## Notes on using aftermarket speakers and a Speaker Light Kit in SPIKE System games

Using aftermarket speakers in your SPIKE System game will work fine with the Speaker Light Kits, however, if they are aftermarket speakers that have a spacer ring attached to the front of them, it may cause complications with installing them.



There is limited space behind the right speaker on SPIKE System games because of the location of the power transformer box. Due to this limited space, some aftermarket speakers with the attached spacer rings will not fit with the Speaker Light Kit light frame. The only way to remedy this situation on these speakers is to **carefully** remove or cut down the spacer ring that is attached to the front of the speaker. If a Speaker Light Kit is being used in a game, the spacer ring is not needed, as the Speaker Light Kit light frame will then be used as the spacer that the speaker needs for its extended tweeter.







If you would choose to only remove the spacer ring for the right speaker, the speakers and Speaker Light Kit would also fit fine. Visually, this is not very noticeable when the installation is complete (as demonstrated in the picture below).



If you would choose to leave the spacer ring on the left side, or if you want to see if your speakers will fit with the spacer rings still attached (some will), you will need to purchase (4 or 8) #6-32 1 in. long machine screws. This is a common size and can be found almost anywhere bolts and screws are sold.

If you choose to remove the spacer rings, **please be careful**. I have had some rings come off quite easily in one solid piece, while others have been glued on quite well and required me to cut them down and leave the glued side of the ring connected to the speaker. If the ring is glued down good and you attempt to peal the entire ring off you may see that it is beginning to also peel the speaker cone material away from the speaker. If that is the case, the ring will probably need to be cut down.

To cut the ring off, I used a utility knife and carefully (don't cut yourself or into the speaker) cut around the outside of the ring. I did not put a lot of pressure on the utility knife and did not attempt to cut all the way through the ring on the first cut around. I simply spun the speaker around while cutting with the utility knife and the ring material slowly peeled away in layers. After a few spins the ring material was then thin enough that I could easily get the utility knife blade through the ring and get the last of it removed. As pictured above, the remaining ring that is still attached is a little rough looking, but this can't be seen when mounted.



Doing the spacer ring removal is done at your own risk. Neither I, nor the speaker manufacturer are responsible for any damage that may be caused by attempting to do so.