wetter Reservoir. Replacement parts: Overflow Pipe C3482A (issue 2 or later), O Ring Seal E0235A, Nut M12 x 5mm P2375A.

4. There has been 1 instance of splashing due to **excess wetting causing a problem with the Wetter Output Receiver (S2-RX).** This sensor can be covered using clear vinyl tape (E0422A) - request 0.5m only. It should be re-calibrated after fitting of the tape - in Engineer mode, run 'Calibrate all sensors' in Analogue sensors.

5. **Over-filling the Wetter reservoir will result in an overflow into the machine**. Ensure that the reservoir is not over-filled when replenished with wetter fluid. The operator should be trained as outlined in the Operating Instructions (i.e. is aware of the 'Max. Fill' position). NB: The Wetter Reservoir and Wetter Tank MUST be drained before moving the machine.

## A-8A. Wetter Leaks – Jan 2007 Updates – see tech tip note A-17A

## A-9. Insert Crashes with vertical window envelopes – Field Option

This can be caused by the operator side inner finger lifting and catching the window acetate.

This can be fixed by removing the inner finger.

## A-10. Envelope crashes at deskew rollers

**Problem resolved on machine (effective from Sept 04) – also Read Tech Tip A-26.**

**The flap opener** intermittently catches the deskew rollers resulting in an envelope crash. This is due to the play in the shaft of the flap opener. The opener has now been changed to widen the cut-out to 19mm. If this problem is occurring replace the **opener (C7383A) issue 2.**

## A-11. Noise from loose pins

There have been some cases where the clutch pins have been protruding and rubbing against the clutch / brake - which result in a noise from these mechanisms.
Check pins in the gears are not loose, protruding and rubbing against clutch / brake.

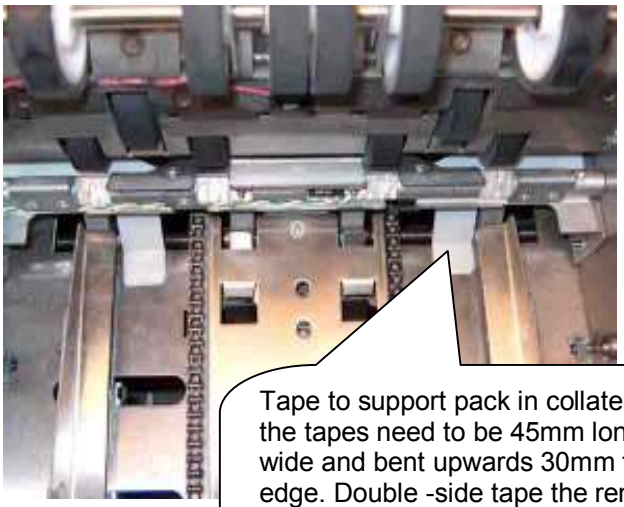
## A-12 Insertion Crashes due to narrow inserts – Field Option

### Running narrow inserts

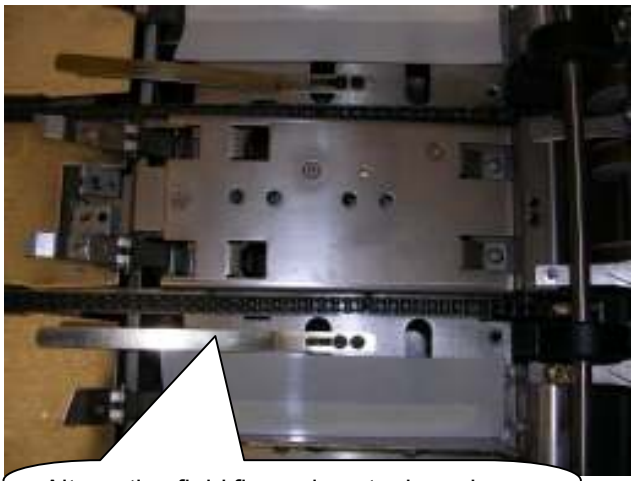
If running a mixture of narrow and wide inserts there is potential for the narrow inserts to drop down from the edges, which result in crashes in the envelope. The preferred option is to sandwich the narrow insert amongst the wider documents so that the above does not occur.

However, if this is not possible, then tape can be fitted as shown below in 2 positions as shown below. Alternatively, **Wide Fingers and Collate Pocket Side Guides (A3287A)** can be fitted which will allow a maximum document width difference of 1 1/4"".

Once the wide fingers have been fitted, they will require re-calibrating. To do this firmware version 3.1.0.4 or later must be loaded into the insert head to allow the fingers to be re-calibrated to 210mm.



Tape to support pack in collate pocket - the tapes need to be 45mm long x 20mm wide and bent upwards 30mm from one edge. Double -side tape the remainder and fix inboard of the collate pocket side guides, making sure that they do not interfere with the fingers and collate pocket side guides.



Alternative field fix: spring steel can be secured to bed of collate pocket.

## A3287A Kit (wide collate pocket and fingers)

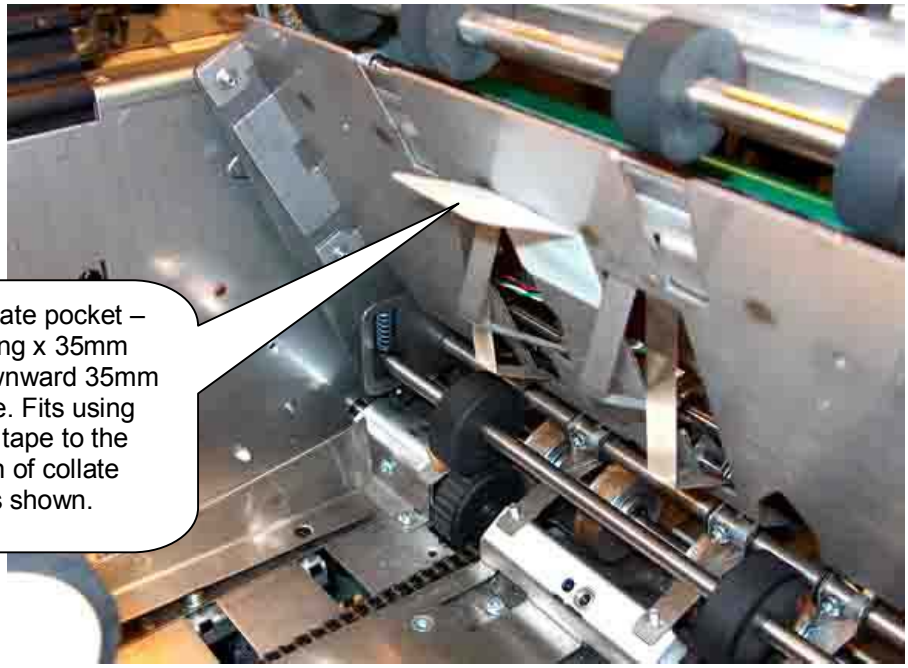
## A-12A - Wide finger kit (A3287A) – Jan 2007 Updates

This new finger profile has been introduced to improve the envelope insertion caused by skewed envelopes from pick-up. These fingers (B9324A and B9325A) are shorter with a slight downturn at the tip. This also, enables inserts unto 40mm narrower than the prime document to be inserted without the need to sandwich in between other inserts.

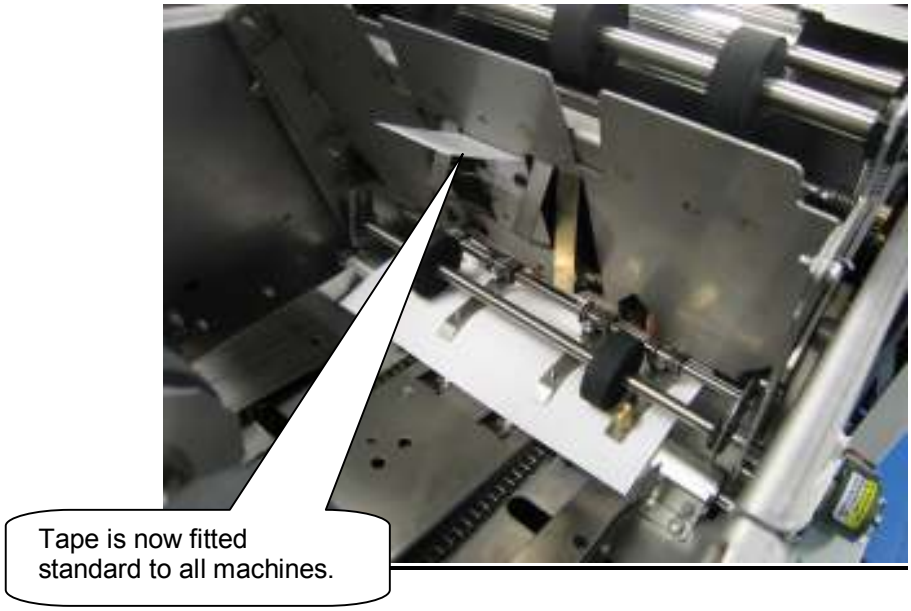
## Support of packs before insertion.

**Problem resolved on machine (effective from Sept 05) – tape is now fitted standard. For greater control, spring steel can be fitted in cases of tight clearances on internal side seam envelopes.**

There have been instances where added support of collated documents is required in the Head unit collate pocket before inserting into the envelope as shown below:-



Fit tape in collate pocket – tape 70mm long x 35mm wide bent downward 35mm from one edge. Fits using double -sided tape to the middle section of collate pocket roof as shown.




## A-13. Envelope Opener Stop breaking (C4360A)

**Problem resolved on machine (effective from Sept 04)**

There have been instances where the above have broken from the score-line (groove).
If this is the case please replace part with C4360A **issue 2**.

## A-14. Operating handles becoming loose

**Problem resolved on machine (effective from Sept 04). Also Read tech Tip A-47.**

There have been instances of some handles in the head, feeder and folder becoming loose.
If this has occurred, please apply Red Loctite or use cap head screws.

## A-15. Wetter and Finger Solenoids sticking

**Problem resolved on machine (effective from Jan 05)**

The Solenoid Plungers are Wearing and therefore preventing full movement of fingers and wetter beam. (Finger **Solenoids (part no. 181-142)** and Wetter Down Solenoids **(181-119 Drive Side and 181-142 Operator Side).**
Corrective action:
Must be replaced with **Teflon coated plungers** part number **ECP1317_30A or complete solenoid.**

## A-16. Clutch Pin (G0079A) falling out or breaking on the EC30 clutches only – see A-16A for 2007 updates

**Problem resolved on machine (effective from Sept 05)**

There have been instances of the standard clutch pin G0079A used on the EC30 (i.e. connector type) clutches/brakes (179-214) breaking or falling out during running. The corrective action is to fit the new style clutch pin part number **G0167P.**

## A-16A. Clutch Pin (G0167P) and (G0079A) – Jan 2007 Updates

**There have been reports of G0167P clutch pins used on ALL EC30 Clutches breaking in the field. The material was galvanised spring steel and plated after bending. The material has now been up-graded and changed to a pre-plated material (and painted yellow after bending) to help prevent pre-mature failures caused by the plating process.**

**Note G0079A pin has also changed to a higher specified/more controlled material.**

## A-17. Wetter Sensor getting wet resulting in Wetter Jam (Errors 36,37 or 38). – See A-17A for 2007 updates

**Problem resolved on machine (effective from Sept 04)**

There have been instances of excess wetter causing problems with the wetter output receiver sensor (Ski Bridge) e.g. errors 36, 37 or 38. This sensor is now enclosed within the new ski bridge (B7464A). Also, the receiver sensor is replaced with a longer version (part number 182-345), preventing water spillage from the above contaminating the sensor connector.

In addition, it is advised the wetter output transmitter sensor (located within the output sensor bracket B7456A) is cleaned thoroughly.

Other wetter checks required:-
a) Check and ensure wetter is setup as per technical Bulletin 1420/101 at first instance.

b) The wetter sponge should be 28mm from base to top - it should be not too tight or loose and follow profile of the metal.

c) Check that the wetter tank assembly is setting level in the machine and 4/6mm of fluid is maintained.

d) The amount of envelope flap that is wetted (+ve = more wetting) can be adjusted - In steps of 1mm. If over-wetting this figure can be reduced.

## A-17A. Wetting - Jan 2007 Updates.

There have been a number of mechanical changes in this area to improve the general reliability of the wetting which have been implemented (Jan 07), these include:-

**1) Over-wetting** caused by incorrect wetter beam setting. Beam needs to be set using the wetter beam block (C7403A). This gives a gap of 1-2 mm between the beam and wetter foam.

**2) Wetter tank (A7042A**) - foams assembled to specification using jig (implemented Nov 06)

**3) Stainless steel 8mm Flanged Bearings E1137A** to be used on wetter output shaft to prevent rust implemented since September 06.

**4) Stainless steel fixings** to be used for fixings around wetter area and for idler posts.

In an addition, the manual has been updated to include a **section (3.10a)** on setting up the wetter beam, see below some extracts.

To set the adjustment of the wetter beam, setting gauge C7403A must be obtained. This is a shaped aluminium bar that sets the adjustable stops correctly.

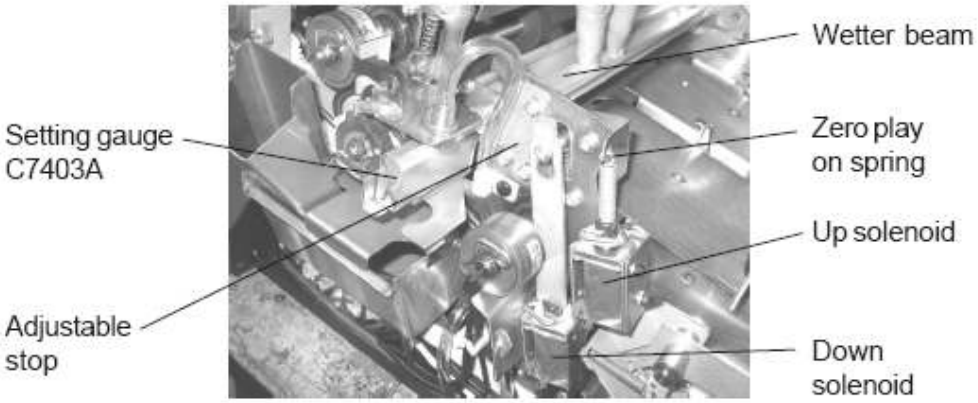



Fig. 13a

**Setting procedure (refer to Fig. 13a above)**

1. Remove/lower both side covers (section 3.1.2)
2. Slacken the screws on the adjustable stop each side. Remove the wetter tank and replace it with the setting gauge C7403A.
3. Hold down the wetter beam to that it contacts the guage, then slide the adjustable stops so that they contact the spigots on the beam. Tighten the screws on the stops.
4. Slacken the adjustment screws on the down solenoid each side. Hold down the wetter beam and slide the solenoids so that the plunger is bottomed when the arm is pulling downwards to take out any play in the pivots. Tighten the screws.
5. With the wetter beam in its raised position, slacken the screws on the up solenoid and slide it so that with the plunger bottomed, any free play is taken out of the spring, without the spring being tensioned. Tighten the screws.
6. Replace the side covers. The wetter beam is now correctly set.

**Wetter adjustments in Engineer mode**

It is important to note that the wetter beam must be correctly set as described prior to making wetter adjustments in Engineer mode (see 'Settings' on page 3-17 for Maximailer, or 'Units Setup' on page 3-21 for Maximailer Plus). If the beam is not correctly set, engineer adjustments will not be able to eradicate wetting problems.

## A-18. Insertion Crashes - corrective actions required – see A-18A for 2007 updates

**Also Read Tech Tip A-3, A-5, A-6, A-7, A-9, A-12 and A-15.**

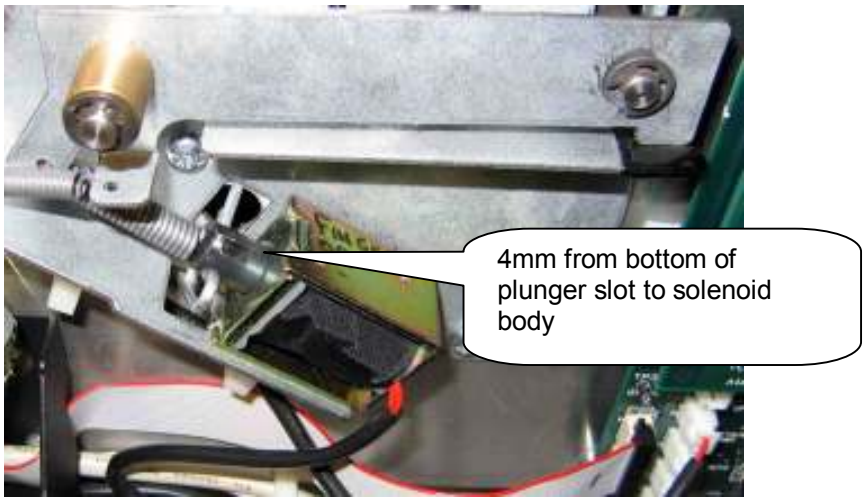
Run machine at speed 1 (walk mode) with covers linked-out to highlight insertion area.

The following checks (and adjustments) are required to ensure good insertion of documents:

a) Check that the fingers and collate pocket are setup correctly (Ref manual page 3-16).

b) Check 2mm clearance in the collate pocket with widest insert (towards wetter area) - this can be adjusted if required.

c) Engage and disengage fingers in Engineer to ensure both solenoids are pulling-in and that the stroke is balanced and setup (4mm from plunger slot to solenoid body – see photo 1). Note this can be reduced if required.



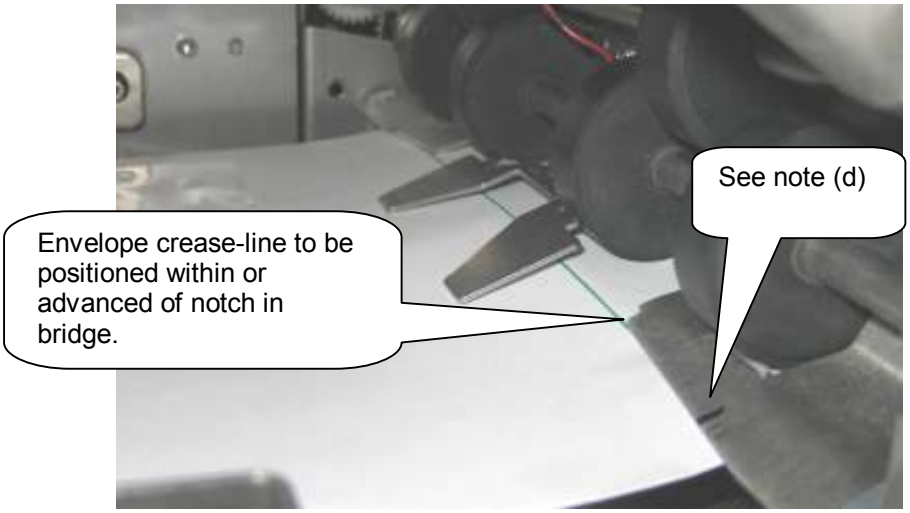

d) Check to see if the envelope is not central to the fingers when sitting in the insertion area. To test for this, mark the extreme edges of the external fingers on the chassis bridge that they sit against. Run an envelope though the system by hand and stop it at the insertion area. The finger position marks on the chassis can then be used to check their position relative to the envelope. If you also find this to be incorrect can you please contact us so that we can determine an appropriate course of action.
Instructions:-

i) Program a job to set-up the fingers to run, e.g. 229mm envelope with 210mm wide insert/or form.

ii) Run the job to allow the machine to set-up for the correct default fingers and collate pocket, e.g. for the above job the outside fingers will set-up to 218mm and collate pocket to 212mm.

iii) Manually pull the fingers IN to help you mark-up the outer finger position on the envelope bridge. Then hand-feed an envelope to the stop posn (see point ‘e’) and mark on the envelope outer finger positions to allow checking for centred finger position to envelope.

e) Check envelope stop posn is correct for the envelope (see Photo below). The stop posn can be moved forward (e.g. +ve takes the envelope towards the wetter area). Note that if this is too far back it can restrict the envelope from opening.




f) Fingers are cleanly entering envelope, not tearing the edge or getting caught on the window. If so, the fingers can be moved inwards or special fingers can be fitted see tech tip note A-6.

g) Check Documents are

i) inserted too far into envelope - causing envelope to lift over wetter beam or

ii) inserted too shallow - causing box folding in sealing. If so, 'Insert in env pos' can be adjusted (e.g. +ve pushes the insert into the envelope).

h) Pawls are stopping consistently before reaching the collate pocket and insertion area - this can be caused by

i) brake not engaging correctly - there have been instances of the stop of the brake bracket breaking - which can result in inconsistent pawls stopping. If this has occurred then a new brake bracket (B8728A, Issue 2) must be fitted - standard on new machines (effective Sept 05).

ii) pawls digital sensor not working – check this in Engineer.

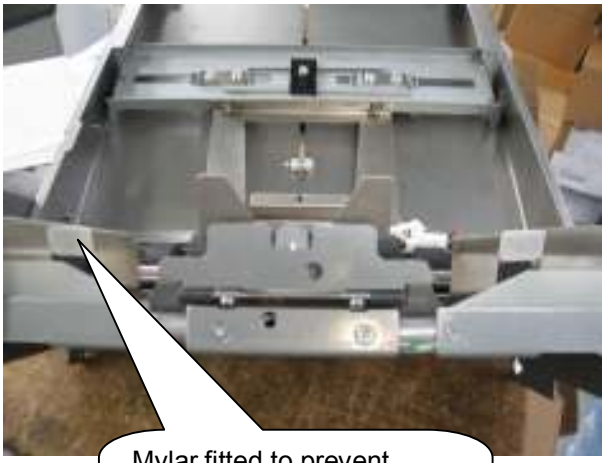
iii) wetter fluid on the splitter board mounted directly under the wetter tank. Note, this is mainly caused by moving the machine without draining wetter tank - PCB Shield G6201A is available and can be fitted to protect the splitter board (below the wetter tank) from wetter fluid – standard on new machines (effective Sept 05).

i) Collate Pocket Issues may need to be incorporated - see tech tip A-12.

j) **Finger Wear issues:** If there are instances of the current plastic outer fingers becoming worn from the tips - new metal fingers (B9203A and B9202A) can be fitted if required. Now fitted standard.

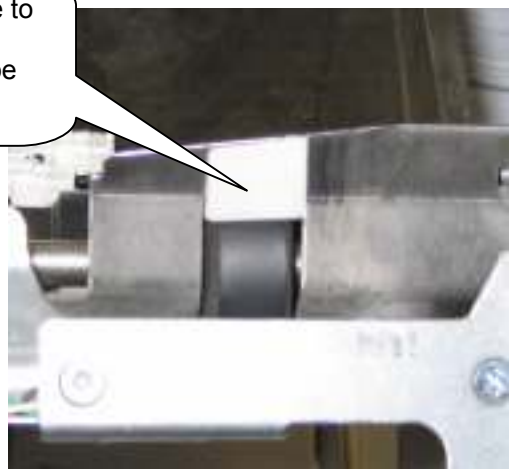
**NOTE: fit tape onto envelope feed bridge B7496A to prevent catching on cut-outs as shown below. In addition, check and ensure that the finger brackets (both operator and drive side) are not bent-up as shown below. If so, this MUST be straightened.**

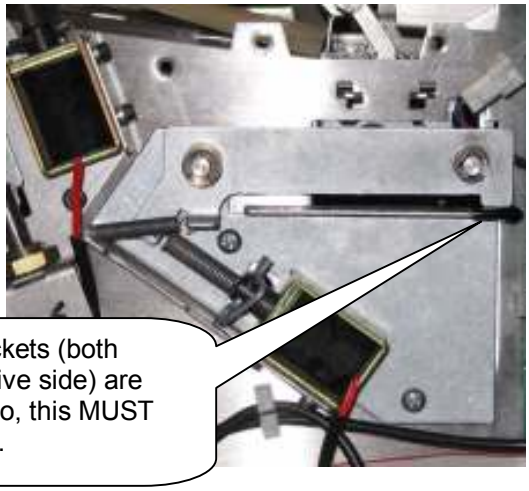
# Technical Tips - INSERT HEAD Module



Mylar fitted to prevent fingers catching on cut-outs (2 posn G6210A and G6211A) – see below.

Tape 17/18mm wide to fit into cutout and extended to envelope bridge profile.



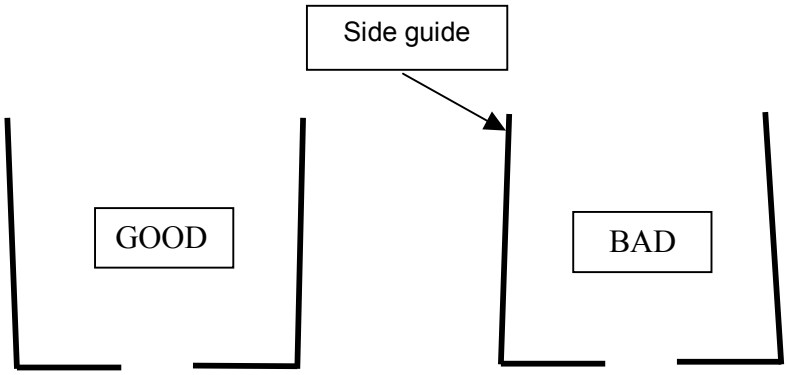


Check that brackets (both operator and drive side) are not bent-up. If so, this MUST be straightened.

j) Envelope Skewing, check:-

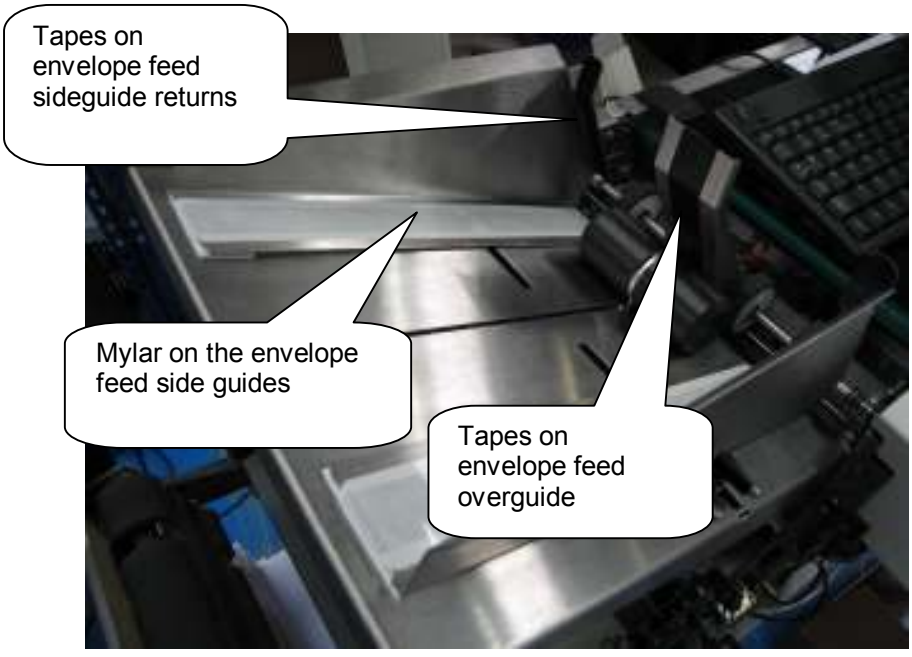
Check side guides are set correctly - **this is critical.**
If the envelope seems to struggle to pickup and feed this will have a tendency to skew the envelope and result in an insertion crash – corrective actions are:-

i) ensure side guides are not over-bent. Run an envelope perpendicular to the guides without the envelope going tight can check this. If so, then remove both sides and bend until correct as shown below. (PICTURE). After fitting, run a handful of envelopes up and down the hopper to set the side guides and then lock them in position, ensuring they are not too tight along of the hopper guides.
In addition, ensure the side guides do not rock side-ways and across the length. If so, it may require packing with Mylar from underneath.




ii) Check and set the separator gap correctly as per the manual. This should be lighter with standard pick-up roller types and slightly heavier with the Pre-feed assembly.

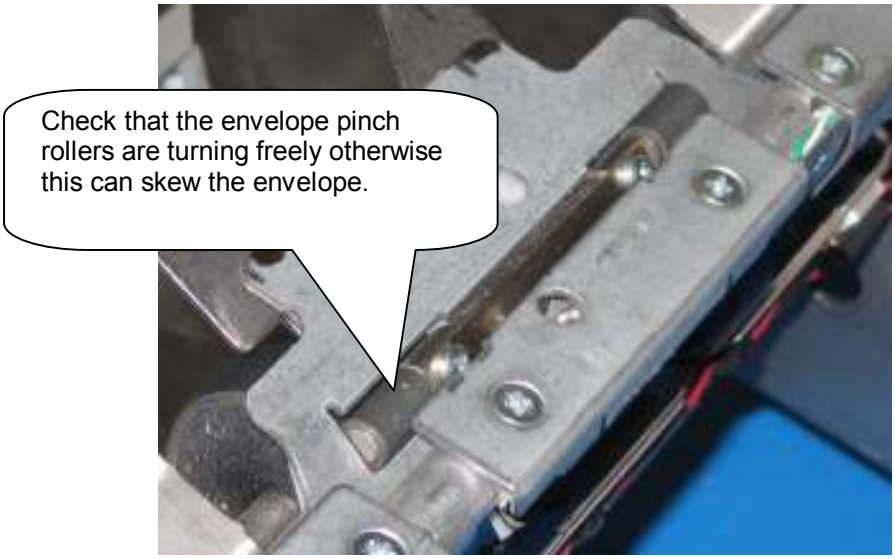
iii) To assist feeding - Mylar tapes can be fitted onto the side-guide as shown below and also onto the returns and overguide.



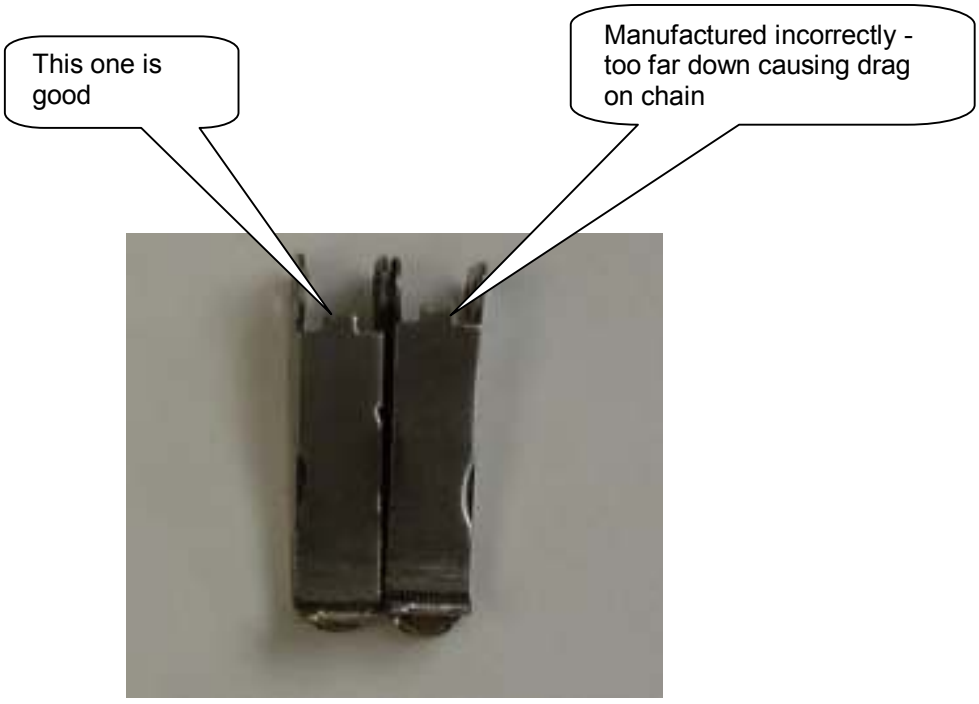
iv) Check envelope pick-up Jogglers are aligned – if misaligned can be glued in position.

v) Check the envelope pinch rollers are turning freely otherwise this can skew the envelope.

vi) Check and implement Tech tip note A-20.



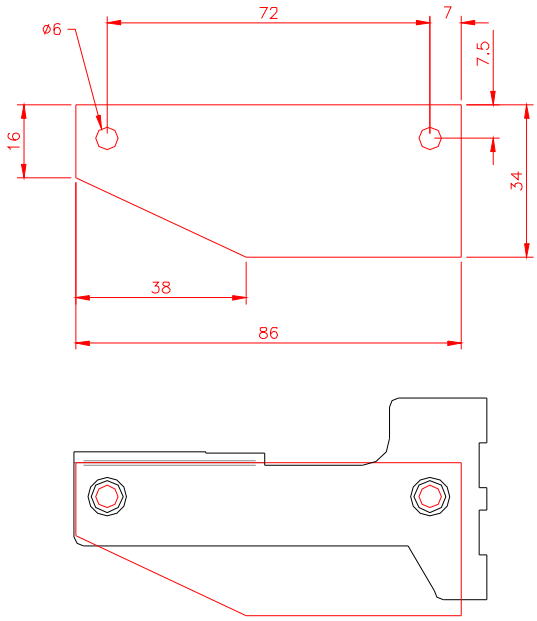

k) Stiff chain and pawls not fitted correctly
If experiencing sporadic insert crashes - check insert pawls are aligned with each other and that there is no resistance when manually moved (to check this turn by hand one complete cycle). Check that the pawls are manufactured incorrectly - if not they could drag on the insert chain, see below.



# Technical Tips - INSERT HEAD Module

l) A Mylar strip (part number G6195A) can be fitted for particular envelopes with a short flap shoulder - this may be required to prevent the insert catching on the edge of flap during insertion.

Material: 0.25mm(0.010”) Polyester Shim Stock (Mylar). Clamped between Aluminium bar and ‘T’ pieces (clamped not stuck down).

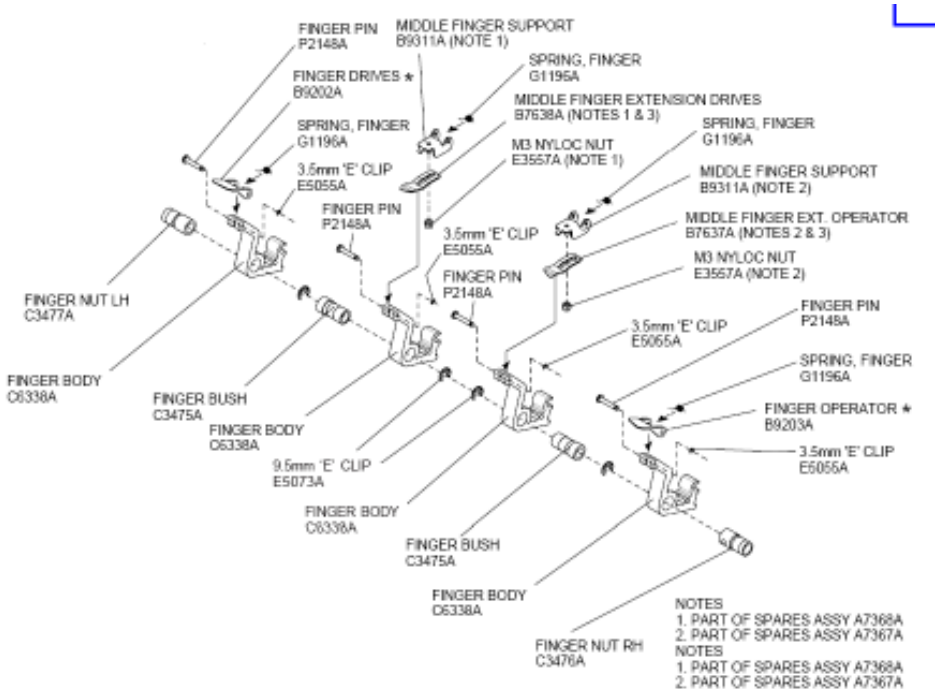


## A-18A. Insertion Crashes Jan 2007 Updates

There have been a number of mechanical and software changes in the machine to improve the general insertion reliability and they include the following:-

**1) Viewing holes have been added to the sides of the envelope feed** to view finger entry into envelope and insertion - Implemented Set 06

**2) New profile adjustable middle fingers A7367A (Ops side) and A7368A (Drive side) –** implemented after Sept 06. These fingers help to open the envelope throat to improve general insertion reliability. The fingers are also engineer adjustable so that they can be lengthened for customers running envelopes with a deep throat profile. In very extreme cases (out of Specification envelopes) where the envelope stop position has to be run very fwd (from the notch) to allow the external fingers to enter the envelope then it may be worth fitting A3325A (fingers with greater extension than above).




**2) Stainless Steel outer fingers B9203A (Ops side) and B9202A (drive side) for improved wear – implemented Jan 07.**

**4) Fingers catching in the envelope feed tray roller cutouts** – this can be prevented by the addition of a plastic guide tape that reduces the gap between the roller and the cutouts – Implemented Oct 06. Part numbers:

**G6210A (LH)**
**G6211A (RH)**

**5) Envelope deskew times altered from standard;**
Low was 20ms, is now 30ms.
Medium was 30ms, is now 50ms.
High was 40ms, is now 100ms.

Released in firmware versions V4-1-0-0 onwards or PD4-1-0-0

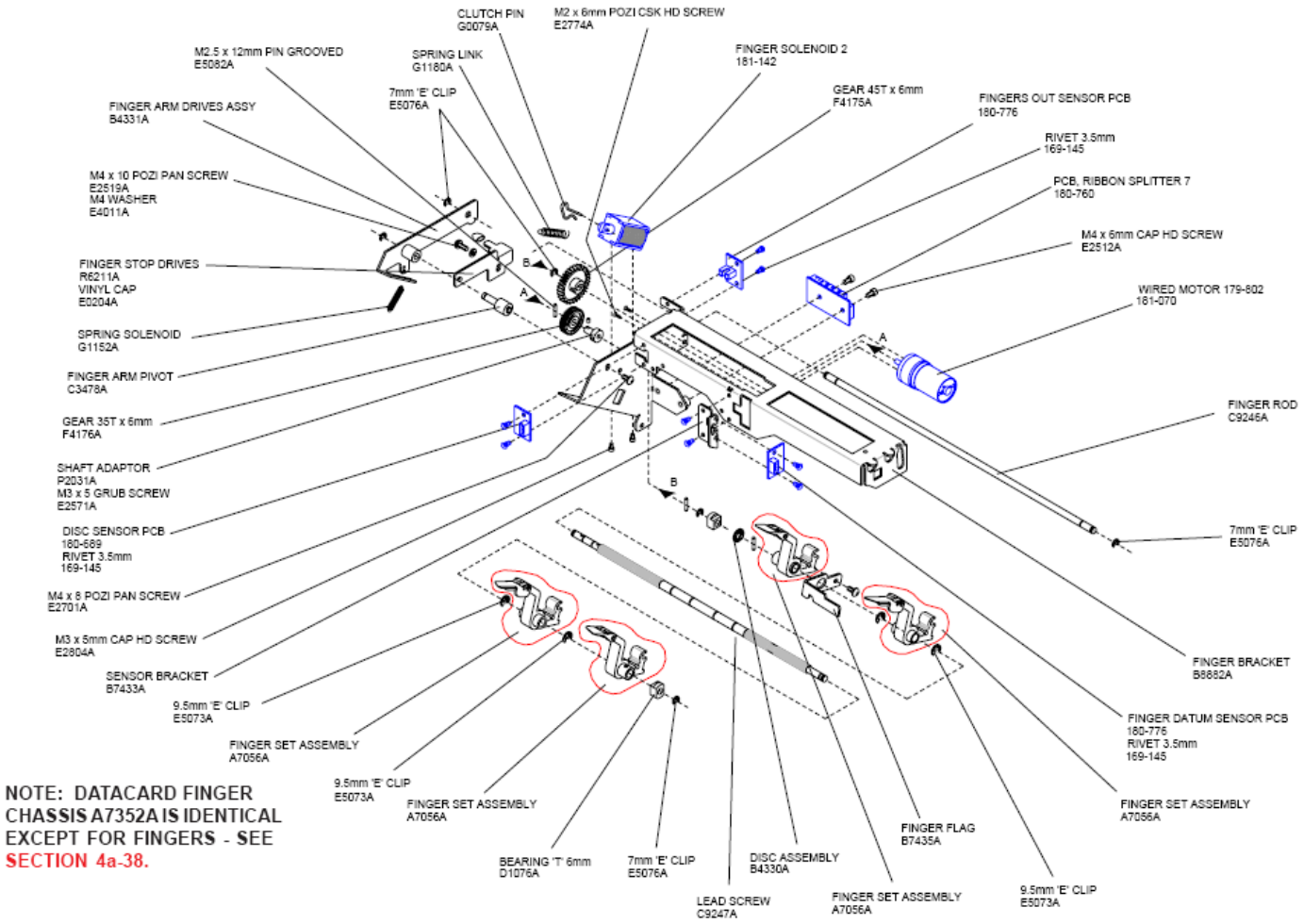
**6) Envelope settle time introduced** from when the envelope has arrived in the insertion area to when the fingers are activated.

Speed 0: Settle time = 500ms Form fed from collate pocket after finger activation time = 2500ms
Speed 1: Settle time = 400ms Form fed from collate pocket after finger activation = 600ms
Speed 2: Settle time = 300ms Form fed from collate pocket after finger activation = 200ms
Speed 3: Settle time = 200ms Form fed from collate pocket after finger activation = 100ms
Speed 4: Settle time = 150ms Form fed from collate pocket after finger activation = 50ms
Speed 5: Settle time = 115ms Form fed from collate pocket after finger activation = 35ms
Speeds 6-9: Settle time = 100ms Form fed from collate pocket after finger activation = 20ms

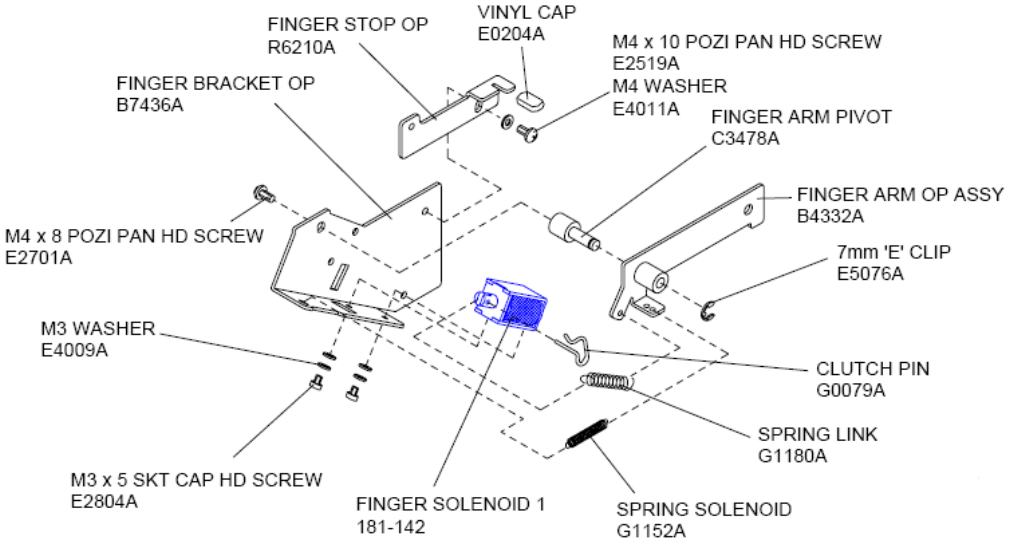
Released in firmware versions V4-1-0-0 onwards or PD4-1-0-0

**7) Wetter Bracket Op B8728A brake location strengthened** – Implemented Jan 06.

**8) Finger Chassis Assembly (A7055A)** - finger home stop positions on both Operator and Drive sides are now adjustable to ease factory setup of fingers.



Note, **a new finger bracket assembly (A7062A**) must be also be fitted to the operator side to allow setup and adjustment.
Implemented Jan 07

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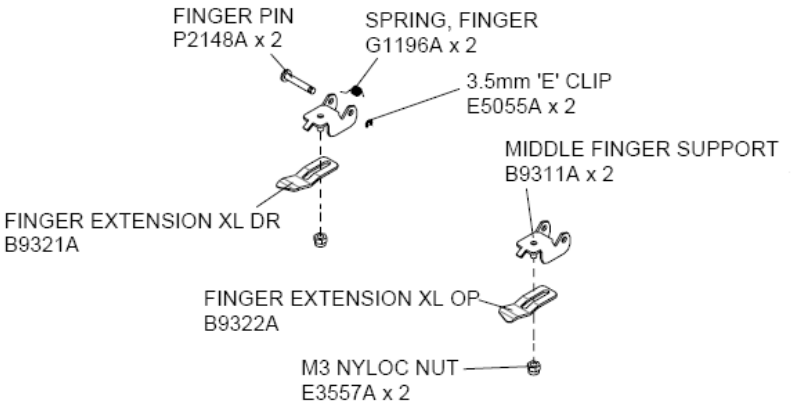
**9) Wide finger kit (A3287A) – new finger profile introduced.** This new finger has been introduced to improve the envelope insertion caused by skewed envelopes from pick-up. These fingers (B9324A and B9325A) are shorter with a slight downturn at the tip.
Implemented Jan 07

**10) Deep Throat Finger Kit (A3325A)** – new profile introduced as per 2.2.

**DEEP THROAT FINGER KIT A3325A**




**11) Z Fold window kit (A3347A)** can be fitted when experiencing documents catching on the window resulting in insertion crashes. Note this assembly consists of:

A7352A ((Datacard Finger overguide Kits A7369A (Drive) and A7370A (Operator) and G6214A (Insert guide tape)) that fits to the underside of the flap grip roller assembly. Implemented Jan 07

**12) Feeding and Insertion Guidelines document** created and placed on the web to provide guidance to engineers (can be found on the PFE web page) – see below for extracts.

## Envelope Feeding Set-up Options

Please note that any combination of these tips could help with particular envelope types.

| Setup Option | Envelope type | Side guides settings | Pick-up feed system required | Separator gap setting | Separator Spring Action | Notes |
|---|---|---|---|---|---|---|
| 1 | Envelope lead edge curled/twisted and does not sit parallel to the separator/pickup roller (resulting in skewed feeding) - see figure 1. | Clearance up to 2mm Max total. | Pre-feed (tractor) part no. A7217A | Separator pad overlap >0.5mm. | | If the envelope is skewing into the sideguide(s) then initially remove and reload entire hopper. If problem persists then re-adjust the side guides to give slightly greater clearance. The use of the tractor should help to flatten the curled envelopes at the point of separation to prevent this. Note, the twist on the envelope should not be more than 1/4" (6.5mm) when placed flat. |
| 2 | Tractor fitted but experiencing streaming and doubles issue. | as above | Remove the outer upper tyres from the pre-feed assembly. | Separator pad overlap >0.5mm | | |
| 3 | Set-up as point 2 but still experiencing streaming and doubles issue. | as above | | Separator pad overlap >0.5mm | Separator spring action locked to prevent any separator movement downwards. This is carried out by adjusting the 2 locknuts to the underside of the sep. bracket - see fig 2. | Separator adjustment is now limited - need to back off the separator lock nuts before any adjustments can be made. No operator intervention allowed. |
| 4 | Running curled/twisted envelopes - no longer having stream or double issues but only experiencing skew. | as above | Remove the outer lower tyres from the pre-feed assembly - see figure 3. | Separator pad overlap >0.5mm | | |
| 5 | Envelope is sitting flat in the hopper and does not have any curl across the lead edge. | Clearance up to 2mm Max total. See note 1. | Standard Feed shaft (part no. A7073A) - see figure 4. | Separator pad overlap 0.5mm or less | | |
| 6 | As above but experiencing pick-up issue. | as above | If poor pick up is experienced it is always best to ensure that side guides are not set too tight and restrictive on the envelope pack. | Separator pad overlap 0.5mm | | |
| 7 | As above and pick-up issues persist. | as above | Loosen the separator, if this doesn't help or leads to doubles then try alternative rollers and then the tractor. | Separator pad overlap <0.5mm | | Current options include slotted or silicon types. Note, the joggler is fitted standard to the outside only. It is essential that bumps in-line across the shaft otherwise this will encourage envelope skew. |

Additional Notes for good envelope feeding:

1 Hopper capacity is very dependent upon envelope types. If feeding problems are encountered it is best to try reducing the amount of envelopes loaded (note this is particularly applicable on twisted envelopes). For optimum performance load 300 envelopes max

2 It is very important that both separator pads are set at the same position (it shouldn't be used to try and overcome skewing). Note, an uneven separator and sometimes a separator that is set too tight will deform the envelope resulting in crashes further downstream

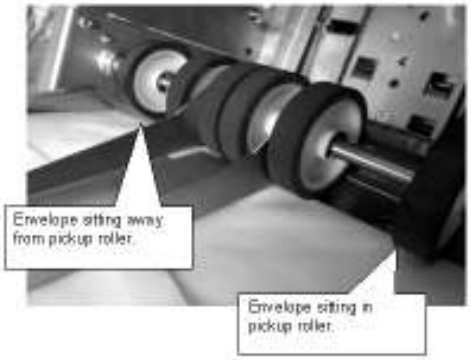
3 If the separator is set very tight (maybe necessary to overcome doubles etc) and the deskew value is set to high this can result in too much drive on the envelope and it will deform badly as it enters the deskew rollers. It is best to start with deskew values set to no/low.

## Guidelines for good Envelope Insertion.

| Setup Option | Action Required | Description |
|---|---|---|
| 1 | Set and lock side guides. | Set to 2mm Max (1mm either side). Only open up clearances if experiencing envelope skew into the side guide. Once set - lock both sides into position and check by placing a handful of envelopes in the hopper for clearance and pickup. |
| 2 | Separator setting and adjustments. | To be set even and equal to approx 0.5mm overlap (default). Generally, this setting is light with a standard pick-up roller types and slightly heavier with the Tractor (pre-feed) assembly. In addition, the separator can be locked in position - see point 3 'Envelope feeding setup'. |
| 3 | Outer finger setting set correctly to the envelope width. | To test for this, mark the extreme edges of the external fingers on the chassis bridge that they sit against - see figure 5. Run an envelope through the system by hand and stop it at the insertion area. The finger position marks on the chassis can then be used to check their position relative to the envelope. These marks should be equally spaced (either side) from the edge of the envelope. The default finger setting is approx 5/7mm from the edge of the envelope and can be adjusted inboard if required. In addition, check if the insert is fully cover by extremes of the outer fingers. |
| 4 | Middle fingers opening the throat of the envelope. | Again feed an envelope by hand and stop it slightly forward from the start of the notch position. Engage the fingers manually or within engineer and then check for middle finger entry using the viewing hole on either side of the envelope feed side plates - see figure 6. Note, if the fingers are not supporting/opening the middle of the throat (envelope throat dimensions >22mm) then the middle fingers will require extending. |
| 5 | Collate pocket width is correct for envelope. | Ensure the widest document (insert) once placed the collate pocket gives 2mm clearance to narrowest point. Also, note any Fine Tuning or Engineer adjustments will adjust the outer finger position. If these adjustments are carried out then re-check point 3 and adjust (if required). |
| 6 | Envelope Stop Position. | Adjust such that it falls within the Notch position (envelope moves the envelope towards the closer and -ve back) see figure 7. |
| 7 | Envelope pickup issues. | see 'Envelope feeding Setup' points 2, 3, 6 and 7. |
| 8 | Envelope skew issues. | see 'Envelope feeding Setup' points 1 and 4. |
| 9 | Envelope skew at insertion area. | The check for this is to see whether the envelope crease line is parallel to the notch on either side. The skew limits are within the start and points of the notch - see figure 7. If experiencing skew beyond this - then check points 1, 2, 7, 8 and for any catch points through the envelope path. |
| 10 | Finger activation start position. | Mark the inside of the crease line and then feed an envelope by hand to the start of the notch position. Then using the viewing hole on the envelope feeder side plates - check the finger start position on either side is sitting on or slightly behind the marked crease line - see figure 8. If this is not set - then the stops need to be adjusted to position. Once this is OK ensure 4mm stroke is set on the finger solenoids (either side). |
| 11 | Envelope Streaming. | If the envelope has stream fed then there is a tendency for the envelope to dive between the fingers and brass cue guides. If this has occurred, carefully remove the filled envelope and check point 2 and 7. |
| 12 | Fingers not returning into home position. | This is a usual check during machine running for fingers returning to home (either side) - see figure 10. Corrective actions if they fail to return fully home are 1) Increase the return spring tension (either side) - see figure 11 2) look for sticking finger assemblies. |
| 13 | Fingers digging into envelope - not pulling in cleanly. | This is a usual check during machine running for fingers not pulling in fully (either side of envelope) - this can also leave finger pierce marks on the envelope - see figure 12. The corrective action is to clean-up the finger tip, or replace the faulty finger. |

# Technical Tips - INSERT HEAD Module

Figure 1: Envelope lead edge curled/twisted and does not sit parallel to the separator/pickup roller (resulting in skewed feeding)




Datacard Machines ONLY

Figure 2: Separator spring action locked to prevent any separator movement downwards. This is carried out by adjusting the 2 locknuts (either side)

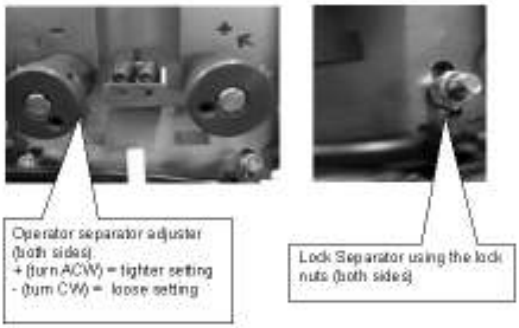



Figure 3: Outer lower tyres removed from the pre-feed assembly

Figure 4: Standard Feed shaft

**Figure 5: Outer finger setting set correctly for the envelope width.**

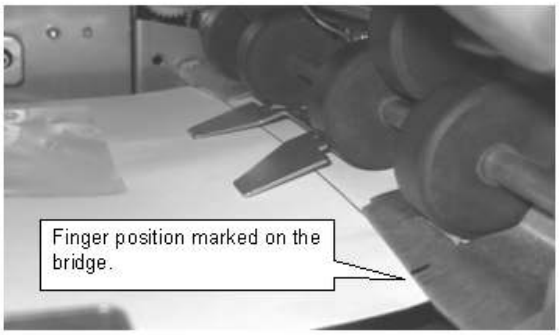



**Figure 6: Middle fingers opening the throat of the envelope**

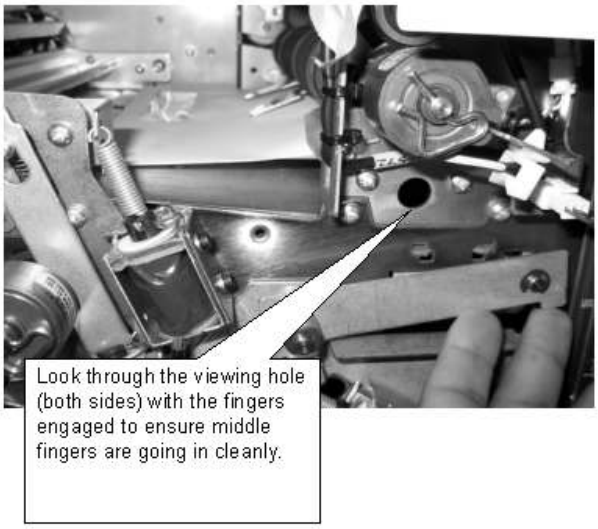



**Figure 7 and 8: Envelope Stop Position and Skew limits.**

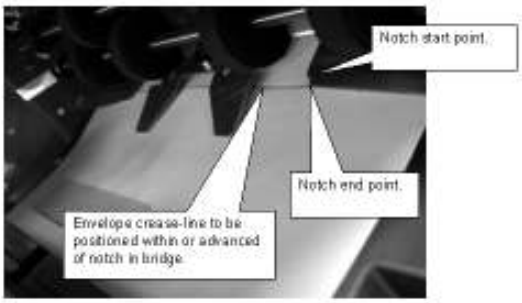



**Figure 9: Finger actuation start position**

**Figure 10: Finger not returning into home position**

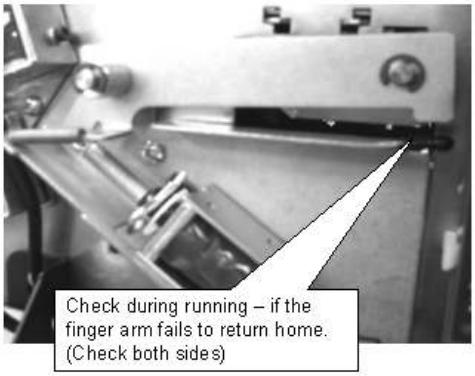



**Figure 11: Finger return spring tension**

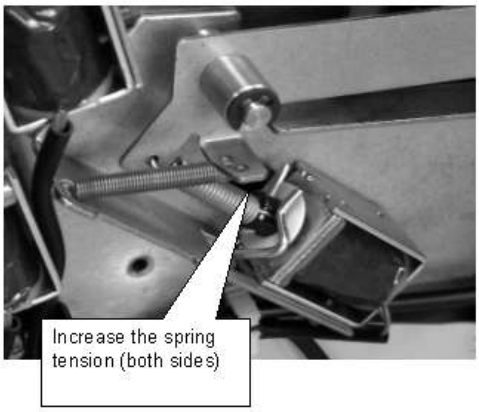
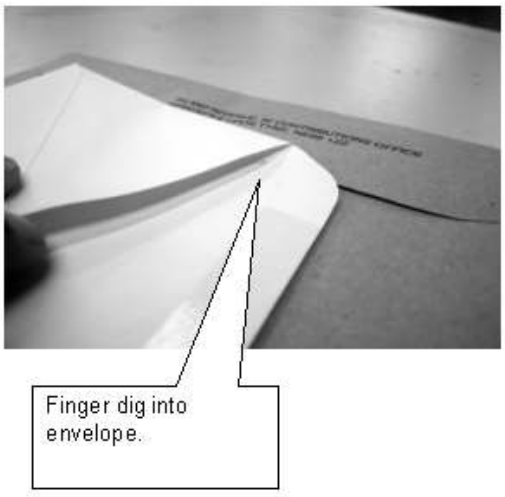



**Figure 12: Insertion crashes due to fingers digging into envelope.**



## A-19. Belts jumping on Head Upper clam assembly (A7041A).

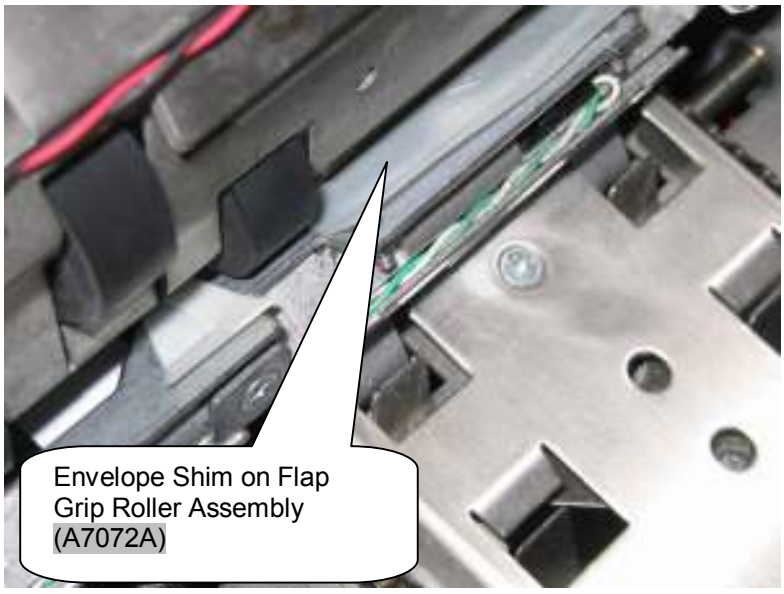
**Problem resolved on machine (effective from Jan 05)**

Clean ALL pulleys and idlers to remove the toner that has deposited onto the teeth form - do not use grease. If problem persists replace ALL Aluminium 25T pulleys with **Plastic 25T (F1375A) pulleys.**

## A-20. Envelope Jam at Guide Bar (C9436A) – see A-20A for 2007 updates

If there are instances of the envelope getting caught as shown below - then the following corrective actions can be attempted:

i) Check by removing **Collate Roof Cover (B7502F)** that all Rollers on the Envelope Feeder Assy (A7061A) are aligned against all rollers on the Collate Pocket Clam Assy (A7060A). If misaligned this can cause envelope skew and insertion problems.
ii) Envelope Shim on Flap Grip Roller Assembly (A7072A) can be lifted up to guide the envelope into the nip of lower rollers as per (a).
Note, on some machines this shim has been fitted incorrectly preventing the shim to be lifted up. If this is applicable - then remove and fit correctly.
iii) Yellow spring's (G1116A) can be fitted onto the lower rollers as per (a).




## A-20A Flap Grip Roller assembly (A7072A)- Jan 2007 Updates

Problem resolved on machine (effective from July 06) – if experiencing problems in this area then fit complete new assembly A7072A.

Various areas around this assembly (A7072A) have been modified to give greater clearance on the envelope as it is driven through the envelope feed path into the insertion area.

# Technical Tips - INSERT HEAD Module

Previously envelopes could distort and catch on the assembly at various points. The bar that holds the small diameter 'grey' flap grip rollers has been modified to prevent the roller from 'locking' and forming flats after time.

Other mods include:-

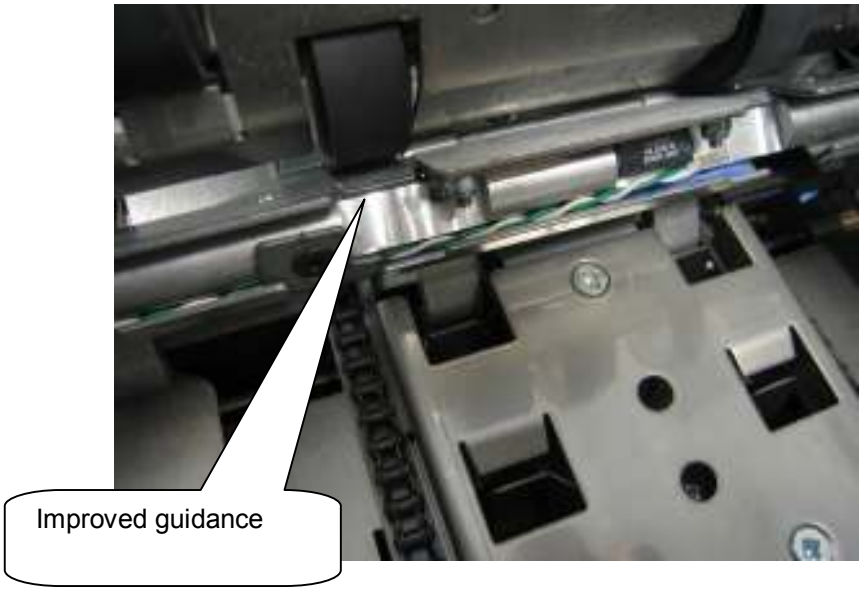
- Edge deflector B7714A improved to give better guidance into flap grip area.

- Envelope Defector R2175A improved to give better guidance into flap grip roller.

- Envelope guide bar C9436A. Chamfers added to cutaways to remove potential catch points.

- Guide tapes added to envelope feed to prevent fingers catching on edge of wheel cutouts.

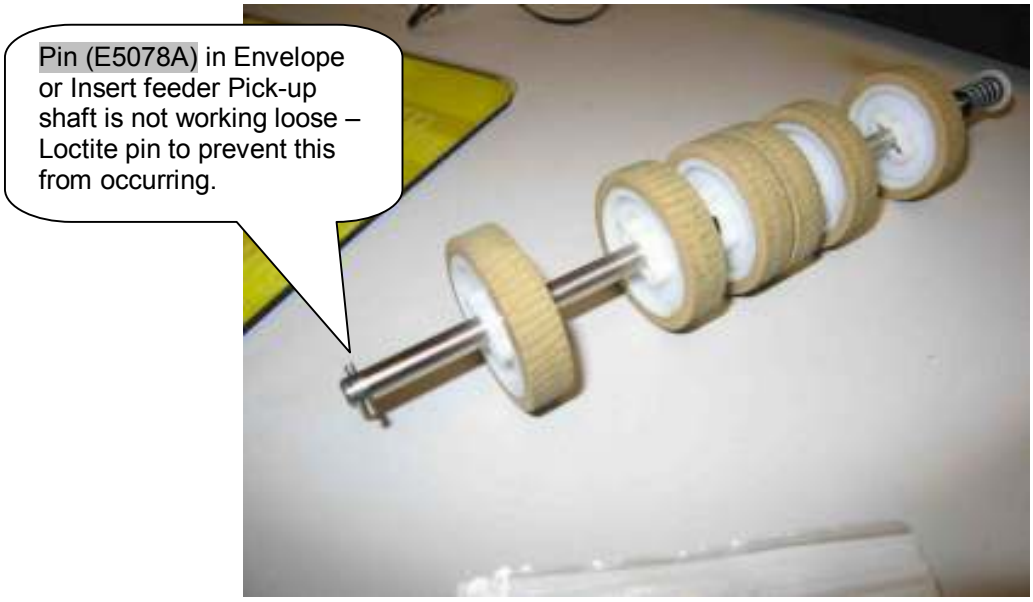
- Flap grip roller bar C4363A bearing shoulder changed to remove potential bearings snag.




## A-21. Feed shaft assembly - pin becoming loose and damages ribbon cable.

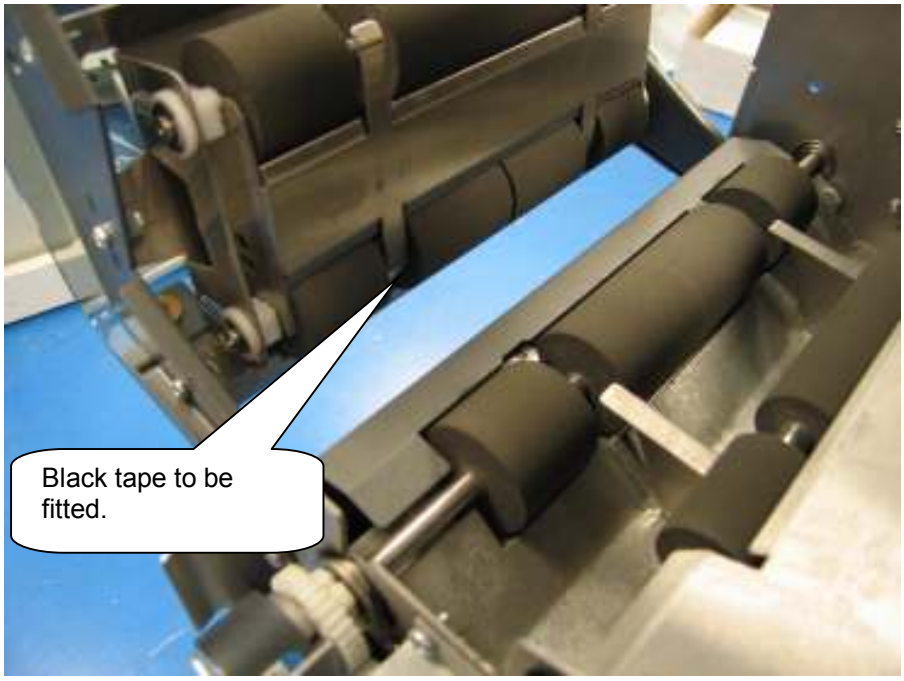
**Problem resolved on machine (effective from Sept 04)**

Check and ensure pin (E5078A) in the **Envelope or Insert feeder Pick-up shaft** is not working loose - see below. If so, it will damage the ribbon cable and short-circuit the relevant sensors. The corrective action in the field is to apply a dab of Green Loctite around the pin and any excess to be cleaned off to ensure the pin does not become loose.



## A-22. Sealer Closer Assembly (A7046A) - black tape fitted to prevent reflecting of metalwork - Field Option

There has been one instance of envelopes exiting the machine without closing the flap resulting in error 47 (jam at output sensor). Initially check by blocking/ clearing the closer output sensor (analogue reflective sensor). If the sensor stays blocked - at the first instance try moving the machine away from light. If this is not appropriate BLACK insulation tape can be fitted onto the closer overguide B7731A as shown below.



## A-23. AC Motor Fails to Stop on Opening of the Covers

**Problem resolved with firmware version V4.0.0.12 or V3.4.0.12 onwards (effective from Feb 06)**

Symptom
AC motor fails to stop on opening of the covers.

Please note that the solenoids and clutches are turned off and that the AC motor cannot be started unless the covers are closed

Machines affected
This may be a problem on any module, including the head unit, manufactured before June 2004. This equates to serial numbers GAZ or earlier.

Risk
This is a risk to the engineer only, not the operator. The engineer is at risk if relies on the covers as an emergency switch for turning off the AC motor. The operator is not affected as, in general, all dangerous moving parts are stopped on the opening of covers. **The exception to this is the Two-Plate-Folder module.** This is dealt with later.

Identifying the problem
To identifying this problem enter Supervisor menu, enter engineer password, select Insert Head or a Module, select 'Drivers' and then turn on the Main motor. Now open a cover, if the AC motor continues to run you have this problem.

The Two-Plate Folder Module
This module has been highlighted because the fold rollers are not clutched and could be a hazard to the operator in the unlikely event the PSU is replaced with an old build.

All Two-Plate-Folder modules shipped from factory have been fitted with latest build of boards and PSU and **do not** exhibit this problem.

! ! ! IMPORTANT ! ! !

The PSU on a Two-Plate-Folder **must only be replaced with a PSU carrying a yellow sticker** near the mains cable entry point. Failure to do so could result in a hazard for the operator.

## A-24. Engineers' Trim List Procedure

List of actions/checks to be carried out by Engineers is highlighted in this document. A copy is attached below:-

# TRIM PROCEDURES

1. Inspect Machine for damage and safety.
2. Check software versions and mandatory updates.
3. Clean and calibrate sensors in all modules.
4. Clean all fold rollers and inspect for wear or damage.
5. Check all track transport and drive belts for wear and fit.
6. Clean and check function of all solenoids.
7. Check all job settings are correct for envelope and insert sizes.
8. Check and clean wetter sponge and tank if necessary.
9. Check and test function of all feeder/folder units.
10. Test run the machine with customer's stationery.
11. Clean the customer's machine so it is presentable.
12. Complete the LOG book fully.

THE TRIM PROCEDURE IS MANDATORY WITH **EVERY** VISIT

Please make sure that you fully complete your worksheet

## A-25. Cleaning sensors and Calibrating in Supervisor Mode (123)

Engineers' to provide additional training to Operators to highlight ALL paper path sensors that may require cleaning, e.g. on the head unit - Envelope Deskew Sensor etc. Also, provide training to the Supervisor on how to calibrate sensors after cleaning within 'Supervisor Screen' – implemented on firmware version V4.0.0.12 or V3.4.0.12 onwards.

## A-26. Motor Stall Error 08, 50 or 1050 or slow paper speed 1061 (Ver. 3)

**Problem resolved on machine (effective from Sept 05)**

If the above errors have occurred, initially refer to previous tech tips for corrective actions.

If problem persists, conduct the following for each module **excluding** the head unit:

a) Connect the debug lead and using Am4go check the trace is being received.

b) Run up motor for a short period and then press STOP. (Note, this can also be done running paper).

c) Now stop the trace by clicking the OFF button (in am4go) at the top right of the trace window and look for the following PS mm/s: **Slowest=1060** Fastest=1100.

d) This is the paper speed and the **slowest should not be below 1040 mm/s.** If it is, then assuming nothing binding mechanically, the slotted disk should be changed (part number 180-794).

Note: The motors can be run up in (GUI) engineer mode (best done using Am4go to minimise additional trace information). If done this way the current speed is traced as follows Speed=1060mm/s instead of the above. Again this should not fall below 1040mm/s

Testing of the head is not conducted in this way - the envelope stop position variability should be a good indication (+/-2mm approx.).

There has been some confusion on the part numbers of the slotted disk sensors.
The table below lists all the ones used in various locations.

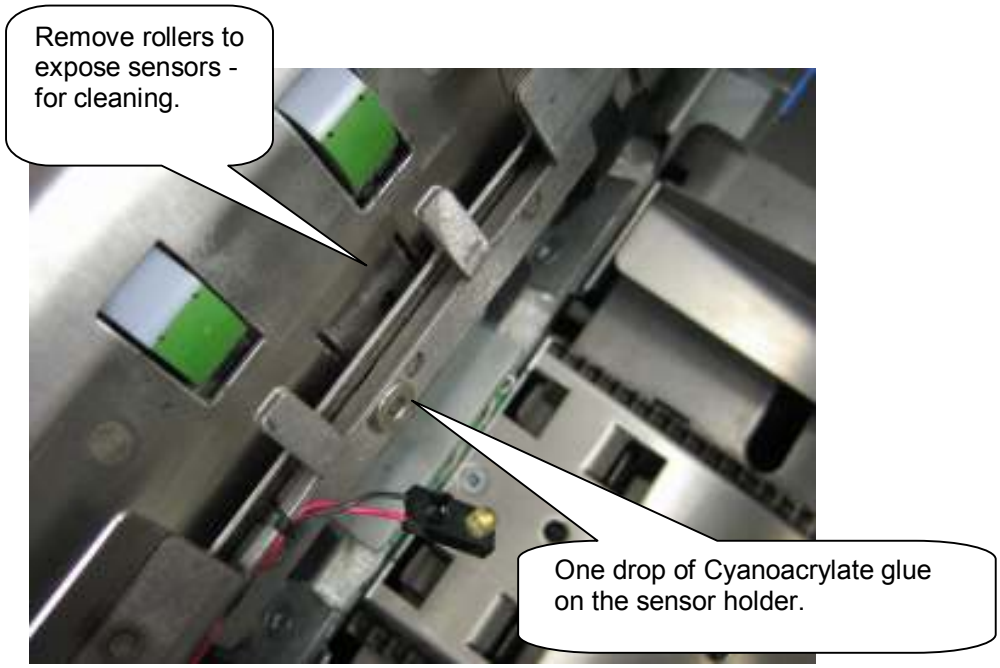
| Slotted Sensor Location | Module | Ref section in Manual | OLD Part Number | PCB Colour | New Number (if applicable) | New PCB Colour |
|---|---|---|---|---|---|---|
| Main Clock Disk | Insert Head | 4a-1 (S7) | 180-746 | RED | - | - |
| Side Guide Disk | " | 4a-1 (S16) | 180-689 | GREEN | - | - |
| Side Guide datum | " | 4a-1 (S15) | 180-689 | GREEN | - | - |
| Finger Disk | " | 4a-3 (S19) | 180-689 | GREEN | - | - |
| Finger Datum | " | 4a-3 (S21) | 180-689 | GREEN | **180-776** | BLUE |
| Fingers Out | " | 4a-3 (S20) | 180-689 | GREEN | **180-776** | BLUE |
| Wetter Home | " | 4a-1 (S6) | 180-689 | GREEN | **180-776** | BLUE |
| Separator Adjust 1 | Feeder | 4b-1 (S14) | 180-689 | GREEN | - | - |
| Separator Adjust 2 | " | 4b-1 (S15) | 180-689 | GREEN | - | - |
| Main Motor Disk | " | 4b-1 (S18) | 180-689 | GREEN | **180-794** | YELLOW |
| Fold Plate 1 Disk | 3PF | 4c-1 (S8) | 180-692 | GREEN | - | - |
| Fold Plate 2 Disk | " | 4c-1 (S7) | 180-692 | GREEN | - | - |
| Fold Plate 3 Disk | " | 4c-1 (S9) | 180-692 | GREEN | - | - |
| Main Motor Disk | " | 4c-1 (S1) | 180-689 | GREEN | **180-794** | YELLOW |

Note, the wide slotted sensors part number 180-776 is now driven harder (in software) to ensure correct set-up.

## A-27. Envelope Deskew Sensor Errors

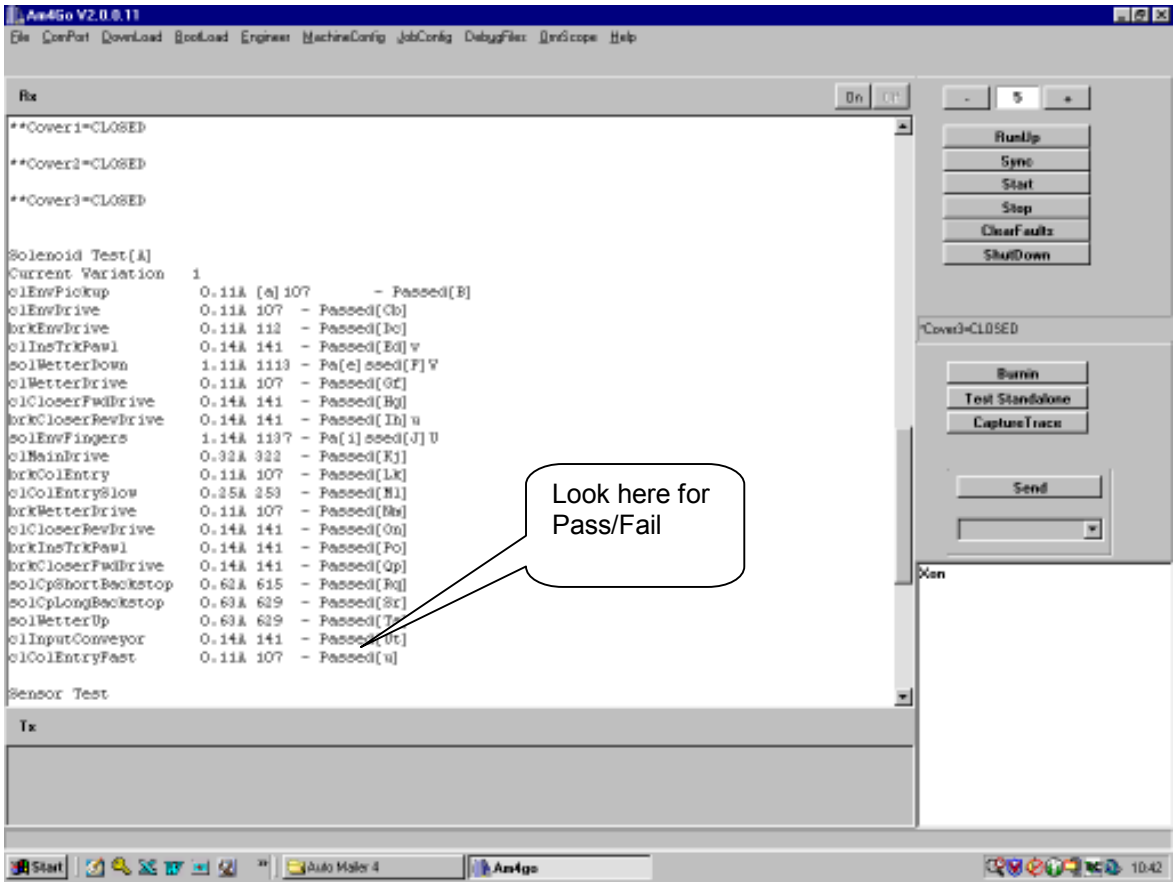
**Also Read Tech Tip A-25 and A-51 sub note 1.**

This sensor is susceptible to capturing dust and movement, which results in error 107 (clean envelope deskew sensor).
At first instance advise customer on how to clean by removing the envelope pick-up rollers and then using PFE approved air duster blow out both parts of the sensor.
In some instances we have found there is too much movement within the sensor holder - if this is the case it is advised to place one drop of Cyanoacrylate glue on the sensor holder as shown below. Once aligned re-calibrate sensor and check by running envelopes for above error. A new sensor bridge (B1797A, issue 4) has now been modified to prevent the sensor from moving within the holder and can be fitted if required (optional).



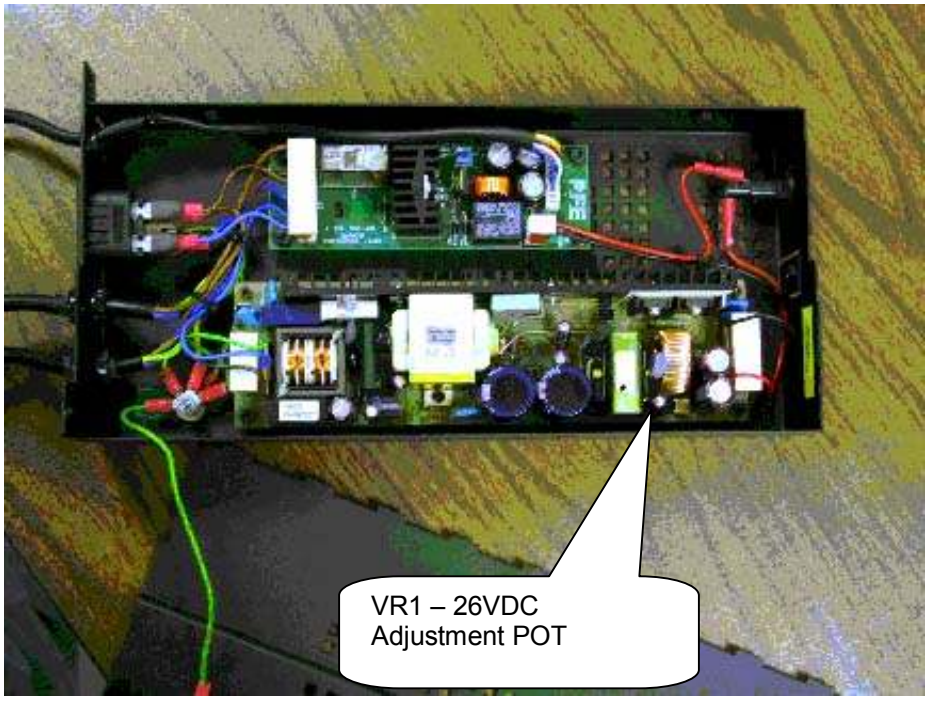
## A-28. Error 56 (version 3) - Excessive Current

If this is displayed on the GUI at switch ON - this means there is a potential short on the applicable module.
Plug am4go diagnostic tool into the applicable module and switch ON machine to display the following as shown below (example trace from Head module). Any failures indicate potential areas in the machine that may require investigation. In the case below all have passed and no problem exists.



## A-29. Power Supply 26V low (error 1054 on version 3 on upwards)

When Upgrading to Version 3 Firmware – there is a potential for the above error to occur. Version 3 of the firmware performs an analysis of all system components at power up or reset. After upgrading to Version 3 firmware you may start getting error 1054, 26Volt Supply is low. There is an adjustment that can made on the module Power Supply board to adjust 26VDC. This potentiometer (VR1 – see picture below) is very sensitive. Very small movements can make 5 or more volt adjustments. Adjustments can be checked via the GUI display, or using a meter. To do the adjustment with a meter, dis-connect the 24v cable from power supply to the module board. Measure voltage on the power supply across YLW (pin1) and BLK (pin5 or 6) - this should be about 26v.



## A-30. MaxiMailer Installation Instructions Updated

Installation instructions for Maxi have now been updated to include Maxi Plus (see latest Service Manual Auto4s1).

## A-31. MaxiMailer Plus Installation Instructions

MaxiMailer Plus Installation Instructions have also been created - Ref. K4040A document.
Also, existing is K4039A MaxiMailer to MaxiMailer Plus upgrade.

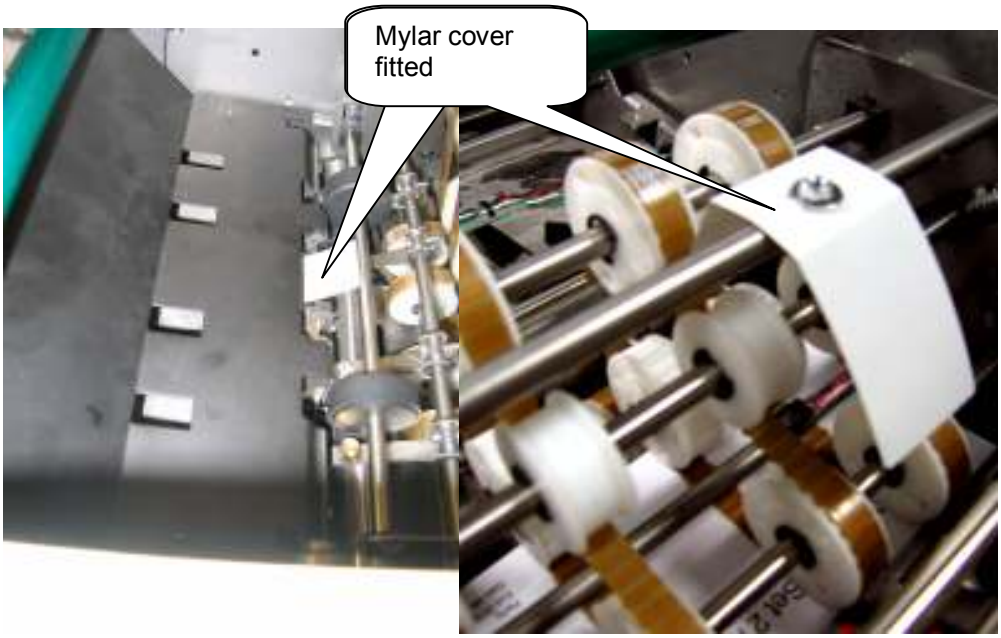
## A-32. Version 3 downloading guidelines document

The latest version (June 05) can be found on the PFE Technical Web page.
Please read and implement before downloading new MaxiMailer firmware.
Note: During November 2005 the latest MaxiMailer / MaxiMailer Plus Service Manual will be available on the website for download. This will be updated at regular intervals.

## A-33. Error 60 (Version 3)- sensor stuck low (collate pocket entry or input conveyor)

**Problem resolved on machine (effective from Sept 05)**

This is caused by direct sunlight or lighting above / over the head unit which effects the above sensors at switch ON. At the first instance move the machine to prevent this from occurring (ref installation instructions). If this is not possible then a shield can be fitted as shown below.
The cover (B7502F, Issue 2) has been redesigned and can be fitted if required (optional).
With regards to the input conveyor again Mylar tape can be fitted as shown below:-




**Also, please note during calibrating the sensors - ensure all the covers are closed.**

## A-34. Shipping modules separately

Individual modules for MaxiMailer are to be shipped separately, either for installation on site or for stock. From software version 3.1.x.x onwards, **it is important that each module on the machine is running the same software version.** This applies to insert head, standard feeder, tower feeder and 3-plate folder. Only the first 2 digits of the version number need be the same; the second 2 digits do not need to match.

In order to identify the software version, each module package carries a label on the outside. This is a silver, credit-card sized label, showing product code, serial number and, as from V3.1.x.x, the software version also.

If a module of an earlier software version is fitted, it must be upgraded.

With the release of version 4, all machines now have a security 'dongle' (firmware lock) added to the CPU PCB. However, for machines in field (without a dongle), a new firmware version 3.4 has been released. This has the same functions and features as version 4 but operates with no dongle.

**Therefore please note that modules running V3.4.x.x firmware are NOT compatible with modules running V4.0.x.x and vice versa. This applies to insert head, feeders/folders and CardFolder.**

## A-35. F1375A 25T pulleys

25T XL pulley F1375A is used in four different assemblies on the MaxiMailer. These have previously been made of aluminium, which is now being phased out to be replaced by moulded acetyl pulleys. If pulleys are ordered now, moulded acetyl items will be supplied, which can be used as a direct replacement. Any existing spares stock of aluminium pulleys can also be used. Machines recently supplied will be fitted with moulded acetyl pulleys.

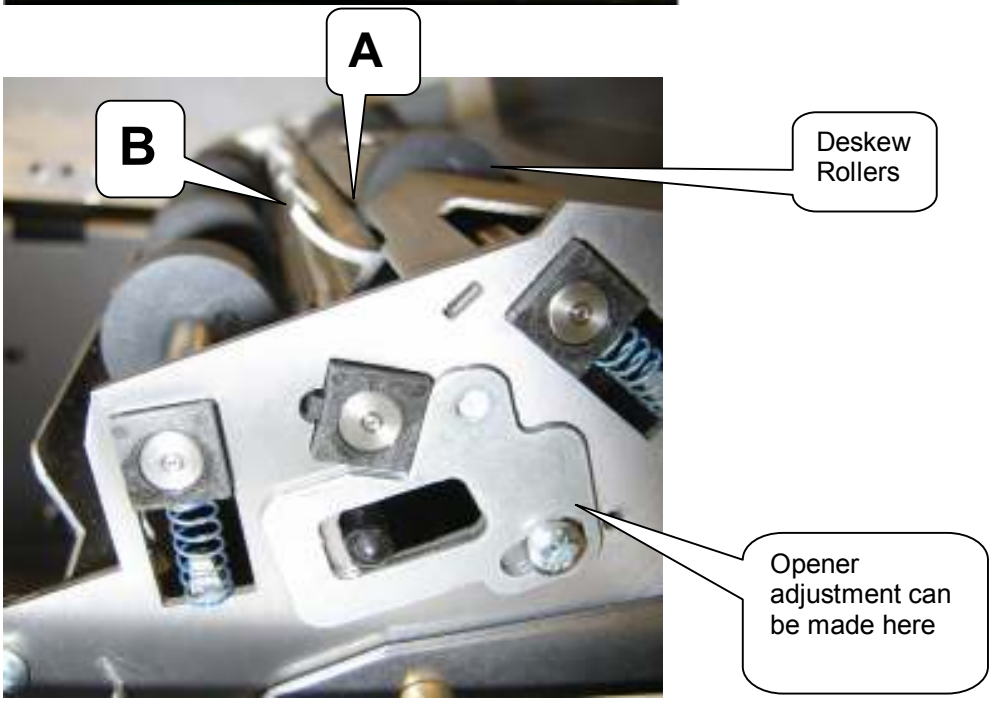
The four assemblies where the pulley is used are:

Overguide Assembly A7117A
Lower Conveyor Assembly A7036A
Upper Conveyor Assembly A7035A
Head Upper Clam Assembly A7041A

## A-36. Flap catches on the Envelope Opener (Field Option) – see A36A for 2007 updates

There have been instances of the flap missing the opener due to the curl on the flap (caused by excessive glue). At the first instance check set-up of the opener as shown below:-
A - when the deskew rollers are compressed (when the pocket is closed) ensure opener edge is NOT touching deskew rollers.
B - ensure this edge is just clear when the opener is in the 'down' position thus allowing the drive roller to turn freely.

If problem persists, then cut a piece of Mylar (H0011A) about 32 to 33mm in length, depending on how much overhang is required to catch the flap as shown below.
Round or taper the corners that will overhang. Then using double-sided tape (E0188A) secures the Mylar piece to the Opener Assy, utilizing the natural curve of the Mylar.

## A-36A. Flap catches on the Envelope Opener – Jan 2007 Update

**Envelope opening issues** with particular curly flaps – a modified extrusion is now available and can be fitted to overcome this problem (assembly number is A7380A which is fitted with envelope opener curled flap C7419A).

## A-37. Upgrading MaxiMailer to MaxiMailer Plus

For upgrading a MaxiMailer (GUI version) to MaxiMailer Plus (PC version) - please refer to the Fitting Instructions K4039A.

## A-38. Error 57 (Version 3 and upwards)- 5v supply low

This error can cause other faults like for e.g. code 202 (clear collate pocket) - this implies a possible short that is taking the supply down. Corrective actions check the relevant sensors (collate pocket, collate pocket entry and input conveyor) either using am4go or using the engineer function in the GUI. Then check ribbon cables and splitter boards associated with the above sensors. There have been some instances where the pawls catching on the ribbon cable can cause this problem - check this by removing the pocket backstop Assembly A7058A (pg 4a-23, Service Manual).

## A-39. Plug and Play

This is a new feature with the latest firmware - at power-up the machine checks for the number of modules fitted, type and calibration information.
This is the **detected** machine configuration. The detected machine configuration is then compared with the programmed machine configuration. If there is a miss-match, the user is given the option to accept the detected configuration, accept the current programmed configuration, or go to the engineer setup screen and edit the current configuration.

The key benefits of Plug and Play are:
if a module is added, removed or changed to a different type, the new configuration will be detected and can be readily updated
if a board is changed on the head or module, the new board will be detected and settings can be readily restored from the INI file
if a new PC is fitted, the configuration can be 'read' from the machine

**IMPORTANT : DIP switches must be correctly set to the module address on power-up!!**
If new CPU board fitted on GUI – Head, then accept settings.
If new CPU board fitted on GUI – Module, then edit and configure.

## A-40. Rubber Roller Restorer (E0483A)

A new cleaning agent is available for cleaning ALL rollers on the MaxiMailer and MaxiMailer Plus. This is water based cleaner, which is aggressive enough to remove toner from the rollers.

## A-41. Updates to MaxiMailer Software, Firmware versions and introduction of MaxiMailer Special Edition – ref TT A-41A for Jan 2007 Updates.

## Also refer to TB1420/104 for additional actions.

There are Hardware and Firmware Compatibility issues associated with the introduction of the MaxiMailer Special Edition.

A security devise (dongle) is fitted to all Insert Heads to distinguish from other products in the MaxiMailer range.

The **dongolising of the MaxiMailer requires a new version of firmware** - this will be **version 4**. It also requires a new issue of **the CPU PCB in the Insert Head - this will be Issue 7 or later.**

There are backward and forward compatibility issues that will complicate some processes e.g. the ordering of CPU PCBs as spares.

**The compatibility rules are:**

1) Version 3 firmware will not work on an Insert Head CPU PCB of issue 7 or later.
2) Version 4 firmware will not work without a security dongle.
3) An Issue 7 (or later) Insert Head PCB will not work without a security dongle.

If a replacement issue 7 or later CPU PCB is required, it must be returned complete with its dongle. If a replacement CPU earlier than issue 7 is required, it must be returned with the machine details for a replacement issue 7 CPU with dongle.

The dongle is a separate PCB with a coded EPROM and is mounted just above the CPU. On production machines, it is secured to the chassis with screws. For retrofitting, a Dongle Bracket kit A3316A has been created for securing a dongle PCB to an older Maxi head

**Product Code Structures for SE MaxiMailer**

1402AA comprises: 1430AB, 1450AA, 1440AC, SE Logo, SE 2P Dongle
1403AA comprises: 1430AB, 1452AA, 1440AC, SE Logo, SE 2P Dongle
1404AA comprises: 14 30AB, 1420AA, 1443AA, SE Logo, SE 3P Dongle
1405AA comprises: 1430AB, 1452AA, 1443AA, SE Logo, SE 3P Dongle

**Notes:**
Any extra feature e.g. an accumulator for the 1443, will require an additional order to the product codes shown.
Operating Instructions and Technical manuals will be generic for the Standard MaxiMailer and the MaxiMailer SE.
PCB's supplied will not be loaded with firmware. Dongles will be specific to the machine configuration that is specified by the customer. The firmware V4 (or later) covers all variants of the machine and works in unison with the dongle to adapt to the machine to which it is fitted.

**Spares policy and Pricing**
1) Only issue 7 (or latest) PCB's will be supplied as spares.
2) An issue 7 PCB will not work as a direct replacement for any previous issues without the correct dongle required for the machine under repair.
3) All parts will be chargeable, through the cost of the dongle will be refunded using the RMA system when the old PCB has been received by PFE UK.

# Technical Tips - INSERT HEAD Module

**Switching the machine off and on**

For V4, if for any reason the machine is switched off and then on again (e.g. to clear an error), the machine must be left for at least 5 seconds after switching off before switching back on. If not, the error message ' Security device missing' will be displayed.

**Dongle Board, part numbers and fitting:-**

123-800 for standard MaxiMailer
123-801 for MaxiMailer SE (with 2 Plate Folder end module).
123-802 for MaxiMailer SE (with 3 Plate Folder end module).
123-803 for MaxiMailer with extended special features.

**To re-fit a Dongle board to an existing machine (pre Oct 05) – a dongle bracket kit is required (A3316A). This contains 182-745 loom Maxi dongle link, E0033A double-sided tape, E0349Ax2 spacers and R6053A dongle bracket.**

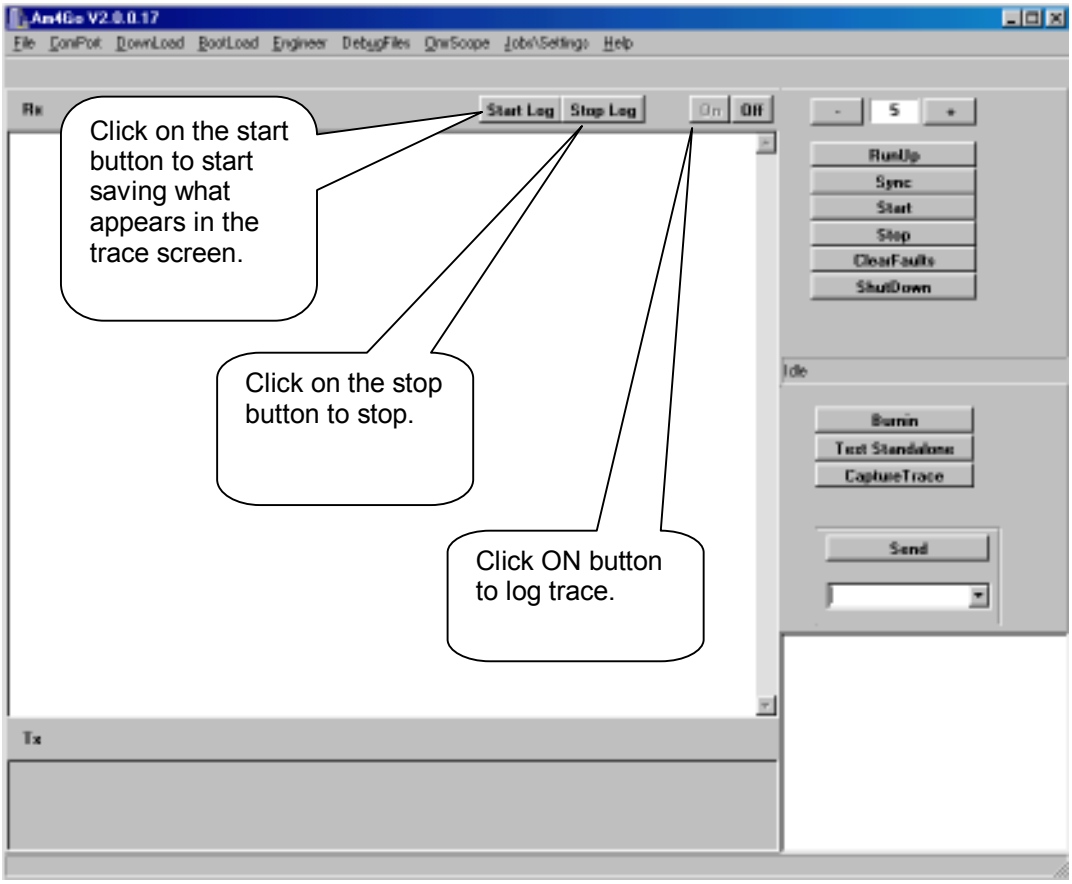
**Updates to MaxiMailer Software and Firmware versions continued…(see TT Note A-41A for Jan 2007 Updates).**

| | Pre-Dongle Head CPU Earlier than Issue 7 | | Dongle Head CPU Issue 7 (or later) | |
|---|---|---|---|---|
| **Module** | **MaxiMailer (GUI) version Firmware** | **MaxiMailer (PC) version Firmware** | **MaxiMailer (GUI) version Firmware** | **MaxiMailer (PC) version Firmware** |
| **Head Unit*** | Am4HeadWithGUI_PD_V3-4-x-x.am4 | Am4PlusPC_PD_V3-4-x-x.am4 | Am4HeadWithGUI_V4-0-x-x.am4 | Am4PlusPC_V4-0-x-x.am4 |
| **IMOS PC Software** | | Installation File: Rev_2.0.1.0 Upgrade file (V2.0.1.0) | | Installation File: Rev_2.0.1.0 Upgrade file (V2.0.1.0) |
| **1 bin Standard Insert Feeder*** | Am4Feeder_V3-4-x-x.am4 | Am4Feeder_V3-4-x-x.am4 | Am4Feeder_V4-0-x-x.am4 | Am4Feeder_V4-0-x-x.am4 |
| **2 bin Tower Insert Feeder*** | Am4Feeder_V3-4-x-x.am4 | Am4Feeder_V3-4-x-x.am4 | Am4Feeder_V4-0-x-x.am4 | Am4Feeder_V4-0-x-x.am4 |
| **Card Folder Mk1*** | Am4Feeder_V3-4-x-x.am4 | | Am4Feeder_V4-0-x-x.am4 | |
| **Card Folder MK2** | Am4Feeder_V3-4-x-x.am4 | | Am4Feeder_V4-0-x-x.am4 | |
| **2 Plate Folder** | Am4Feeder_V3-4-x-x.am4 | Am4Feeder_V3-4-x-x.am4 | Am4Feeder_V4-0-x-x.am4 | Am4Feeder_V4-0-x-x.am4 |
| **3 Plate Folder (single and 3 bin)*** | Am4Tpf_Issue2_V3-4-x-x.am4 | Am4Tpf_Issue2_V3-4-x-x.am4 | Am4Tpf_Issue2_V4-0-x-x.am4 | Am4Tpf_Issue2_V4-0-x-x.am4 |
| **Am4go Application*** | Am4Go_V2.0.0.17 | | PFETraceTool V3-0-0-6 | |
| **Latest GUI Simulator** | B3.x.x.x | | B4.x.x.x | |

* Now called PFE Trace tool and can be found on the PFE Technical Web Page

## Latest Version of Am4go is V2.0.0.17 – this version is easier to capture the trace.

With the latest version of Am4go (V2.0.0.17 onwards) it is advised to capture a trace using the 'Start Log and ' Stop Log' feature. This will automatically save the trace in Traces folder within this application, for e.g. if the amg4o is located on the 'C' drive then trace will be stored within C:\Am4Pc_Software\Am4go\Traces



## A-41A – Software/Firmware Updates – Jan 2007

**SOFTWARE V2.6.x.x (Maxi Plus),**
**FIRMWARE V4-1-x-x (Dongle) or PD4-1-x-x (Pre-Dongle) and**

### 1.0 Introduction

There is now a new release of software and firmware for the MaxiMailer Plus (PC machine) and MaxiMailer (GUI version).
In addition, a new version of the Diagnostic tool Am4go is now available.

The upgrade to this new software and firmware issue is available as follows:-

From the PFE web site (in the technical area). This version is limited to software and firmware and does not include documentation. Latest service manuals and other documentation is also available on the website - these can be found on the 'Downloads' drop-down menu.
In addition, the document 'Instructions for upgrading MaxiPlus Software' can also be found which must be read before carrying out any updates.

From the technical support department at maxisupport@pfe.co.uk (on CD ROM) by ordering ES1400AA. This version is a full upgrade including documentation.

A service charge is applied to this software to cover the costs of distribution.

### 1.1 Latest Maxi Plus (PC)

Software: V2.6.2.0
Firmware for Head is Am4PlusPC_V4-1-0-7.am4 or PD4-1-0-7.am4;
Firmware for Feeder modules is Am4Feeder_V4-1-0-7.am4;
Firmware for 3 Plate Folder Am4Tpf_Issue2_V4-1-0-7.am4

### 1.2 Latest Maxi (GUI Version)

Firmware for Head is Am4HeadwithGUI_V4-1-0-7.am4 or Am4HeadwithGUI_PD4-1-0-7;
Firmware for Feeder modules is Am4Feeder_V4-1-0-7.am4;
Firmware for 3 Plate Folder Am4Tpf_Issue2_V4-1-0-7.am4

### 1.3 Backward Compatibility

**These versions are NOT backward compatible to previous Software and Firmware releases.**

You must install either V4-1-x-x to the head module for dongle machines or PD4-1-x-x for Pre-dongle machines. Note, dongle firmware dependency is now only on the head module – the feeder and folder firmware for both dongle and pre dongles machines will be the same.

Please remember it is always good practice to backup important files before upgrading the software, particularly the .INI files and the data files folder. Also, important to 'Stream Jobs' before download on the Standard MaxiMailer (GUI).

## 2.0 New features and Changes

2.1 Daily Post:
When running the daily post job (prime) the timeout has now been extended to 1.5 minutes to allow operator more time to prepare the next group.
Deskew settings are now programmable (Off, Low, Medium, or High).

2.2 Batching mode:
Batch, pause and auto-restart modes now work correctly. Previously, during the pause the auto-end button was pressed, the machine would start one more group from the next batch - this was unnecessary and now the machine just stops.

2.3 Hopper feed counts:
Increased to 24 (was 8) on the GUI to match the Maxi Plus.

2.4 Insert feeder hopper Deskew modes:
Feeders: Defaults to OFF when job is programmed with Separator posn C/D, and to LOW when A/B.

2.5 Feeding thicker booklets on standard feeder:
The pickup rollers stay on for longer (time depends on doc length) to assist feeding of thicker booklets.

2.6 Cascading on 3PF:
LED flashes to indicate which hopper requires loading next.

2.7 MaxiPlus (PC):
Refill timeout extended to 50secs.

Barcode Numeric 2&5 now available on the MaxiMailer Plus – extend feature ONLY available at additional cost.

Updates to Data logging and statistics.

Conditional logging of all labels – optional extra at even more additional cost.
Added and implemented 'Calibrate reader' in Twiddle screen for hoppers.
Enhanced calibration mode Cal-Check-Go (No Confirmation).

Flush Button added to ‘Run Screen’.

Firmware download: this process has been made more reliable but requires the above firmware to be first loaded. To do this, either use the am4go (via laptop) or use the PC firmware download and set the parameter to Packet size = 1, Send interval = 1 and Overflow timeout = 10 - to ensure the above is loaded.
Once loaded to all the modules set the parameters to Packet size = 5, Send interval = 1 and Overflow timeout = 10 as default and reload the above files again.

Firmware downloading via Broadcast Channel – major benefits are: speed, reliability and better reporting. All modules can be downloaded using this feature by selecting all files for downloading (e.g. head and feeder and 3Plate Folder).

Barcode reading hoppers: Barcode reader can now be setup in the Run Twiddle Screen.

Full Engineering Diagnostics for barcode reader setup. Checks decodes/sec, read percentage and displays label read.

DTI module reports analogue states in engineer mode.

Autoending: Previously if the machine had autoended with an empty prime hopper and the machine had timed out. It was impossible to get the PC to understand the machine was empty, and the only way around was to run one more group and hen press autoend while the machine was running. Now you can press autoend button to complete the job run and mark reading sequences when the machine empty and in the ready state.

Document ID implemented. Available for all barcode-reading hoppers (Datacard ONLY).

Current Languages support by PC: English, German, French, Spanish, Flemish, Dutch, and Croatian.

2.8 Envelope Feed Mode Only
This has been introduced to help with machine set-up.
Maxi Plus – F3 on run screen.
GUI – Supervisor menu.

2.9 OMR Features
OMR reading feeder available.
Global matching available on Plus only.

2.10 Improvements to Insertion
Envelope settling times and Finger activation optimised for greater reliability.
Envelope Deskew times increased.
Dual envelope loading feature removed.
Single envelope loading times has been improved.

The increased delays at speed zero allow enough time to observe the envelope position and finger entry before the documents are inserted. This is very useful when trying to analyse any problem areas.

2.11 Barcode Reading:
Max. barcode label length increased to 25.
Barcode reading feeder available.
Global matching available on Plus.

2.12 CardFolder module
Barcode reading and multiples now available on the CardFolder.
Fold consistency and detent positioning consistency improved with change of two clutches.
Throughput increased to 2000/hr.
Now user is correctly prompted to remove packs from output rollers.
Resolved problem autoending correctly when feeding multiples from CardFolder.
Calibration cycle works at correct speed when feeding multiples.
Improved error handling and recovery.

2.13 Special Edition MaxiMailer
New SE dongle type introduced – one module 3 plate folder configuration.

2.14 What you get with a 123-804 Extended Features Dongle (not available on SE machines).
Local matching ( FOG or EOG) 3PF top hopper to mid hopper.
Reverse group sequencing and start count control.
Extended OMR pitches (1/10$^{th}$, 3/8mm, 4mm, 5.3mm).
Invisible gate mark (i.e. a single EOG mark only).
Demand Feed (FOG and EOG).
Barcode on last page fed only.

2.15 PFE Trace Tool V3.0.0.6 – formerly called AM4go
Name changed to PFE Trace Tool because it now supports the Mailer 5.
Minor cosmetic improvements.

2.16 GUI version specific

Advanced fold mode changed such that any of the 4 paper orientations can be set and to make advanced mode easier to use – the user has complete control over orientation, paper size, address and fold plate lengths. Entry to advanced mode can now also be done by selecting a new fold type.

Machine now checks that unfolded forms fit the envelope.

Mark reading feeder – now supports the setup of the OMR sick head in the run window (only if prime for current job is using this OMR head type).

OMR head voltages readout and block/clear states in GUI sensor window.

Barcode set-up option in enabled in running window to test functions. The operator can select 1) % Read test 2) Decodes/s c) label only reporting with audio feedback (beeps) or d) laser OFF. This functionality applies only to the currently active barcode scanner in a barcode reading job.

Firmware version compatibility check added to GUI – first two numbers are checked (e.g. 4 and 1 in version “4.1.0.7”) for each module against the head unit and will a warning if it fails.

‘Delete jobs’ – in user access section of Supervisor window removed. As before only users with supervisor status can delete jobs.

2.17 Miscellaneous fixes.

In engineer mode the Tower cover was displaying the front cover as the top cover and vice versa – now corrected.

Machine could lockup with the following condition: Jam at envelope hold point area, but the insert(s) slipped under the envelope and exited the machine.

MaxiPlus now reports the status of foldplate 1 motor in engineer test mode on 2-plate folder.

Prefeed 1 and 2 reports the analogue values in engineer mode.

Command added to exercise the foldplates to there limits repeatedly until another command is sent to stop them (Maxi Plus)

## A-42. Saving Jobs and Machine Settings -

There is a risk of losing all these settings during a firmware download.
For general guidance it is advised to stream whenever possible and especially when the first 2 digits of the firmware level are up-issued, e.g. 3.1.x.x to 3.2.x.x.

NOTE: Although it is mentioned to stream settings, problems have been experienced - therefore it is suggested to record all your settings and jobs manually.

Manual trace of machine and Job settings:

NOTE: Adjust address is not traced.
Connect to head using Am4go.
Select the job you want to record and go to the run window on the GUI.
Send *I and wait for information to be traced.
Click the OFF button above trace window and copy relevant trace to a text document of your choice.

Now click the ON button above trace window and repeat for other jobs of interest.

*?3 traces all machine settings and all jobs.
This is available on V3-2-0-5str and available from V4-0-0-6 and V3-4-0-6 onwards.

The steps required for streaming are as follows:-

1.Open am4go.exe 2.0.0.17 or later diagnostic tool (Ref. below) and plug debug box into head serial link (J14) - check machine is communicating as normal.

2. Download V1-0-2-40 to head unit only. [1]

3. Click Jobs\Settings to bring up 'Stream Jobs and Settings' box.

4. Click 'SaveToFile' and wait until the scrollbar is completed. This file is stored under your am4go application within a 'Jobs folder'. Note down the file name and location if required (xxxxxx.txt file). Check to ensure the file is stored as mentioned in above folder.

5. Power Off/ON

6. Download new firmware as per normal starting from the *last module and working forward towards the head.*

7. Power Off/ON

8. Re-connect debug lead to head unit and type *XR- in am4go (send box) and click send to accept. This will reset all nvram - Note, that the GUI will display 'Reconfigure machine'. Note - DO NOT RECONFIGURE MACHINE.

9. Power Off/ON

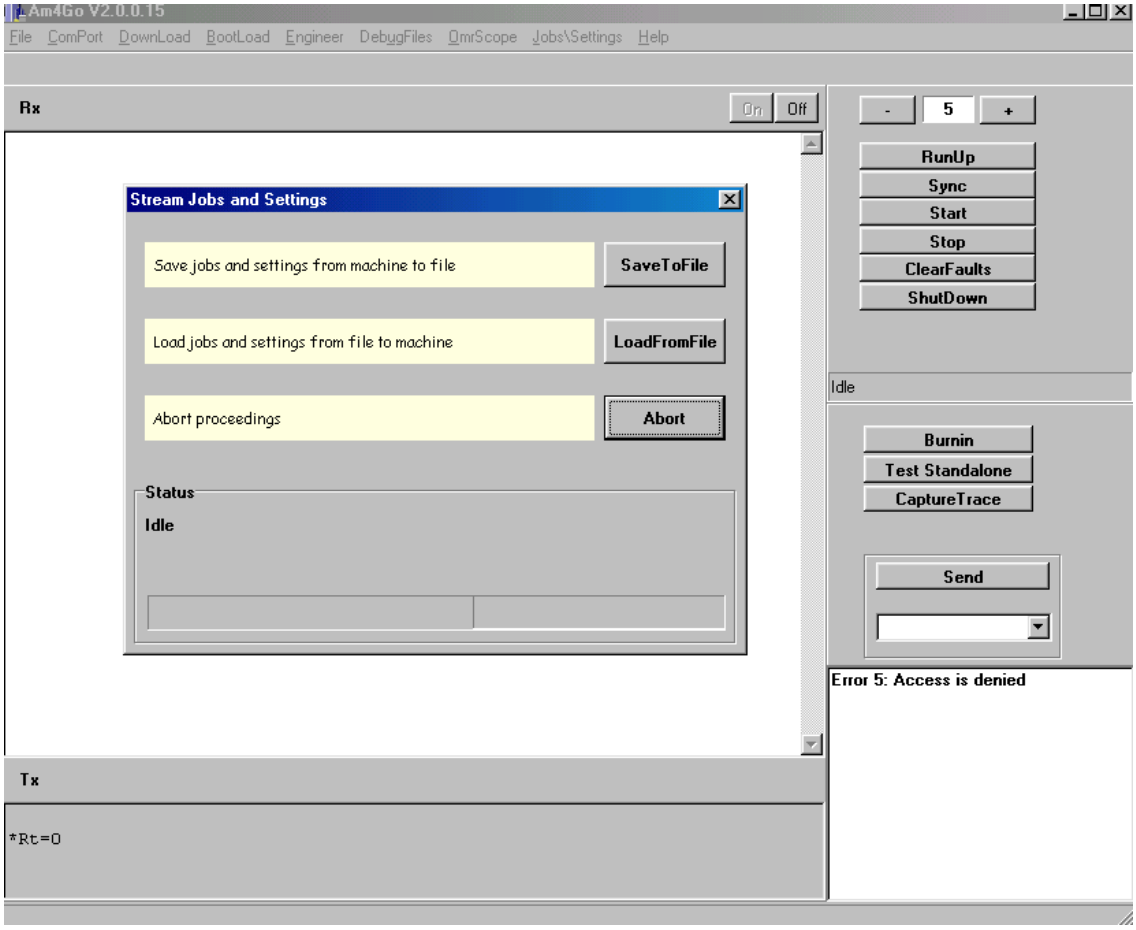
10. Re-connect debug lead to head unit - then re-click Jobs\Settings to bring up 'stream Jobs and Settings' box.

11. Click 'LoadfromFile' - select file as per 1.1.4 and wait until the all record have been streamed back into the machine.

12. Switch off machine and re-start. Notice that machine will have reconfigured and retained all settings and jobs.

[1] Not Applicable if already on V3-1-xx or later.

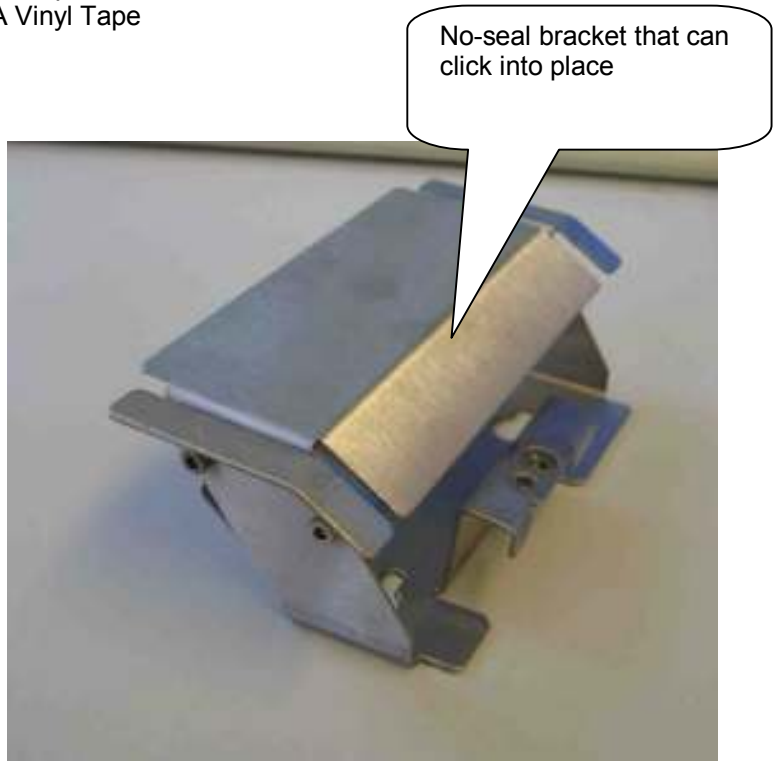
NOTE: if you are running firmware version V3.2.0.5x then you will require a special version V3.2.0.5STR for streaming.



## A-43. Envelope flap catches on the Sealer Ski (B7464A) when running in No Seal Mode - Field Option

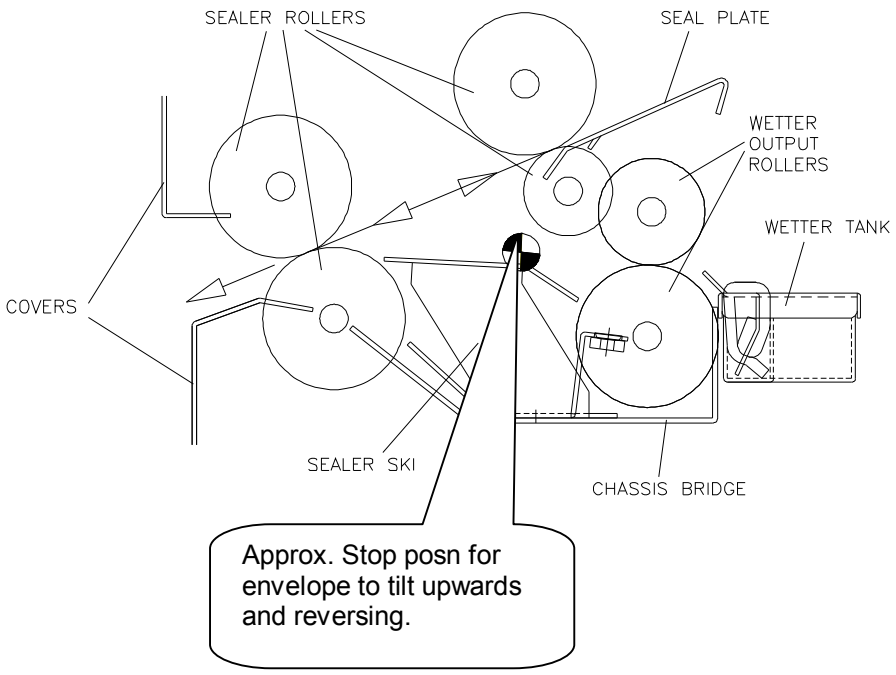
If there is a requirement to run the machine in NO-Seal Mode and closing flaps - there is a potential with certain envelope flaps to catch on the sealer ski. If this occurs a no seal bracket (B9120A) can be clicked into place to provide support of the envelope flap as and when required. Note that this part can only be fitted with the latest version of the sealer ski (B7464A issue 2 or later).

**Parts required:**
1x B9120A No seal bracket
1x B7464A Sealer Ski (latest version)
4x P2278A Pusher Pivot
4x E2771A M3x8 Cap Hd St. Steel
0.07m x E0422A Vinyl Tape



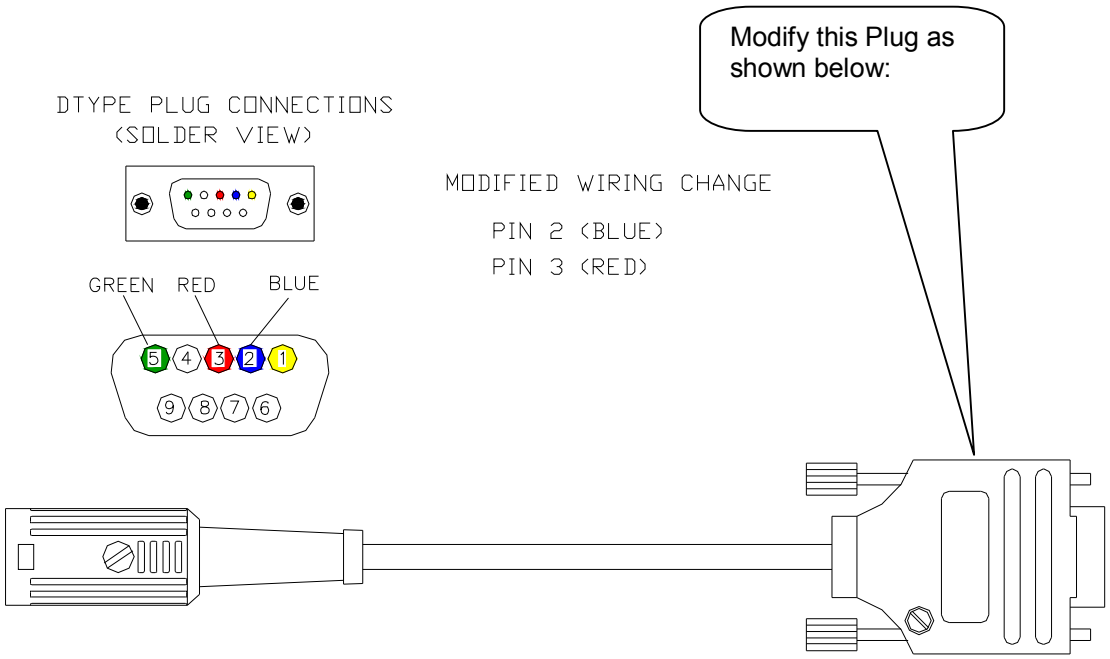
## A-44. Envelope crashing at Reversing / Closing

If this occurs carry out the following actions:
Observe and run machine at slower speeds with the head side cover linked-out.
Check that the reverse position allows the envelope to tilt upwards and position itself neatly into the nip of the seal rollers near to the seal plate as shown below.



## A-45. Downloading via head

To download directly to the head unit via the RS232 connector (Right Hand Side - Socket) located at the rear of the machine the following actions are required:-
Modify debug box **184-176** D-Type Plug connections Pin 2 = BLU and Pin 3=Red as shown below.
Remove the Main Cover Lower (B7745T) and connect the serial connector on the Head PCB (J14).
Connect modified lead as per (a) to rear of machine for downloading and diagnostics.



## A-46. MaxiMailer Plus PC set-up Instructions

**1 INSTALLATION FOR DEMONSTRATION ONLY (e.g. LAPTOP)**

1.1 CAN DRIVER INSTALLATION
1.1.1 In folder IXXAT082005, double click CDSTART.EXE
1.1.2 Click ENGLISH or DEUTSCH
1.1.3 Click Driver Installation
1.1.4 Click VCI Version 2.16 for Windows 9x/Me/2000/XP + Service Pack 2
1.1.5 Follow the instructions and install the drivers

1.2 M4GO INSTALLATION FOR PFE MAXIMAILER PLUS
1.2.1 In folder PFE MAXIMAILERPLUS\REV_1.1.0.4 click SETUP.EXE
1.2.2 Follow instruction and install the drivers

**2 INSTALLATION ON MAXIMAILER PLUS MACHINE PC**

2.1 CAN-CARD DRIVER INSTALLATION
2.1.1 In folder IXXAT082005, double click CDSTART.EXE
2.1.2 Click ENGLISH or DEUTSCH
2.1.3 Click Driver Installation
2.1.4 Click VCI Version 2.16 for Windows 9x/Me/2000/XP + Service Pack 2
2.1.5 Follow the instructions and install the drivers

2.2 CAN-CARD HARDWARE INSTALLATION

2.2.2 If you have a PCI Card (179-736), follow the instruction in the manual and install the card in the PC
2.2.1 If you have a USB-to-CAN (179-780 + 179-781 connector) Compact, connect it to a USB port on the PC ( always use the same USB port in future). Double click on file USB-CAN.REG in the PFE MAXIMAILERPLUS folder

2.3 M4GO INSTALLATION FOR PFE MAXIMAILER PLUS
2.3.1 In folder PFE MAXIMAILERPLUS\REV_1.1.0.4 click SETUP.EXE
2.3.2 Follow instruction and install the drivers

## A-47. Envelope side guides becoming Loose

The side guides are now held secure using Torx screws, which provide greater screw security - **(Implemented June 06)**

Service engineers will need the T20 size Torx tool.

Torx Screws currently used are:

E2828A (M4 x 8 CSK. TORX HD M/C SCREW) - to be used in place of E2535A or E2668A, On A7227A Tower Feed Tray, 4-off required, A7031A Feed Tray Assy. (Feeder) 4-off required & A7061A Envelope Feeder Assy.4-off required.

E2832A (M4 x 10 TORX HD TAPTITE SCREW) - to be used in place of E2730A, on A7071A Side Guide Rack Assy. 4-off required

E2829A (M4 x 8 TORX HD TAPTITE SCREW) - to be used in place of E2701A on A7041A Head Upper Clam Assy. 8-off required.

E2826A (M4 x 8 TORX HD M/C SCREW) - to be used in place of E2701A, on A7036A Lower Conveyor Assy. 12-off required.

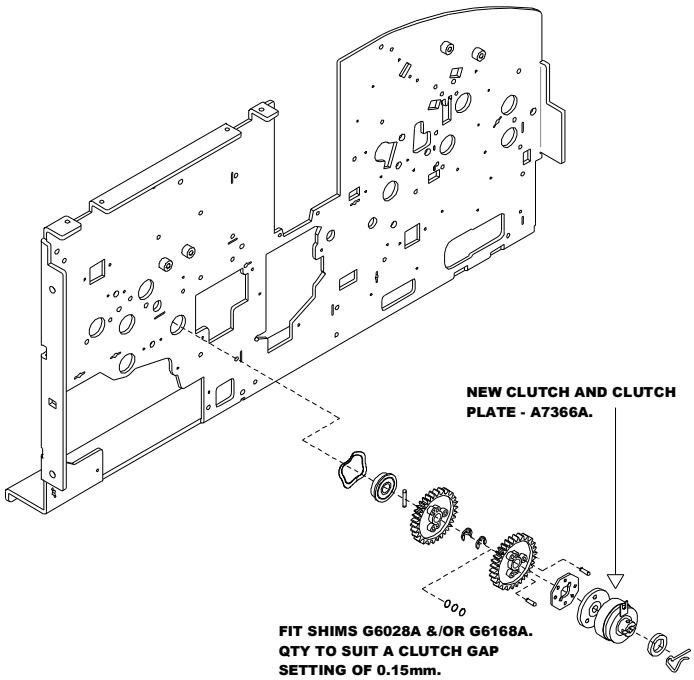
## A-48. New style Rolling Backstop and Field Options

**The Rolling backstop has been revised** to make it easier for assemble/disassemble. Also, there are now optional heavier and lighter versions that can be fitted if experiencing feeding issues. Note these options can also be fitted onto the feeder modules if required.

Part numbers:
C3657A x2 – Backstop roller Acetyl
C9734A x1 – Roller bar
C3656A x2 – Optional heavier Backstop roller Aluminium
C3660A x2 – Optional lighter Backstop

## A-49. Slow-down-clutch 03 clutch 'over-heating'/'failing to pull in.

This is due to:
**1. Too large clutch gap -** the clutch gap is nominally 0.15mm but can be 2.5x this (0.375mm) without reducing the rated torque. Introduce shims behind 48T gear to ensure a clutch gap less than 0.3mm.
**2. Restriction of armature spring -** an Schnorr serrated cone washer (supplied with the 03 clutch) must be used under the head of the rivet. The washer should be placed with the narrow top of the cone against the head of the rivet and the wider cone base against the armature spring. It is important that the correct size cone washer is used or the flat spring function may be adversely affected.
Assembled Clutch part number = A7366A



## A-50. Envelope too Short Error

This can be caused by the following:-

1) The flap catching the pick-up rollers during feeding – this normally occurs with poor curly flaps and can result in a secondary envelope crease line.

2) Deskew drive clutch and/or brake not functioning all the time during running – replace.

3) Deskew sensor (both REC and EMITTER) working intermittently during running – replace.

## A-51. Gear Vibration Noise (squeaking gears)

If experiencing a vibration noise from the gears – remove/clean gear and shaft then fit a shim behind the gear to prevent any rocking movement.

## A-52. Envelope missing the opener and diving into the collate pocket

Initially check the correct setup of the envelope opener as per the tip note A-36.

With particular long flap envelopes – it may be the flap has not cleared the deskew rollers causing the envelope to dive into the collate area. If this occurs – the envelope stop position can be moved forward so that the flap no longer is held in the deskew rollers.

## A-53. Franker Link Compatibility

The 1421AA Franker Link receives an envelope from the MaxiMailer, rotates it through 90 degrees (clockwise or counter-clockwise) and aligns the bottom (non-flap) edge to a datum plate.

The linear speed of the Franker Link is nominally 0.4 metres/second.

The 1421AA transport plane can be adjusted in height from 120mm to 150mm measured from the surface it is resting on.

The input height of the franking machine needs to fall between these height limits.

## A-54. Spare Kit Part numbers for the Head Module Only

A0341A Head GUI version (1430) spares 230V
A0344A Head GUI version spares 115V

A0412A Head PC version (1431) spares 230V
A0411A Head PC version spares 115V

## A-55. Additional envelope popping (opening) for insertion – Field Option Only

This tech tip can be implemented to provide additional opening (how much the envelope is popped) to the envelope whilst held in the stop position. The modifications consist of the following:-

1. Finger Overguide Kits LH & RH (A7369A & A7370A). The overguides are designed to hold the inserts down away from the top face of the envelope during insertion.

2. Central Overguide G6214A fitted underneath the envelope feed unit. This overguide is designed to hold the inserts down away from the top face of the envelope during insertion.

> Note - the finger position and overguide position have been set so that the cheques are held flat as they are inserted into the envelope.

3. R2175A Envelope Deflector - Bent upwards to hold the top face of the envelope away from the inserts during insertion.

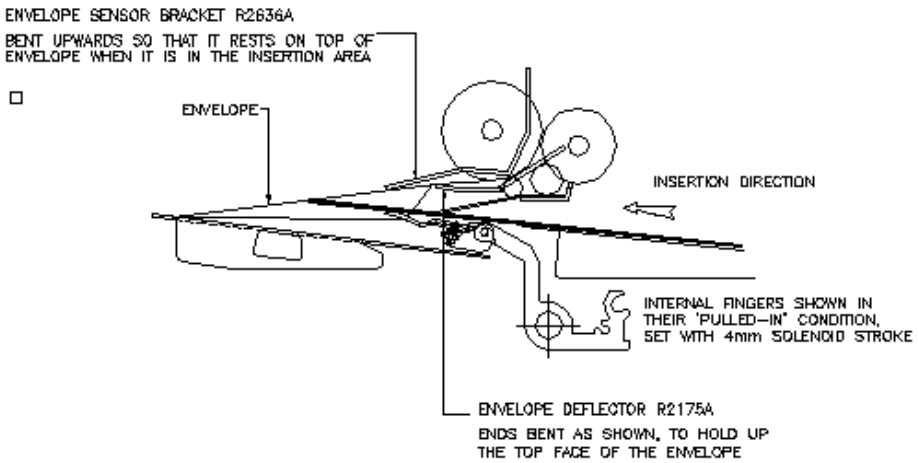
4. R2636A Envelope Sensor Bracket - Bent upwards so that it doesn't apply pressure to the top of the envelope.

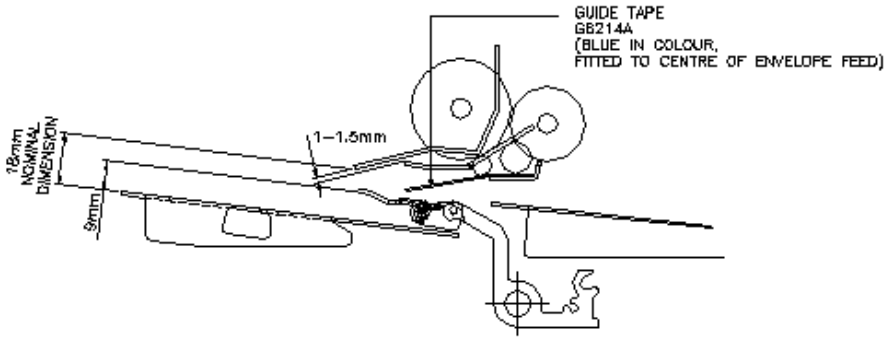
> This gives more room for the Envelope Deflector R2175A to push the top of the envelope away from the inserts during insertion.

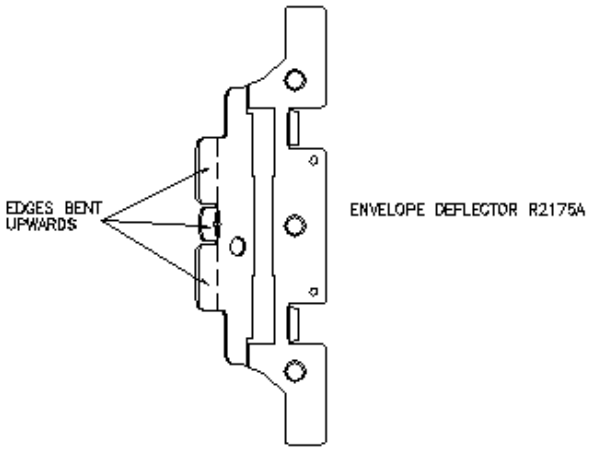
5. Adjustable middle fingers set longer than standard. Ensuring that the envelope throat is held away from the inserts during insertion.

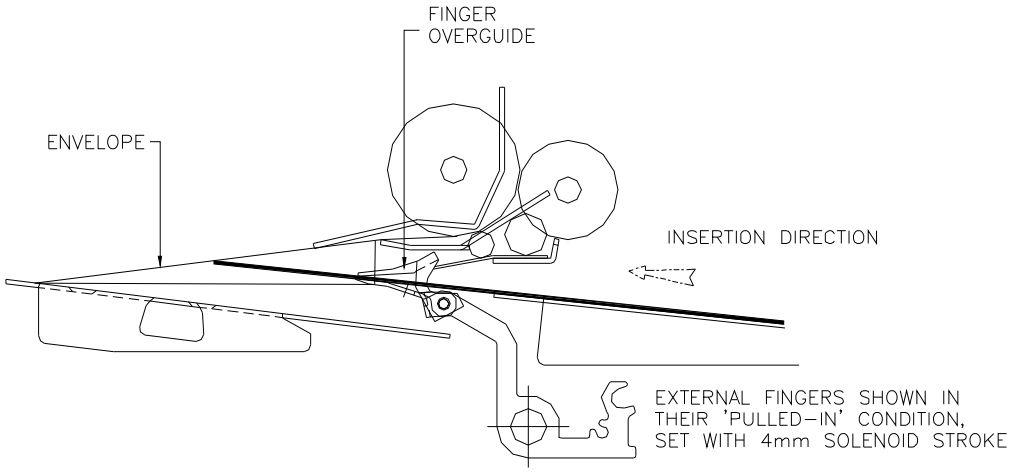
6. Additional guide tape (G6200A) added to the collate pocket clam assembly (A7060A). This is to give greater control on the inserts and prevent them from 'skewing' during insertion (and catching on the envelope side seams).

See details below:-


ENVELOPE SENSOR BRACKET R2636A
BENT UPWARDS SO THAT IT RESTS ON TOP OF ENVELOPE WHEN IT IS IN THE INSERTION AREA
ENVELOPE
INSERTION DIRECTION
INTERNAL FINGERS SHOWN IN THEIR 'PULLED-IN' CONDITION, SET WITH 4mm SOLENOID STROKE
ENVELOPE DEFLECTOR R2175A
ENDS BENT AS SHOWN, TO HOLD UP THE TOP FACE OF THE ENVELOPE


GUIDE TAPE
GB214A
(BLUE IN COLOUR,
FITTED TO CENTRE OF ENVELOPE FEED)
18mm NOMINAL DIMENSION
1-1.5mm
9mm


EDGES BENT UPWARDS
ENVELOPE DEFLECTOR R2175A




In some cases (for example, if an envelope is stream-fed) then the envelope can be pushed between the fingers and overguides (as shown in the picture below). In this case the customer must be told to remove the envelope with care. The envelope must be removed from the collate pocket clam area of the machine and not from the insertion area. If the customer does this they may bend the overguides.

## A-56. Miscellaneous Jan 2007 improvements

**1) Punched arrow indicators added to identify sensors.**

**2) Short Overguides B7833A** at collate pocket entry replaced by Central Overguide B9313A to improve delivery of form trailing edge into pocket.

**3) Improved location of latch springs** in the collate pocket clam side plates.

**4) Input Conveyor shaft** - removal of grooves to improve fatigue strength.

**5) Output Sensor Bkt B7488A** has improved retention of reflective sensor.

**6) PC Lead** – change to angled connector for improved clearance to Monitor Post.

**7) Soft Start interlock to protect mains switch from high inrush current.**

**8) USB PC connection change – PCI card now obsolete**.

**9) R7968A Reflective sensor bracket** – sensor falling out – changed to improve the snap location of the reflective sensor.

**10) E0446A – plastic wiring clip to be used instead spring type B01060A** to retain ribbon cables throughout the machine.

**11) New fixing arrangement for the re-modelled ELO touch screen monitor – see manual section 4a-36.**

**12) Hank bushes added to secure idler post (C2586A).** There have been reports of screws locating the idler posts (C2586A) shearing in the field. This seems to be to a combination of the posts being attached un-square to the chassis (putting the screw under stress) and rust due to water leakage from the wetter area of the machine. The use of the hank bush should guarantee that the posts are attached square to the chassis and allows for the new stainless M4x35 Pozi-Pan head screw (E2833A) without pre-tapping the chassis.

**13) Most Idler Post fixings changed to self-clinch** threaded bushes to prevent screw failure. Tolerances amended to reduce side float.

**14) B8744A (T5671) Front Latch Plate change to profile.** Reason: the tip of this plate can touch a bridge clamp on the MaxiMailer chassis causing unequal seating of the Collate Pocket Clamshell, which can cause envelope-skewing problems.

**15) C8203A Feed Roller** – optional. A softer natural rubber feed tyre is now available for the envelope or feeders.

**16) Easy adjust separator assembly (A7353A)** – Field Optional Only (see TT note E-5 b for details – Datacard machines ONLY.

**17) Dell PC casing** to the protect PC in the stand and small size keyboard (with mouse) - to be introduced.

**18) MaxiMailer Specification Change:** The wide outer fingers will be fitted as standard. This means standard machines can only insert into envelopes with a minimum width of 7”. If customers need to use narrower envelopes (typically C6 size) then the machine will need to be fitted with Narrow Envelope Finger Kit A3348A.

19) Current MaxiMailer Features and Product Guides available on request – see extracts below.

# Technical Tips - INSERT HEAD Module

## MaxiMailer Product Features Guide - Issue 21 Dec 2006

(Hardware, Software and Firmware Features and Options)

**1402AA comprises :**
**1430AB (Head),**
**1450AA (Std Feeder),**
**1440AC (2PF)**

**1402BA comprises :**
**1430AB (Head),**
**1450AA (Std Feeder),**
**1442AA (1bin 3PF)**

**1403AA comprises:**
**1430AB (head),**
**1452AA (Tower Feeder),**
**1440AC (2PF)**

**1402BA comprises :**
**1430AB (Head),**
**1450AA (Tower Feeder),**
**1442AC (1 bin 3PF)**

**1402CA comprises :**

**1404AA comprises:**
**1430AB (Head),**
**1450AA Std Feeder,**
**1443AA (3PF)**

**1405AA comprises:**
**1430AB (Head),**
**1452AA (Tower feeder),**
**1443AA (3PF)**

**1 Hopper 3 Plate Folder**

**3 Hopper 3 Plate Folder**

**Key**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ✓ | Standard | ☑ | Optional | ✗ | Not Available | F | Future Option | - | Not Applicable |

| | Models | | | | | | | | | Modules | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximailer Special Edition (SE) | | | | | | | Maxi | Maxi Plus | 3 Plate Folder | | | | | | | 2 Plate Folder | | | OMR/BCR Feeder | | Feeder | Feeder |
| **Module Code** | **1402** | | **1403** | | | **1404** | **1405** | **1430** | **1431** | **1442** | | | **1443** | | | | **1440** | | | **1451** | | **1450** | **1452** |
| **Variants (see Product Code Tables on page 2)** | AA | BA | AA | BA | CA | AA | AA | AA | AA | AA | BA<br>BB | DA<br>DB | AA | BA<br>BB | CA<br>CB | DA<br>DB | AA<br>CA | BA<br>BB<br>CB<br>CD | CE<br>CH<br>CJ<br>DA<br>DB<br>DC<br>DD | BA<br>BB | DA<br>DB | AA | AA |
| **Features** | | | | | | | | | | | | | | | | | | | | | | | |
| Top Address C, Z, V, Double Forward | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - |
| Bottom Address Z , Middle Address C | ✗ | ✓ | ✗ | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✗ | ✗ | - | - | - | - |
| Bottom Address V Single forms only | ✗ | ☑ | ✗ | ☑ | ☑ | ☑ | ☑ | - | - | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✗ | ✗ | ✗ | - | - | - | - |
| Automatic Fold set-up | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - |
| Max No of sheets folded via accumulator (80 gsm) | - | - | - | - | - | - | - | - | - | - | 8 | 8 | - | 8 | 8 | 8 | - | - | - | - | - | - | - |
| Accumulator Bed | ✗ | ☑ | ✗ | ☑ | ☑ | ☑ | ☑ | - | - | ☑ | ✓ | ✓ | ☑ | ✓ | ✓ | ✓ | ✗ | ✗ | ✗ | - | - | - | - |
| Divert Bin | ✗ | ☑ | ✗ | ☑ | ☑ | ☑ | ☑ | - | - | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✗ | ✗ | ✗ | - | - | - | - |
| OMR- see OMR features table below (Note 1) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | ☑ | ✓ | - | ☑ | ✓ | ✓ | - | ☑ | ✓ | - | ✓ | - | ✗ | ✗ |
| Bottom Read Barcode - see Barcode features table below (Note 1) | F | ☑ | F | ☑ | ☑ | ☑ | ☑ | - | - | ☑ | - | ✓ | ☑ | - | - | ✓ | ☑ | - | ✓ | - | ✓ | ✗ | ✗ |
| Additional OMR head (A3261A note 6) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | ✗ | ✗ |
| 3-Plate Folder OMR Cascade - see OMR features table below | ✗ | ✗ | ✗ | ✗ | ☑ | ☑ | ☑ | - | - | ✗ | ✗ | ✗ | ☑ | ☑ | ☑ | ☑ | ✗ | ✗ | ✗ | - | - | - | - |
| Daily Post | ☑ | ✓ | ☑ | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ☑ | ☑ | ☑ | - | - | - | - |
| Max No of sheets 'C' folded via Daily Post (80gsm) | 3 | 8 | 3 | 8 | 8 | 8 | 8 | - | - | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 3 | 3 | 3 | - | - | - | - |
| 3 Plate Folder Turnover assembly for Single forms V-fold only | - | ☑ | - | ☑ | ☑ | ☑ | ☑ | - | - | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - |
| GUI templates (stationery, OMR and Barcode) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Self diagnostics at start-up (sensors, solenoids and clutches). | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Operator adjustable deskew setting | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Automated Application Set-up | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dynamic sensor monitoring - constant checks during running of sensors | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Supervisor access to re-calibrate sensors | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Automatic track purging at start up and job change | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Engineer/Advanced Automatic settings | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Faulty group removal at closer (non OMR) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hopper extended refill timer for loading on the fly | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Engineer diagnostics of clutches, solenoids etc | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Auto-end on prime empty - (Note 2) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Context Sensitive help on fault screen | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Conveyor batch pulse control (modes, jog step and pause time control) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total batch flexibility | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| No seal options | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Sensor failure tolerant run mode for insert feeder | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Quick Job Count reset on GUI (press 'stop' and then tick) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cascading on Tower Insert Feeders (Up/Down) | - | - | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | ✓ |
| Cascading on Adjacent Standard Insert Feeders | - | - | - | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cascade from 3PF stations 1&2 or 2&3 | - | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - |
| Flexible feed modes | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | ✓ |
| Enhanced calibration mode Cal-Check-Go (No Confirmation) | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cascading from modules 1, 2 and 3 (non OMR) | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | F | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Memory storage capacity for applications | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Unlimited memory storage capacity for applications | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Database for stationery and applications | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Restricted user access to system with PIN/password protection | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Statistics Capability** | | | | | | | | | ✓ | | | | | | | | | | | | | | |
| Event log | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Error log | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Document counts from each hopper | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Output log | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Postal manifest | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Cycling Speeds (based on DL Envelope and A4 Sheets)** | | | | | | | | | | | | | | | | | | | | | | | |
| 1 sheet or insert | 3750 | 3750 | 3750 | 3750 | 3750 | 3750 | 3750 | 4500 | 4500 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 sheet from each hopper collated on the fly on 3 plate folder | - | - | - | - | 3750 | 3750 | 3750 | 4100 | 4100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 sheet from top hopper + insert pack | 3750 | 3750 | 3750 | 3750 | 3750 | 3750 | 3750 | 4100 | 4100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 sheets from one hopper via accumulator (if fitted) | - | (3000) | - | (3000) | (3000) | (3000) | (3000) | 4000 | 4000 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 sheets from one hopper via accumulator (if fitted) | - | (2000) | - | (2000) | (2000) | (2000) | (2000) | 2650 | 2650 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Ethernet connectivity** | | | | | | | | | | | | | | | | | | | | | | | |
| View statistical information remotely | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Remote diagnostics over internet using VNC or similar | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | F | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **MaxiMailer Cardfolder Specifics** | | | | | | | | | | | | | | | | | | | | | | | |
| Cardfolder Barcode reading (see Note 4 ) | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ☑ | ✗ | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

# Technical Tips - INSERT HEAD Module

| Features List of OMR or Barcode | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **OMR Features** | | | | | | | | | | | | | | | | | | | | | | | | |
| End of Group Mode (group mark on last page fed) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| First of Group Mode (group mark on first page fed) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Forms Sequence within a job (security) - 6 Marks (0-63) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Group Sequencing within a group - 4 Marks (0-15) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Face Down 'Split Groups' based on Max Fold Setting | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Diverting all oversize groups (see note 3) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| OMR Cascading (on 3PF hoppers 1 and 2) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | - | - | - | - | ✓ | - | - | ☑ | - | ☑ | - | - | - | |
| Selective feeding of folded sheets | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Selective feeding of inserts | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Selectively feeding hoppers can feed multiples | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Divert group on Mark - (Note 3) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Divert a blank form between groups | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ☑ | - | ☑ | - | - | - | |
| Reverse Reading | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Reverse Form Sequencing | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Flexible Form Sequencing - start at zero or 1 | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Pulse conveyor on mark (if conveyor fitted) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Halt mark | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Parity | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Ignore | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Blank | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Unseal | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Standard pitches | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Match Group Security - 5 Marks (0-31) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| Matching between feed modules | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Custom pitch option | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | F | - | F | - | - | F | F | - | - | F | - | F | - | - | - | |
| **Barcode Reading - Features** | | | | | | | | | | | | | | | | | | | | | | | | |
| PFE BSC Code 3of9 | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ✓ | - | ✓ | - | - | |
| End of Group Mode (group mark on last page fed) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ✓ | - | ✓ | - | - | |
| First of Group Mode (group mark on first page fed) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ☑ | - | ☑ | - | - | |
| Customer ID grouping only | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ☑ | - | ☑ | - | - | |
| Selective Feeding | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ✓ | - | ✓ | - | - | |
| Diverting | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ✓ | - | ✓ | - | - | |
| Forms Sequencing | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ✓ | - | ✓ | - | - | |
| Grouping (OMR or Barcode) on multiple modules | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ☑ | - | ☑ | - | - | |
| Matching between feed modules | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ☑ | - | ☑ | - | - | |
| Easy re-programming of item-id to hopper assignment | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ☑ | - | ☑ | - | - | |
| Different barcode symbologies and grouping schemes can be offered (specials) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ☑ | ☑ | ✓ | ☑ | ☑ | ☑ | ✓ | - | - | ☑ | - | ☑ | - | - | |
| **Features available on the Plus, additional cost on the Std** | | | | | | | | | | | | | | | | | | | | | | | | |
| seq) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | - | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | - | - | |
| Barcode Reading: Label on FIRST page printed ONLY (last page fed) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | - | - | ✓ | - | - | - | ✓ | - | - | ✓ | - | ✓ | - | - | |
| Extended OMR pitches: 1/10", 3.8mm, 4mm and 5.3mm | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| OMR reading: Invisible Gate Mark | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| OMR reading: Demand Feed (feed when mark is present) | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ | - | - | - | |
| OMR reading: Force Fold | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | F | F | - | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - | - | - | - | - | |
| OMR reading: Local Matching - see note 5 | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ✓ | ✓ | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | |
| **Maximailer Plus extended Features available at additional cost** | | | | | | | | | | | | | | | | | | | | | | | | |
| Datalog ALL pages | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| PFE Numerical Barcode Reading 2 of 5 | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| DataLogging Software Package | | | | | | | | | ☑ | | | | | | | | | | | | | | | |
| Log barcode labels read at input | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Track each document pack travelling through the machine | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Log groups at output | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Log errors | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Generate CSV text files which the end-user can analyse for basic integrity checking | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| PICS Software Package | | | | | | | | | ☑ | | | | | | | | | | | | | | | |
| Integrity checking software package | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Late divert facility | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Generate re-print file etc etc | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

**Notes**

1. Requires OMR/Barcode (and an accumulator on 3 Plate Folder) to be fitted
2. Except 1st of Group
3. Diverts to either accumulator or collate pocket
4. Requires card folder module 1444BA
5. OMR definition, position on page and document size must be identical for the prime and matched document. Variable grouping is only possible from one hopper. FOG on non-prime document is not possible.
6. When more than 2 OMR heads are fitted an Expansion Kit 184-191 is required. 2x 184-191 are required for more than 4 OMR heads
7. Standard Maximailer requires extended features dongle

**12/02/07**

# MaxiMailer Product Code Guide - 11th Jan 2007 Issue

(Hardware, Software and Firmware Features and Options)

## MaxiMailer Configurations

### 1.0 MaxiMailer SE - Fixed Configurations (hardware non-upgradable)

Fixed configurations (2 modules Maximum) and throughput 3750/hr Max.

| Product Code | Configurations |
|---|---|
| 1402AA | Standard feeder plus 2 Plate Folder |
| 1402BA | Standard feeder plus 1bin 3Plate Folder |
| 1403AA | Tower feeder plus 2 Plate Folder |
| 1403BA | Tower feeder plus 1bin 3Plate Folder |
| 1403CA | 3bin 3 Plate Folder |
| 1404AA | Standard Feeder plus 3bin 3 Plate Folder |
| 1405AA | Tower feeder plus 3bin 3 Plate Folder |
| Options | See Upgrade Kits Table 6* |

### 2.0 Standard Maximailer (GUI machine) Configurations

Up to 4 modules Max configuration and throughput 4500/hr

1430AA Maximailer Head Unit

### 3.0 MaxiMailer Plus (PC machine)

Up to 8 modules Max configuration and throughput 4500/hr

1431AA MaxiMailer Plus Head Unit

**Notes:**

**'A' prefix before the Product Code denotes 115V 60Hz**
**'E' prefix before the Product Code denotes 230V 50Hz**
**'X' prefix before the Product Code denotes 115V 50Hz**
**'Y' prefix before the Product Code denotes 230V 60Hz**

# Product Codes

## TABLE 1 — Modules and Upgrades

| Product Code | Description |
|---|---|
| 1450AA | Insert Feeder |
| 1452AA | Tower Insert Feeder |
| 1420AA | Envelope Output Conveyor |
| 1420BA | Long Envelope Conveyor |
| 1421AA | Franker Link |
| See table 2 | 1 tray 3 plate folder |
| See table 3 | 3 tray 3 Plate folder |
| See table 4 | 2 Plate folder |
| See table 5 | OMR/Barcode Feeder |
| See table 6 | Upgrade kits |

## TABLE 4 — 2 Plate folder Options

| | |
|---|---|
| 1440AA | Standard In-Line |
| 1440BA | Bottom Read OMR In-Line |
| 1440BB | Top Read OMR In-Line |
| 1440CA | Standard End Module |
| 1440CB | Bottom Read OMR End Module |
| 1440CD | Top Read OMR End Module |
| 1440CE | Barcode Vertical Bottom Read End Module |
| 1440CF | Barcode Horizontal Bottom Read End Module |
| 1440CH | Barcode Vertical Top Read End Module |
| 1440CJ | Barcode Horizontal Top Read End Module |
| 1440DA | Barcode Vertical Bottom Read In-Line |
| 1440DB | Barcode Horizontal Bottom Read In-Line |
| 1440DC | Barcode Vertical Top Read In-Line |
| 1440DD | Barcode Horizontal Top Read In-Line |

## TABLE 5 — OMR/Barcode Feeder Module

| Code | Description |
|---|---|
| E1451BA | OMR Bottom Read |
| E1451BB | OMR Top Read |
| E1451DA | Horz. Barcode Bottom Read |
| E1451DB | Horiz Barcode Top Read |

## TABLE 6 — Upgrade Kits

| Product Code | Description |
|---|---|
| A3247A* | 3-Plate Folder OMR upgrade kit (3 tray) |
| A3248A* | 3-Plate Folder OMR Cascade upgrade kit |
| A3252A* | Accumulator upgrade kit (3 tray) |
| A3262A* | Accumulator upgrade kit (single tray) |
| A3266A* | 3-Plate Folder OMR Upgrade kit (single tray) |
| A3277A | MaxiMailer to MaxiMailer Plus PC upgrade kit 230V |
| A3279A | MaxiMailer to MaxiMailer Plus PC upgrade kit 115V |
| A3290A* | 3-Plate Folder Anti-static kit (3 tray) |
| A3291A* | 3-Plate Folder Anti-static kit (3 tray OMR) |
| A3292A* | 3-Plate Folder Horizontal Barcode upgrade kit (3 tray) |
| A3293A* | 3-Plate Folder Vertical Barcode upgrade kit (3 tray) |
| A3296A* | 3-Plate Folder Vertical Barcode upgrade kit (1 tray) |
| A3297A* | 3-Plate Folder Horizontal Barcode upgrade kit (1tray) |
| A3301A* | 2-Plate Folder Hand-Feed Upgrade Kit |
| A3302A* | 2-Plate Folder Short-Form Upgrade Kit |
| A3303A* | 2-Plate Folder OMR Upgrade Kit |
| A3310A* | Folder Feed Overguide Light Kit |
| A3311A* | Folder Feed Overguide Heavy Kit |
| A3317A* | Accumulator Clutch Upgrade Kit |
| ES1401AA | MaxiMailer Plus PICS Software |
| ES1402AA | MaxiMailer Plus Datalogging Software |

## TABLE 2 — 1 Tray 3 Plate folder Modules and Options

| | | Features | | | Options | | |
|---|---|---|---|---|---|---|---|
| | | OMR or BC Tray 1 (1 channel) | | Accumulator Fitted | Divert Bin (part no. A7119A) | Feed Tray 1 add.OMR Head kit A3261A* | Accum Bed (part no. A3262A) |
| Code | Description | Top | Bottom | | | | |
| 1442AA | 1 Feed Tray / 3 Plate Folder | | | | | | |
| 1442BA | IS OMR 1 Tray / 3 Plate Folder | | Y | Y | | | |
| 1442BB | IS OMR 1 Tray / 3 Plate Folder | Y | | Y | | | |
| 1442DA | IS VBC 1 Tray / 3 Plate Folder | | Y | Y | | | |
| 1442DB | IS HBC 1 Tray 3 Plate Folder | | Y | Y | | | |

*Note: When more than 2 OMR heads are fitted an Expansion Kit 184-191 is required. 2x 184-191 are required for more than 4 OMR heads

| Key | |
|---|---|
| | Not fitted or Not Available |

## TABLE 3 — 3 Tray 3 Plate folder Modules and Options

| | | Features | | | | | Options | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | OMR or BC Tray 1 (1 channel) | | OMR Tray 2 (1 channel) | | Accumulator Fitted | Divert Bin (part no. A7119A) | Feed Tray 1 add.OMR Head kit A3261A* | Feed Tray 2 add.OMR Head kit A3261A* | Accumulator Bed (part no. A3252A) |
| Code | Description | Top | Bottom | Top | Bottom | | | | | |
| 1443AA | 3 Trays / 3 Plate Folder | | | | | | | | | |
| 1443BA | IS OMR 3 Trays / 3 Plate Folder | | Y | | | Y | | | | |
| 1443BB | IS OMR 3 Trays / 3 Plate Folder | Y | | | | Y | | | | |
| 1443CA | IS OMR 3 Trays / 3 Plate Folder | | Y | | Y | Y | | | | |
| 1443CB | IS OMR 3 Trays / 3 Plate Folder | Y | | Y | | Y | | | | |
| 1443DA | IS VBC 3 Tray / 3 Plate Folder | | Y | | | Y | | | | |
| 1443DB | IS HBC 3 Tray 3 Plate Folder | | Y | | | Y | | | | |

# Technical Tips - INSERT HEAD Module

| TABLE 7 | Machine Stands |
|---|---|
| A7048A | Single module stand |
| A7049A | Two module stand |
| A7050A | Three module stand |
| A7051A | Four module stand |
| A7259A | Five module stand |
| A7256A | Six module stand |
| A7257A | Seven module stand |
| A7258A | Eight module stand |
| | |
| A3239A | Head stand unit |
| A3240A | Double stand unit |
| A3241A | Single stand unit |
| | |
| A3209A | Franker Table |
| A3253A | Franker Table Ext. Kit |

| TABLE 8 | DataCard Product Codes |
|---|---|
| DC31DA | D/C Maxi Combo, 1420BA, 1453AA, EDC31AA |
| DC31AA | D/C Maxi Plus Head & stand A3239A |
| DC50AA | DataCard Insert Feeder and stand A3241A |
| DC51DA | DCard Intelligent Fdr Horiz BC Btm Rd + A3241A |
| DC51DB | DCard Intelligent Fdr Horiz BC Top Rd + A3241A |
| DC52AA | DataCard Tower Feeder and stand A3241A |
| 1453AA | Datacard Turnover Interface |

| TABLE 9 | CardFolder Product Codes |
|---|---|
| 1430PA | Inserter + Card-Folder + stand |
| 1440PA | 2Plate Folder + stand |
| 1450PA | Insert Feeder + stand |
| 1452PA | 2 Hopper Insert Feeder + stand |
| 1444BA | Card-Folder module (excl.stand) |

| TABLE 10 | Miscellaneous |
|---|---|
| A3260A | Envelope Conveyor conversion kit |
| A3263A | 3PF Operator Adjustable Separator kit (3 station) |
| A3264A | 3PF Operator Adjustable Separator kit (1 station) |
| A3267A | Envelope Feed Tractor kit |
| A3270A | 3 Plate Folder Motor Bearing Kit 230V 50Hz |
| A3271A | 3 Plate Folder Motor Bearing Kit 115V 60Hz |
| A3287A | Wide Finger Kit |
| A3289A | Turnover Kit 3PF No.2 FP Single Forms |
| A3316A | Dongle bracket kit |
| A3317A | Accumulator Clutch Upgrade Kit |
| A3321A | Rear Cover Kit Feeder (req'd when end feed module is an Insert/Tower |
| A3322A | Rear Cover Kit Folder (req'd when end feed module is a 2 Plate Folder) |
| A3325A | Deep Throat Finger Kit |
| A3347A | Z Fold Window kit |
| A3348A | Narrow envelope finger kit kit |
| A7174A | Special Separator for Insert Feeder |
| A7379A | 3PF Pick-Up Shaft Assy (silicon tyre) [illegible] |
| A7380A | Envelope Opener Assembly for curly flaps |
| | |
| B0107A | Anti-Static Brush (Feeder Output) |
| B7723A | Overguide (can assist feeding of BREs from Insert Feeder) |
| B7803A | Special Feeder Overguide (can assist feeding of Z fold forms from Insert |
| B7941A | Special Wetter Guide |
| B9070A | Hi-Window Envelope Finger RH |
| B9071A | Hi-Window Envelope Finger LH |
| B9120A | No Seal Bracket (+ 4x P2278A + 4x E2771A) |
| C3656A | Backstop Roller Heavy |
| C3660A | Backstop Roller Light |
| C8193A | EPDM Feed Wheel (Grey) [illegible] |
| C8194A | Slotted Feed Wheel (Black NR) [illegible] |
| C8195A | Silicon Slotted Feed Wheel (notch-backed) [illegible] |
| C8196A | Coated Silicon Slotted Feed Wheel [illegible] |
| C8203A | Soft Natural Rubber Feed Wheel (Grey) |
| E0563A | Set of 2 Steel Castors and fixings for MaxiMailer stands |
| 123-800 | Dongle for Standard MaxiMailer & Maximailer Plus |
| 123-801 | Dongle for SE MaxiMailer with 2 Plate Folder as 2nd module |
| 123-802 | Dongle for SE MaxiMailer with 3 Plate Folder as 2nd module |
| 123-803 | Extended Features Dongle for Std Maxi & Maxi Plus |
| 123-804 | Dongle for SE MaxiMailer with 3 Plate Folder as sole module |
| 123-805 | SE MaxiMailer Upgrade Dongle |

## A-57. MaxiMailer ribbon cable sets now available as separate items

Ribbons are now available separately.

**182-550 Maxi Head Ribbon Set**

Now also available in the separate parts shown below:
**182-550A** - RIBBON 182-550 PART A
**182-550B** - RIBBON 182-550 PART B
**182-550C** - RIBBON 182-550 PART C
**182-550D** - RIBBON 182-550 PART D
**182-550E** - RIBBON 182-550 PART E
**182-550F** - RIBBON 182-550 PART F
**182-550G** - RIBBON 182-550 PART G
**182-550H** - RIBBON 182-550 PART H
**182-550I** - RIBBON 182-550 PART I