

## The 4900 Single Board Snack, OBA and CBA-2

The 4900 single board snack acceptor could be an OBA, CBA-2 or an UCBA-2. A two wire data link called Rowelink is used to connect the control unit or CBA/UCBA-2 to the main control board.

Problems occur when vendors do not clean and lubricate the acceptor and run it in what I call the stickation mode. Stickation is a Bruno term to indicate an acceptor has not been lubricated, and after a period of time, the motor/belt speed is too slow to accept a bill. After a number of accept attempts the bill may finally get accepted. Once the motor speed is close to normal, it may accept many bills, one after another, that is, until another period of idle time. As the stickation gets worst at some point the acceptor gets to the stuckation mode and it will not accept any bills. When bills get stuck inside the acceptor, it may receive damage from knives or other sharp objects. Even if this does not happen, the bill box collects less bills and many of the acceptor's parts take a hell of a beating because of the large number of rejects.

The 4900 single board machine gives error codes on main computer display and the BA status indicator on the OBA control unit or on the back of the U/CBA-2. To get bill reject codes leave the bill where it is and count the blinks on the status indicator. Refer to the manual to find out what the blinks mean. When you have to get an exchange, or repair, make sure you write down and attach a note why the equipment was removed and what error codes you had. Include 4900 error number.

Eating a bill OBA problem can be caused by stickation, dirty belts, not using the newer anticheat lever and/or it's new spring, etc, The two rear creasing rollers should be free to move.

Other OBA problems occur when mounting the bracket on the back of the OBA. If the mag head assembly has hi-low sheet metal type screws these screws cause breakage problems. These screws are no longer used and two wire springs mounted on longer cover screws hold the head assembly in

place. The spring provide better assembly sitting and stops the damage caused by the screws. A new bracket is the old one but it has a slot hole so a screw can be placed thru the bracket and into the hole in the side of the OBA instead of the head assembly. You can drill a hole in the old bracket. Very old OBAs do not have a hole in the side so you have to drill and tap it. The older version of the head assembly uses four normal screws to hold the head assembly in place and these do not have the hi-low screw problems.

When using a U/CBA-2 in a 4900, the switches must be set in the Rowelink mode. The switch setting has to be 1 3 4 ON and all others are in the OFF position. Other settings may accept the bill but you will not get credits. You must push reset or power up again after re-setting the switches. If the switches are inside, under the bill box, the 2 wire cable plugs into the little plug on the side of the logic module, but if the switches are on the bottom, plug the 2 wire plug into the bottom near the reset button.

If you have enough change in the coin mech and the 4900 is ready the acceptor should be able to acceptor bills. The status indicator will be in the normal OFF mode. If it is ON, or blinking, there is a problem. Look at the manual for information on what status steady on or blinks mean.

The Rowelink talks to acceptor and to the coil on the display board. The Rowelink could stop talking to the acceptor because the Rowelink thinks there is a signal from the coil. Display boards as been modified. The coils is removed and jumpers are added so it cannot screw up the Rowelink operation.

The most common problems are running the acceptor into the ground, U/CBA-2 switches to 1 3 4 on, plugging two wire cable in the right place (side or bottom), cleaning connectors, thinking an acceptor is good when its not, not using the Bruno OBA Speed/Mag setup procedure, not looking at and recording BA/CBA error blinks and codes, not using BASICS 101.

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## SPEED ADJUST ON OBA 4-50575-xx UNITS

Speed adjust is a must ! There is only a 3 % acceptance range. The speed must be adjusted BEFORE using my mag adjust procedure, With a good lubricated acceptor, good control unit with good cable and clean connectors start with the FAULT indicator OFF. Turn switch #6 ON as marked on the cover and press the TEST switch. Slowly adjust the speed until the FAULT indicator stays OFF. If you can not keep it off, keep it off as much as possible. Blinking on and off may mean you need another acceptor or you have a problem in the system. You can leave #6 on if you are going to use the [ Bruno ] Mag adjust system

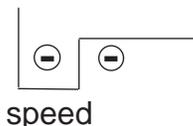
Where they exist, Speed and/or Mag adjustments is a must. Many acceptors do not have a speed and/or mag adjustment.

## SPEED ADJUSTMENTS OTHER THAN 4-50575-xx Units

Before doing a Mag adjust, you must make the speed adjustment first. No amount of speed and/or Mag adjusting will fix an acceptor which has stickation problem and it needs lubrication. After you adjust the speed, it may accept bills for a short period but if the acceptor has stickation, and you take no action, you will be back.

Most control units use a status or fault indicator for adjusting the speed. Press the TEST button or the reset button. Adjust the speed until the status ( or fault ) indicator stays on all the time. If it blinks perhaps there is an acceptor or a control unit problem.

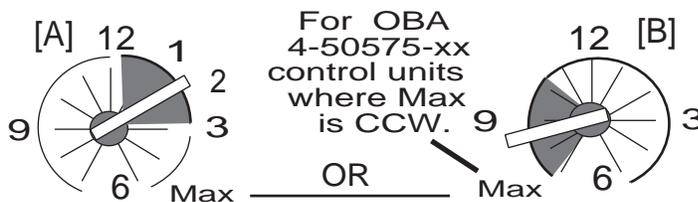
Older CBA/UCBA-2s have a speed adjustment pot. New upside down modules do not. Make sure you adjust the "speed " pot and not one of the other pots.



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## Adjusting Rowe Mag Gains

There are many reasons to adjust the mag gain as listed below. If a speed adjust exists, adjust the speed FIRST. With an average bill, start at one end and insert the bill. Move one clock position and reinsert the bill and repeat the process until it is accepted. Note this position, say 12 noon. Go to the other end of the pot and repeat the process again going back one clock position till the bill is accepted. Say 3 pm. Set the mag gain between the 2 accept points (shaded area) at 1:30 or 2. See [A]. With OBA 4-50575-xx [B] units Max is CCW. You may find the range is between 7:30 and 10 so you would set the gain at 9 or 8:30. If it does not work when tested, repeat the process with another bill. In checking, you may find you get some rejections and the adjustment wants to be closer to the Max position or Min position. If the unit gives an error code when the bill is rejected. Use them and the manual as an aid. With the new \$5 conversion follow the procedure given in the installation note. Then you may have to try this system.



## Bruno's "STICKATION"

STICKATION describes is a condition which occurs when an acceptor can not come up acceptance speed. Generally this occurs because the acceptor needs lubrication. If it has been at rest for a while, it can not make speed. With repeated inserts of the bill or adjusting the speed, the acceptor works but after a period of idle time, it slows down AGAIN.. Preventive lubrication is required and this will also cut down on wear and tear which leads to expensive repairs and exchanges costs. This is what Magic Wandings s all about.

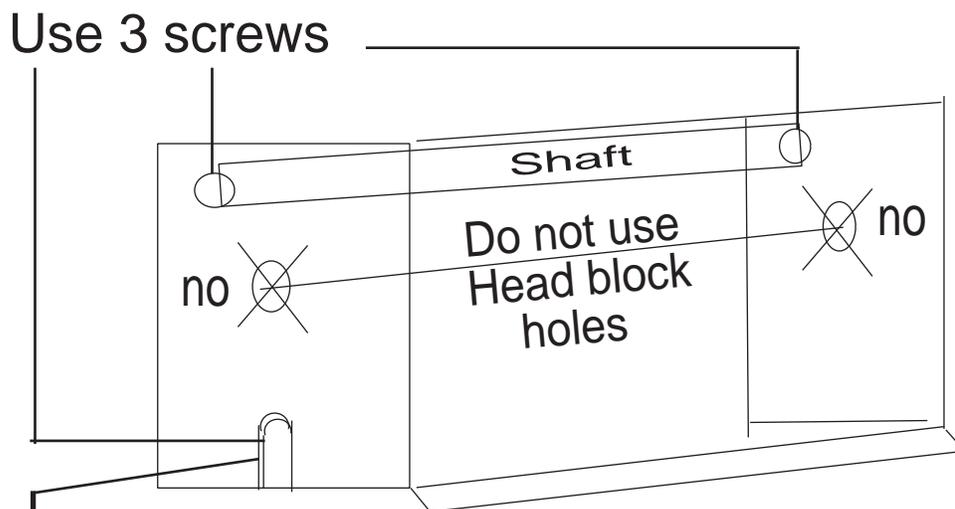
The Magic Wand Club !



Every \$30,000 or once a year which ever comes first !

# 4900 Single board ,OBA Bracket

With an OBA with a new Head assembly (no metal inserts for screws) use the Hold-Down wire springs [ part #35112301] and use the newer OBA 4900 bracket. Use only three (3) screws. If you have the older bracket which does not have the slot-hole, drill a new hole in the older bracket.



Part # 308785-01 with "slot"

No slot, then drill a new hole in the bracket !

**Bruno**

At some point in time you may want to check out my other Bear notebook articles because they contain a great deal of related material. You will find them on Bruno's Page in <http://www.eastcoastamusements.com/> then: left click on: **Visit his page for service notes and tips.** **OR:** <http://www.eastcoastamusements.com/services.htm> and then click on the BEAR with the flower!!

Note: These files were checked with Acrobat Reader 7.0. Earlier versions **may not** view/print correctly. I know version 5.0 will not work correctly.

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You will want to check the East Coast Amusements site for revised or new articles. I do have more titles in the works. Here are some the posted articles.

**ROWE 4900 ACCEPTOR ISSUES**  
**ROWE BC-1 BILL CHANGER**  
**THE MAGIC WAND (Dick's - my favorite)!**  
**CONNECTORS - FIXING AND TESTING (another good one)**  
**ROWE BILL CHANGER HOPPER REPAIR**  
**MEASURING VOLTAGES**  
**BUCKET POWER ON ERRORS**  
**ROWE STACKERS**  
**MAG HEAD LOOP SECRETS**  
**DREMEL & ROWE STUFF**  
**FEK MOTOR TEST UNIT**  
**OBA ACCEPTORS**  
**JACKPOTTING, FS, BUCKET POWER ON & CRASHES**  
**BC-8 to BC-35 Bill Changers**  
**CBA\_UCBA**  
**Basics\_101**  
**BCxx00\_bill\_changers**

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To East Coast Amusements  
> THANKS ! Bruno

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