

ADJUSTING THE ANGLE OF THE BALL LIFT

1. Keep in mind that the machines can vary from center to center. The original machine installation and the machines themselves can have variances that don't allow a magical angle for the ball lift - but you can figure it pretty close. The angle of the uprails vary so much from center to center we can't just say set your lift so many inches from the rails and that's it.
2. The best way to help determine the angle of the lift is by using the rubber bumpers that you would adjust to raise and lower the ball lift. Most centers already have their rubber bumpers cut in half, which is good. When all is said and done the bottom of the shaft that sits on the rubber adjusting bumpers should be around 1-1/4 inches from the plate the bumper screws into. That measurement is a general guide - when you adjust your lower support and then adjust the height of your lift to get 1/8 clearance over the ball, providing the rubber bumper is close to that measurement, leave it.
3. There are two types of adjustable lower supports in the field. The original one is a type that adjusts by removing or adding washers. The ball lift will need to be removed to do so. (Our [NEW adjustable support](#) is a type that can be adjusted in the machine without the need to remove the ball lift.) If you have the type with washers, take the time to make the needed adjustments to tweak it out. In general the same amount of washers needed in the first support you tweak out will be the same amount needed to tweak out the remainder of the lifts in your center. If you're in a center where at one time machines were added on after the original installation the tweaking may vary somewhat on that section because of differences in installations and machine lot numbers.
4. When the angle is correct the ball should roll freely under the lift with about a 1/8 inch gap between the ball and the flat section of the belt. See also important note below.
5. Once you have the height adjusted properly, a ball will be blocked and will hover at the exit if a hump is passing by. After the hump passes by, the ball will drop in and the next hump will catch it. The ball lift belt should only rotate an inch or so before the incline of the hump blocks off the window of opportunity preventing the ball from entering. If the lift is too high the ball could go in further than it should and you can get a clunking and possible belt damage.

IMPORTANT NOTE: When you adjust the gap between the ball and the belt take notice if you can rock the ball forward before it begins its upward climb. Any forward movement of the ball needs to be compensated for in the height adjustment. A good way to know you're low enough is to lower the rubber height bumpers until the ball has trouble going in - then raise it a little at a time from there.