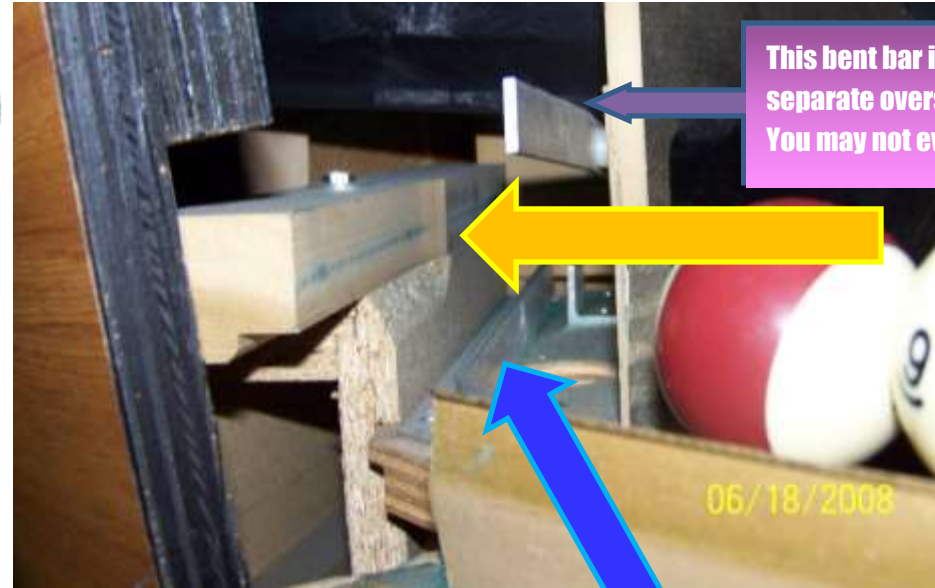
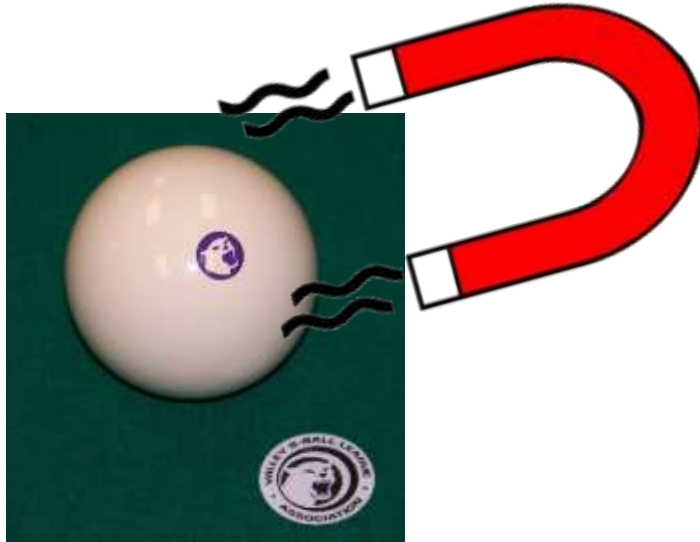


“My cue ball isn’t separating” : What to check before buying anything or calling Tech Support



This bent bar is used only to separate oversized cue balls. You may not even need it.

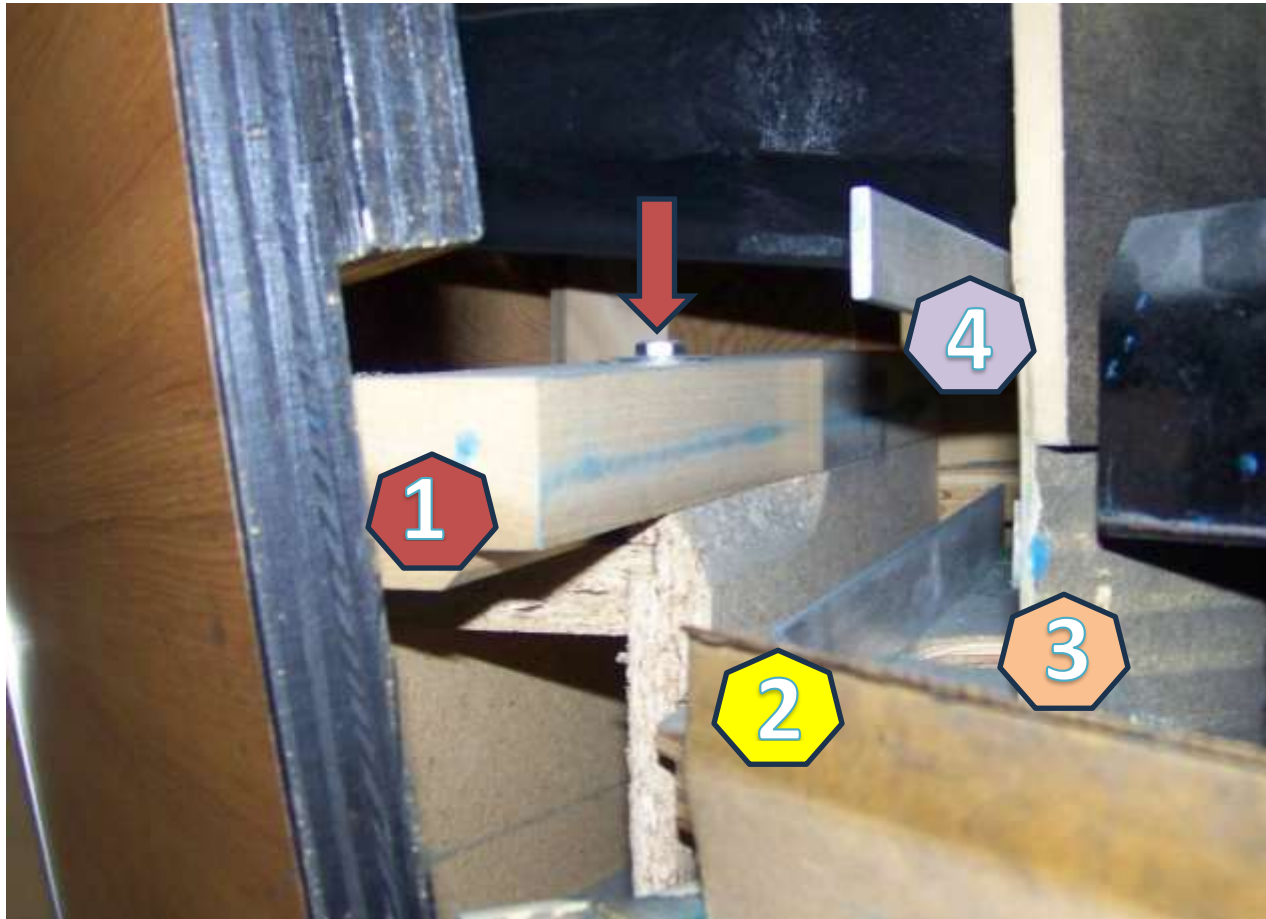
1) Valley invented and patented the magnetic cue ball separator nearly 60 years ago. Confirm that the cue balls used with your table are magnetic and have not been swapped out. Any good magnet (even those on your fridge) will react and be drawn to a magnetic cue ball

2) Open the table’s Ball View Door and check the ball return path, the [MAGNET HOLDER](#) (orange arrow - could be wooden or plastic) holds the [SEPARATION MAGNET](#). With “something metal and magnetic” like a long screwdriver, test if the magnet still has power to draw the cue ball. Magnets take a while to lose strength, but eventually will need replaced

3) The magnet holder needs to be mounted flush as shown here. Too far into the return path and the magnet cannot draw the cue ball over. Too far away from the path and ALL balls may route through the cue ball return and not go into the trap.

4) If the magnet holder is flush as shown, but the cue ball *still* rolls toward the trap after passing the magnet, check the [LONG RAIL](#) (blue arrow) for wear. Remember, balls passing over these rails for decades will wear them out.

BEFORE WE GO ANY FURTHER - LET'S IDENTIFY THE COMPONENTS



1) **MAGNET HOLDER** – will be wooden on most table, plastic for a few in the 2000s. The magnet holder should be adjusted **FLUSH** to the side wall of the separator track. If you place a screwdriver or metal wrench nearby, the magnet inside should be strong enough where you can feel the pull. The arrow points to the bolt securing this part

2) **LONG RAIL** – closest to the separator along the bottom of the track. Should be smooth and not nicked or dented up.

3) **SHORT RAIL** – difficult to see at this angle, but just across the path from the long rail

4) **BALL SHUNT** – gently angled, higher up. This bar is only truly functional if you plan to use an oversized cue ball in your table. Without it, a magnetic ball should separate just fine.

After this – it's either one problem or the other – not a whole lot else goes wrong.

THE *ONE* THING THAT GOES WRONG:

THE CUE BALL GOES IN WITH THE OBJECT BALLS

- 1) CONFIRM YOU HAVE A MAGNETIC CUE BALL was the ABSOLUTE VERY FIRST STEP on this sheet. We're going to just accept that you checked that (you *did* check that, right?)
- 2) THE MAGNET MAY BE LOSING STRENGTH. As noted in Step #2 on the first page.
 - A. To replace you will need a 7/16" wrench or socket, Loosen the bolts you see. (or bolt - on older tables there is not a second bolt). Sometimes it is easier to access the back bolt through the Clean Out Door on the end of the table
 - B. Take the holder out and tap it downward. The original magnet should fall out.
 - C. Install the new magnet; it should fit tightly in the holder. To make sure you have mounted the magnet for proper polarity, there are 3 positions where the magnet will be loose and in the correct position it will be tight. Mount it incorrectly – the magnet will *repel* the cue ball, not attract.
 - D. Slide the holder back into place and secure hand-tightening the bolt/bolts. It should be flush with the base wall.
 - E. Run both cue balls and number balls through to make sure it is working properly and then tighten down the bolt/bolts using the 7/16 wrench or socket.
- 3) THE MAGNET HOLDER MAY BE TOO FAR FORWARD. Step #3 on the first page addresses this. The magnet holder should be flush with the left base wall of the separator. So break out a **7/16" wrench or socket**
 - A. Loosen the bolts you see. (or bolt - on older tables there is not a second bolt). Sometimes it is easier to access the back bolt through the Clean Out Door on the end of the table
 - B. Position the magnet holder as we show in the photos.
 - C. Hand-tighten the bolts (bolt) and run the cue ball through a few times as well as object balls to make sure everything separates correctly. If the object balls start going in with the Cue ball the holder is too far back from the edge and needs to come forward. If the cue ball still goes in with the object balls adjust the holder a little further out toward the long bracket. If nothing works, it might be another issue.
 - D. Using your wrench/ socket fully tighten the bolts.

Helpful tip - A line of dirt on the face of the magnet holder should be cleaned off, sand paper works best. If it has been more than 10 years since you replaced the Magnet, consider it. If it's been more than 15 years, SERIOUSLY consider it.

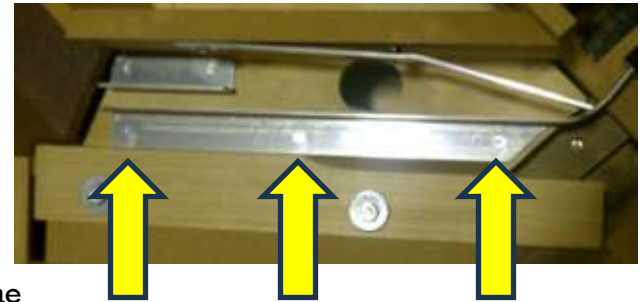
4) **THE LONG RAIL MAY BE WORN OR DAMAGED.** Step #4 on the first page addresses this.

A. Watch the balls and cue ball as they travel the length of the rail. The object balls should be pushed to the left wall against the Magnet Holder until they pass the Short rail. From there they should remain on the right side of the Long Rail. If they jump or fall back to left side after this point there could be a damaged spot on the long rail.

B. The Cue ball should be forced by the short rail to the left side wall against the Magnet Holder and stay on the left side of the Long Rail. If it jumps or falls to the right side, there could be damage. Check issues A and B first and if nothing is found, replace the long rail.

C. The top edge that the balls roll over should be smooth – check for any type of wear or damage. You can try sanding off the damage, but it is a better (and not that expensive) long-term fix to replace it.

D. We recommend a short straight lot screw driver or a ¼ nut driver to remove the 3 screws securing the long rail. Install the new part and secure using the 3 screws you just removed.



5) **THE SHORT RAIL MAY BE WORN OR DAMAGED** The Short rail is the first rail the balls contact as they enter the separator. It is slightly taller than the Long Rail to force all balls to the left wall. Once the object balls have passed the short rail the Magnet holder pushes them to the right side of the long rail. The magnet should hold the cue ball to the left wall.

After years of use this rail can be damaged and fail to force the balls to the left wall. Replace it using a very short standard screw driver or a ¼ nut driver. It is pretty far back and you may find it easier to remove the Ball Shunt to access the short rail. Remove the 2 screws and make sure the tall side is up, secure the new part with the screws you removed.



THE *OTHER* THING THAT GOES WRONG:

THE OBJECT BALLS GOES IN WITH THE CUE BALL

- 1) THE MAGNET HOLDER MAY BE TOO FAR BACK. Step #3 on the first page addresses this. The magnet holder should be flush with the left base wall of the separator. So break out a **7/16" wrench or socket**

A: Loosen the bolts you see. (or bolt - on older tables there is not a second bolt). Sometimes it is easier to access the back bolt through the Clean Out Door on the end of the table

B: Position the magnet holder as we show in the photos.

C: Hand-tighten the bolts (bolt) and run the cue ball through a few times as well as object balls to make sure everything separates correctly. If the object balls start going in with the Cue ball the holder is too far back from the edge and needs to come forward. If the cue ball still goes in with the object balls adjust the holder a little further out toward the long bracket. If nothing works, it might be another issue.

D: Using your wrench/ socket fully tighten the bolts.

Helpful tip - A line of dirt on the face of the magnet holder should be cleaned off, sand paper works best.

If it has been more than 10 years since you replaced the Magnet, consider it. If it's been more than 15 years, SERIOUSLY consider it.

- 2) THE LONG RAIL MAY BE WORN OR DAMAGED. Step #4 on the first page addresses this.

A: Watch the balls and cue ball as they travel the length of the rail.

B: The object balls should be pushed to the left wall against the Magnet Holder until they pass the Short rail. From there they should remain on the right side of the Long Rail. If they jump or fall back to left side after this point there could be a damaged spot on the long rail.

C: The Cue ball should be forced by the short rail to the left side wall against the Magnet Holder and stay on the left side of the Long Rail. If it jumps or falls to the right side, there could be damage. Check these issues first and if nothing is found, replace the long rail. The top edge that the balls roll over should be smooth – check for any type of wear or damage. You can try sanding off the damage, but it is a better (and not that expensive) long-term fix to replace it.

D: We recommend a short straight lot screw driver or a ¼” nut driver to remove the 3 screws securing the long rail. Install the new part and secure using the 3 screws you just removed.

3) THE BALL SHUNT MAY BE TOO LOW

The Ball Shunt's only purpose in life is to separate Oversized Cue Balls. Some object balls are not perfectly round or perfectly sized, on occasions these balls will be deflected due to the high spot passing under the Ball shunt. Typically you'll notice this because it's the same number balls misbehaving (“Hey you, #11! What's your problem??”).

A: If you do not (and have no plans to) use an oversized cue ball the Ball Shunt can be removed.

B: You can adjust the angle on the ball shunt by pushing it inward toward the Ball View Door (note the arrow). This will increase the distance between the balls and Ball Shunt allowing them to pass.



If these fail to fix your issue, [E-Mail Valley Tech support](#) and MAKE SURE TO TELL THEM...

- If this is happening ALL THE TIME or OCCASIONALLY
- If the issue involves the object balls returning with the cue ball, or the cue ball going into the trap

Tech Support will ask if you've tried these steps (as they will help clear up most simple separation issues), they are the computer equal to “did you completely shut it off and turn it back on again?”