

To: Martin Yale Technical Support

From: Martin Yale Engineering

Date: 5-November-2013

Subject: 2051 Folder, Instructions for replacement of original style home flag sensor with WRA2051144 retro-kit ('new' style home flag sensor)

Affected Machines:

2051110: All Folders previous to S.N.: 39586.01164.K46

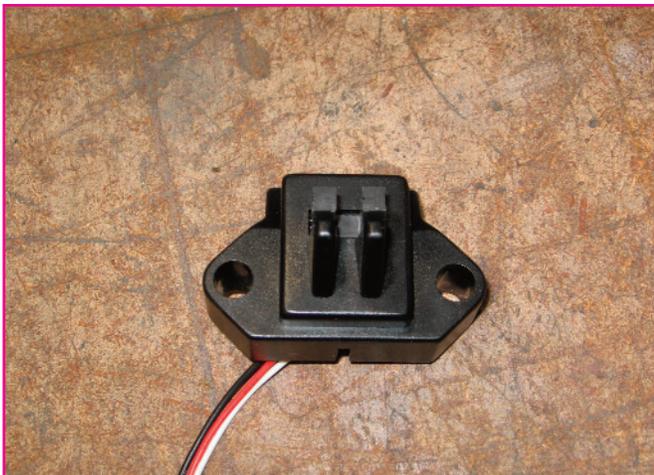
2051220: All Folders previous to S.N.: 39587.01001.K40

2051UK: All Folders previous to S.N.: 39588.01001.KXX

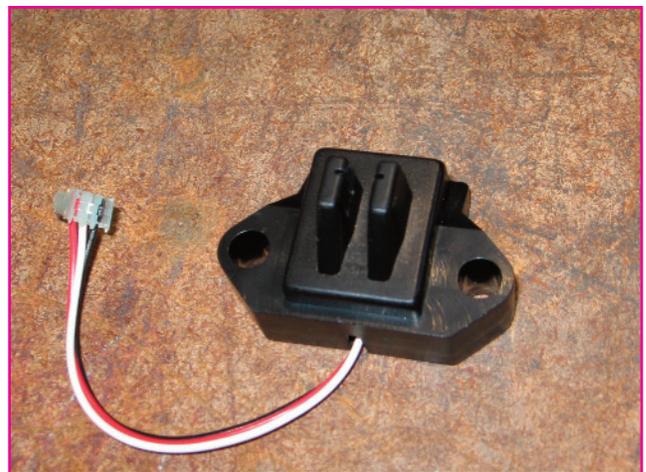
2045110: All Folders previous to S.N.: 39570.01043.K47

Background: At the machine S.N.'s given above, the home flag sensors were upgraded from the original '2-piece' design to a more robust '1-piece' design. These instructions outline the steps necessary to replace the original home flag sensor with the style supplied with the WRA2051144 retro-kit.

Identification: The first step in fold table sensor replacement is identifying the sensor to be replaced and confirming that it is the 'old' style. Pictures of both the old and new style sensors are given below for reference. If the part being removed is the same style as the replacement, the software set-up modifications presented below are to be ignored.

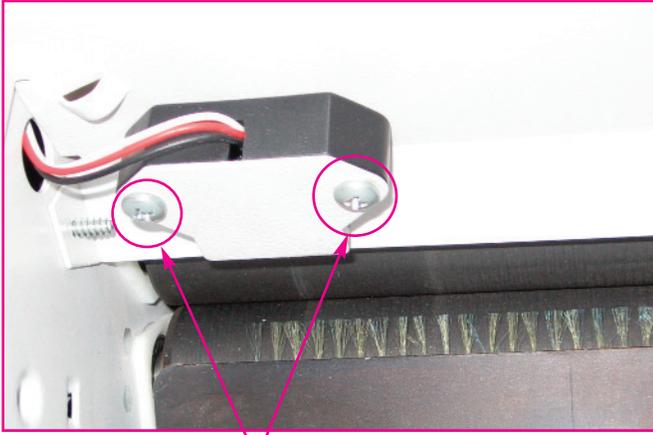


Original style 2051/2045 home flag assembly---Note 2 piece arrangement of sensor/housing.

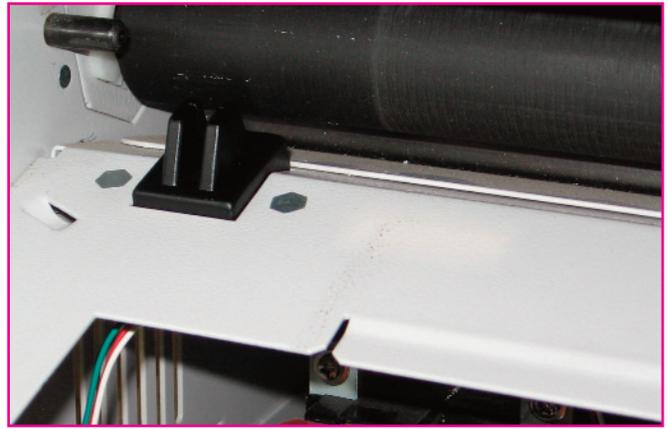


New style (WRA2051144) replacement home flag assembly---Note 1 piece construction.

Sensor replacement: *WARNING: Unplug the Folder before performing any service on it.* Removal and replacement of the home flag sensors is largely self-evident by inspection. Replacement of both involves removing (2) philips mounting screws and unhooking its electrical connection. Removal of the 2nd fold table home sensor requires removal of the access panel located under the 2nd fold table. Removal of the 1st fold table home flag sensor may require removal of the folder's front cover in order to access its electrical connector.



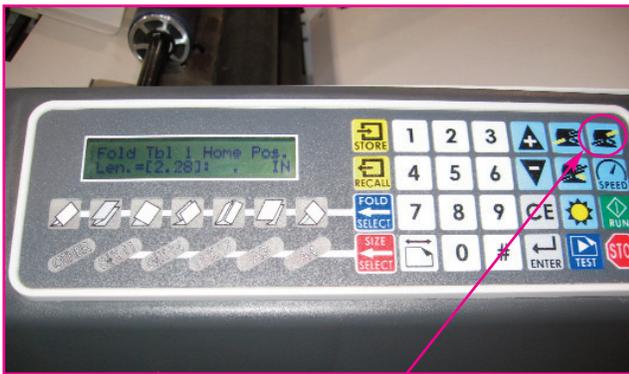
1st Fold Table Home Flag Sensor mounting screws



2nd Fold Table Home Flag Sensor-Mounting screws are underneath

Software adjustment: Replacing an older home flag sensor with the WRA2051144 retro-kit requires certain adjustments be made in software to the fold table corresponding to the replaced sensor. Follow the steps below to do this:

- A. Power up the folder in diagnostic mode by holding down the 'STOP' button while turning the unit on. It is necessary to hold the STOP button down continuously until the diagnostic screen appears on the folder display. Then press '7' to access the offset limit settings.
- B. Once in the offset limit setting diagnostic menu, press the fold table button on the display that corresponds with the fold table system the technician is working with. Press the button for the first fold table if you replaced the home flag sensor for fold table #1 and press the button for the second fold table if you are working with that system instead.

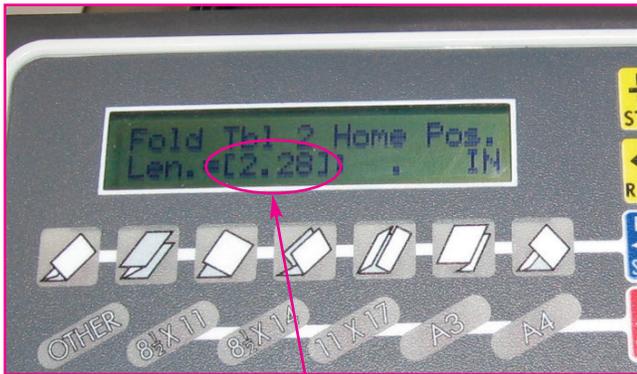


1st Fold Table offsets screen in diagnostic #7



2nd Fold Table offsets screen in diagnostic #7

C. When the fold table button is pressed a screen appears that reads: Fold Tbl X Home Pos. Len.=[X.XX]: . IN. Record the bracketed value on the display for 'X.XX'. It should be a number from approximately 2.27 to 2.30. Once you record that number, add .05 to it and enter that number on the display by using the keypad. For example, if the number given on the display is '2.28', add .05 to that to get 2.33. Then type the '2.33' value on the display. Once the new value is on the display press 'Enter'. If you replaced the first fold table home flag, you have finished with the software set-up and can move onto step 'E' below. If you replaced the home flag sensor for fold table #2, perform step 'D' below.



Offset value screen-Record number in brackets



New value entered on display via keypad

D. After pressing Enter in 'E' above, for fold table #2 only, a screen that displays: Diverter Offset, Len.=[.XX]: . IN appears. Record the bracketed value on the display for '.XX'. Much like in step 'C' above, add .05 to the number on the display and enter it on the display by using the keypad. For example, if the number given on the display is '.37', add .05 to that to get .42. Then type the '.42' value on the display. Once the new value is on the display, press 'Enter'. You have now completed the software adjustment for fold table #2.



Diverter Offset Screen-Only applicable on Fold Table #2 settings



Diverter Offset Screen-New value typed in

E. Power the machine back up and confirm that it functions as it should. A sample half fold and z fold should be performed to assure that the fold tables are set up correctly (i.e.: the paper ends are even on the folded paper). If not, contact Martin Yale technical support at (260)-563-0641 for further instruction on how to 'tweak' the fold table settings.

This final step is optional, although it does make future service easier. **WARNING: Always unplug power cord before removing the access plate.** On the bottom side of the access plate under the first second fold table, the factory offset values for the folder are written. That plate should be removed and any new offset values should be recorded there with the old ones crossed out. In the event of future board replacement, this information will be **extremely** helpful.

Model #	2051		Serial #	39586,01009,43				
	1	2	3	4	5	6	7	8
FT1 Offset	2.28							
FT2 Offset	2.27							
Diverter	.37							
Center Offset	.02							
LFW / GAP	.02							
Date	1/7/13							

M-S015387

Example of settings label located on inside of circuitboard cover. Once satisfied with Folder operation, record the new offset or diverter values here