

*MJ-1027/1028*  
*Service Manual Addendum*

Supplement to the Troubleshooting  
Section

## Overview

This is a collection of troubleshooting hints that TABS has received during our dealer visits, communication that we have had from technicians, and information from TABS Technical Specialists. This list is not exhaustive and as usual the Service Manual should always be used as a reference.

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## 1. EA20 Paper Transport Stop Jam

There are a couple of areas that should be looked at when EA20 jamming is occurring.

- Check for proper operation of Escape Solenoid (SL6) (part number 4402962760 SOLENOID).

If the Escape Solenoid does not operate properly then an EA20 jam could occur (see Figure 1). The items to check for include:

- Binding of linkage
- Sticking of plunger
- Defective solenoid



Paper buckled due to guide plate not being lowered by escape solenoid

**Figure 1**

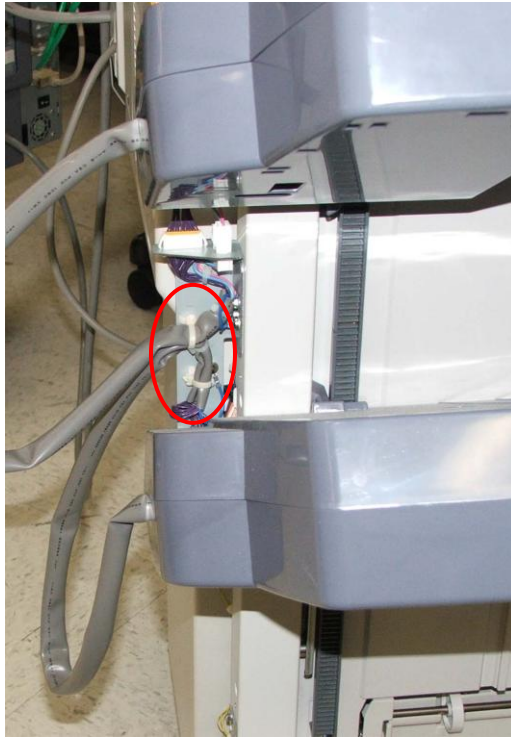
- Check the proper return operation of the buffer sensor (PI14).
- We have had reports that either the first (M1) or second (M8) feed motors (part number 6LE67833000 MOTR.S-FEED) could fail. The reports from the field are that both motors need to be replaced at the same time. The reports state that replacing one motor does not solve the problem and that both need to be replaced at the same time.

## 2. CB30 Tray Lift Abnormality

There are a couple of causes of CB30, one is intermittent and the other is constant.

- **Intermittent**

It has been noted in the field that an intermittent CB30 bin lift motor error may occur; it usually occurs when the lower bin is driving. The cause is linked to the tie wraps on the harness being too tight (see Figure 2). Over time, with the bins moving up and down, damage occurs to the harness resulting in this error. As deemed necessary, remove the cable ties. However, if the wires have already been damaged you may need to replace the harness. (upper part number: 4G30851000; lower part number: 4G30852000 CABLE-TRAY)



**Figure 2**

- **Constant**

- Check the tray lift motor(s) (M5, M10) (part number 4K11102000 MOTOR-DC).
- Check the torque limiter (see item 8 Abnormal Noise when exit tray lowers)

### **3. CBE0 Paper Folding Motor Abnormality**

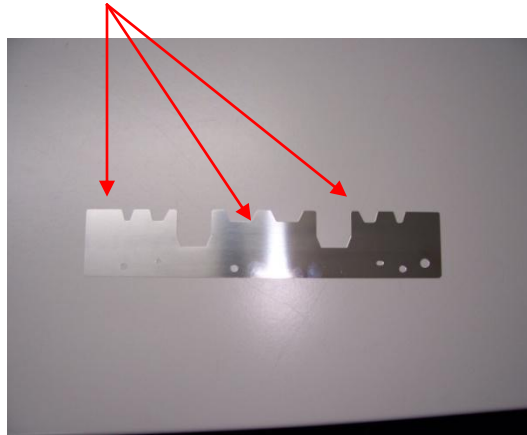
CBE0 relates to a folding motor abnormality. It has been determined that the folding motor itself can be at fault. If replacing the folding motor (part number 6LE67820000 MOTOR) does not resolve the problem, the faulty motor could have damaged the saddle stitch control board (part number 4G30849000 SADDLE-CONT-PCB-ASY); in this instance the board must also be replaced.

**\*\*\*\*CAUTION – NEVER REPLACE THE BOARD BEFORE CHANGING THE MOTOR\*\*\*\***

#### 4. CB90 Paper Pushing Plate Motor Abnormality

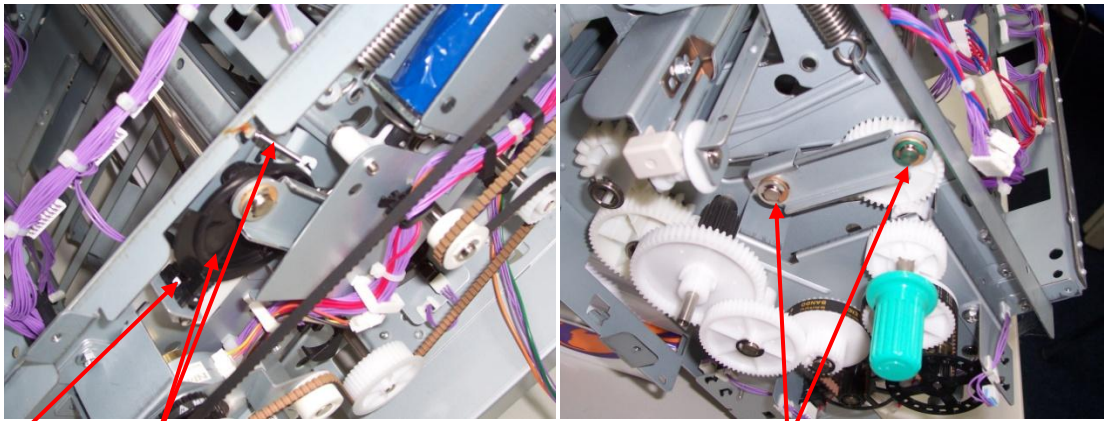
CB90 refers to the pusher plate (part number: 4402353400 PLATE) on the saddle stitch and there can be various causes.

- Check the condition of the pusher plate (see Figure 3); it should be completely flat with no kinks or bends in the lead edge 'castle' areas.



**Figure 3**

- Clean and check the pusher plate home sensor (PI15S) – do not exchange sensors in these finishers as they are not the same (see Figure 4). If you suspect the sensor is at fault, order and fit the correct sensor.



**PI15S**

**Cam Assembly and Spring**

**Bushings (Front)**

**Figure 4**

- Check the condition of the cam assembly and that the spring is still attached (see Figure 4). Also ensure that the bushings on both sides of the pusher plate assembly are in good condition and not elongated (see Figure 4).

## **5. Limitless Copies**

Limitless means the finisher recognizes the height of the stack rather than the number of sets). To make this modification, set dip switch 5 to the ON position. If you make this modification, advise the end-user of two things:

1. If many sheets are stacked, it is possible that the stacks may fall from the exit tray.
2. The paper may not stack properly in the finisher tray.

## **6. CB80 without hole punch installed (Backup RAM Data Abnormality)**

If the machine is exhibiting CB80 without a hole punch installed perform the following adjustments

- Tray Height Adjustment (MJ1027/28 Service Manual page 6-1)
- Alignment Position (MJ1027/28 Service Manual page 6-1)

When replacing the finisher logic board, there are adjustments that must be performed otherwise a CB80 error may occur, see item 13 for a list.

## **7. CB80 with hole punch installed (Backup RAM Data Abnormality)**

In addition to the items listed in 6 above, perform Sensor Output Adjustment and Registering the Number of Holes Adjustment. The MJ1027/28/29 Service Manual does not list these adjustments; the adjustments are listed in the MJ1017/18 Service Manual page 8-7 (see Figure 5).

The following adjustments should be run when changing the hole punch board or replacing any of the sensors in the hole punch unit.

### C. Electrical System (puncher unit (option))

#### 1. Sensor output adjustment

Perform this adjustment when the punch driver PCB, transmission sensor (photosensor PCB/LED PCB) or reflection sensor (scrap full detection PCB unit) has been replaced.

- 1) Remove the rear cover of the finisher unit.
- 2) Set bits 1 through 6 of DIPSW3 on the finisher controller PCB as indicated.

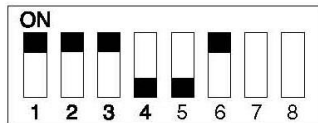


Figure 8-117

- 3) Press SW1 on the finisher controller PCB. Pressing this switch automatically adjusts sensor output.
- 4) Set all bits on DIPSW3 to OFF.

#### 2. Registering the number of punch holes

This operation registers which puncher unit is attached to the IC on the punch driver PCB so that the puncher unit can be identified by the finisher. For this reason, this operation must be performed when the punch driver PCB has been replaced.

- 1) Remove the rear cover of the finisher unit.
- 2) Set bits 1 through 6 of DIPSW3 on the finisher controller PCB as indicated.

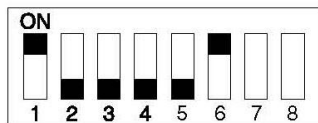


Figure 8-118

- 3) Set bits 7 and 8 on DIPSW3 on the finisher controller PCB to match the number of punch holes of the attached puncher unit according to Table 8-103.

- 4) Press SW1 on the finisher controller PCB. Press SW2 when setting a 2-/3-hole model (MJ-6003N). Pressing this switch registers the number of punch holes to the punch driver PCB.

Number of Punch Holes	DIPSW3 bit settings		Push switch
	bit 7	bit 8	
2-hole (MJ-6003E)	OFF	OFF	SW1
2-/3-hole (MJ-6003N)	OFF	OFF	SW2
4-hole (MJ-6003F)	ON	OFF	SW1
4-hole (MJ-6003S)	ON	ON	SW1

Table 8-103

- 5) Set all bits on DIPSW3 to OFF.

#### 3. Checking the sensitivity level of the transmission sensor

How dirty the transmission sensor (photosensor PCB/LED PCB) can be checked by the number of times that LED1 on the finisher controller PCB lights. For this reason, how dirty the transmission sensor is serves as a guide for when to perform cleaning during periodic maintenance.

- 1) Remove the rear cover of the finisher unit.
- 2) Set bits 1 through 6 of DIPSW3 on the finisher controller PCB as indicated.

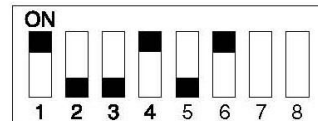
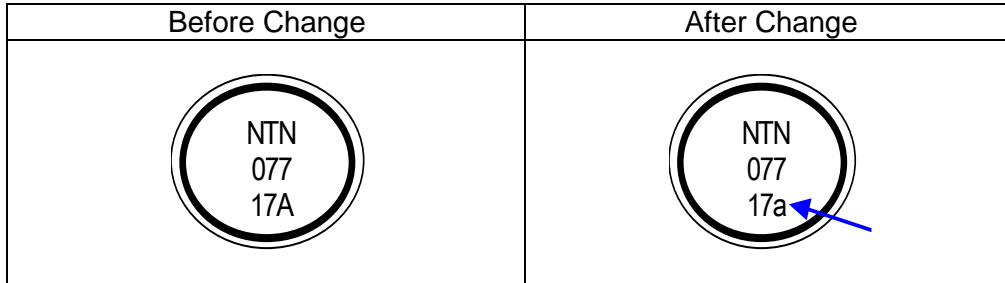


Figure 8-119

## 8. Abnormal Noise when exit tray lowers

Sometimes when the paper exit tray lowers an abnormal noise can occur. To prevent the noise, the grease in the torque limiter has been changed. See the diagram below to distinguish the new torque limiter from the old one.



MODEL	P-I	Before Change	After Change
MJ-1027	7-13	FC56862000	4A30736000
MJ-1028	8-13	LIMITER- TORQUE	LIMITER-TORQUE

## 9. CB10 Feed Motor Abnormality

When this error occurs check the following items:

- One-way bearing located inside the cam shutter (part number 4402350530 CAM-SHUTTER). This may slip causing the error code. Clean/replace as needed.
- Safety Switch (MS3) – The spring may not push hard enough on the actuator; reform the switch arm to make good contact.

## 10. Intermittent Stapling

Perform Alignment Position adjustment (MJ1027/28 SM page 6-1). If the alignment is too tight this may produce a buckle lifting the center of the paper off the stapling tray sensor (PI4).

## 11. Mis-Stapling

- Check the paddles and make sure they are not worn.
- Check that the Paddle Solenoid (SL5) is working and that the paddles rotate during every copy.

## 12. Adjustments that must be done when boards are replaced

When replacing boards and some sensors there are certain adjustments that must be done. The adjustments can be found in Chapter 6 of the SM.

Finisher Controller PCB



- Height Sensor Adjustment
- Alignment Position
- Staple Position
- Buffer Roller Winding Amount

#### Height Sensor (PS1)

- Height Sensor Adjustment

#### EEPROM (Q2)

- Buffer Roller Winding Amount

#### Saddle Stitch Controller PCB

- Set the new DIPSW1 so that the settings will be the same as those on the old DIPSW1.

#### Hole Punch Board

- Refer to item 7.

END