



Cushion Rail Information



www.valleydynamoparts.com

Valley and Dynamo cushion rails are intended for use only on Valley and Dynamo tables and we make no claims or guarantees that they will work on products of any other manufacturer: past, present or future.

Our Valley Competition Rail system is engineered for the livelier action League Players prefer. These are the cushions of choice for new production tables and replacement cushion rails. Nylon inserts are NOT USED when installing Valley Competition Cushions



All rail rubber is date coded. We also began stamping the profile and build date on the wood rail in 2002 and all sets since 2009 have a Richland Hills TX stamp.

If you're used to the 3-bolt rails prior to 2009...

- ◆ Two additional rail-bolt attachment points added
- ◆ Existing 3 attachment points unchanged
- ◆ Now using easily replaced Threaded Inserts instead of T-nuts
- ◆ Small dead spots in rubber eliminated

Will these rails fit my existing table? YES THEY WILL!! We kept the center and outer-most bolt locations unchanged. If your table uses three bolt rails, the five bolt rails work just fine. For tables built prior to 1999, use the same process for installing newer rails on older tables (see next page). Panther rails will not fit old pre-1970 tables with rails attached using wood screws, but neither did the prior 3-bolt rails.



Can I change my three-bolt table to attach rails with five bolts? Specialized CNC equipment guarantees the bolt holes are correctly located on new tables' rails. While modifying an old table is possible, it is not recommended.

About the nylon inserts—for DYNAMO

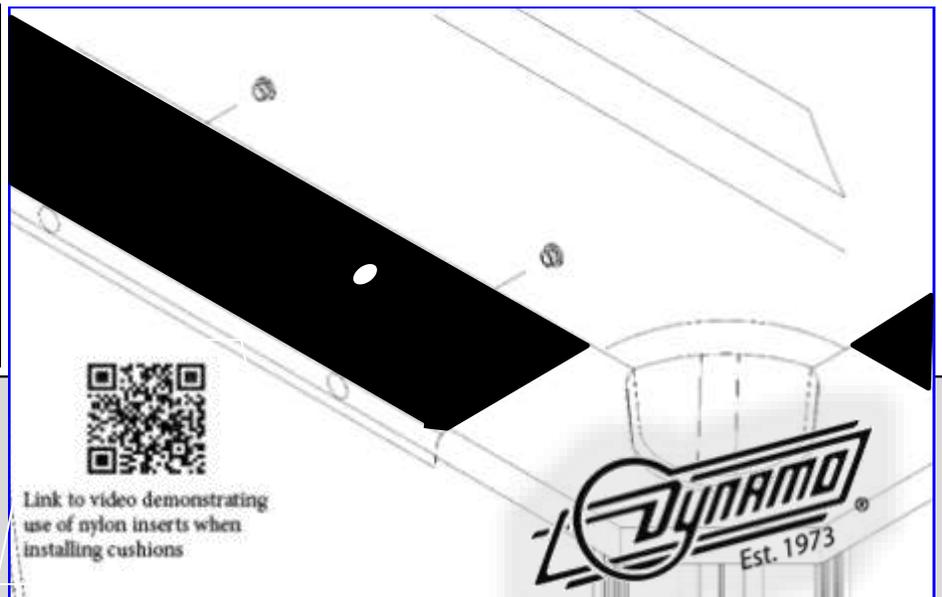
DYNAMO rails include a small bag of Nylon Inserts. Install the Inserts on the CUSHION RAIL side—tapered portion in the bolt hole—when bolting the rails on. These nylon inserts are further protection to prevent overtightening DYNAMO cushions and possibly backing out the threaded insert.

How Tight is "Tight Enough" ?

Player complaints of "dead rails" may be easily solved just by tightening the rail bolts. We are frequently asked "how tight?" *65 inch-pounds* of torque provides the optimum tightness for cushion rails. This setting assures the rails remain at the recommended height and maintain the expected rebound properties.

PROPER MOUNTING IS A BIGGER FACTOR IN PLAY QUALITY THAN RAIL BOLT TIGHTNESS.

- ◆ *START THE BOLTS BY HAND BEFORE FULLY TIGHTENING to avoid cross-threading.*
- ◆ No torque wrench? Just make sure the bolts are snug.
- ◆ Cross-threaded bolts are not a covered warranty failure.
- ◆ Overtightened rail bolts are not a covered warranty failure



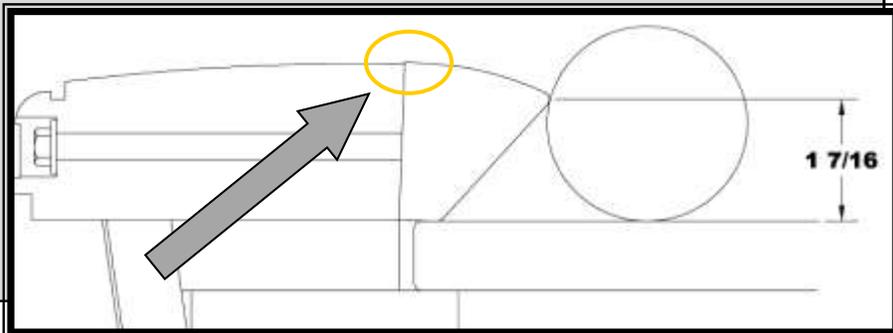
Link to video demonstrating use of nylon inserts when installing cushions

WHAT IS THE PROPER CUSHION RAIL HEIGHT? – BCA Specifications are 60% - 64% of the height of the object ball, or more simply measured: **1 7/16" above the bed of the table.** Many people align the cushion rail even with the top rail laminate—usually putting the rails at or below the bottom-end of the specification. If you prefer to increase the speed or bounce of your rails, lower them at your own risk.

For complaints about “dead” cushion rails—measure the height and verify it is within specs. Rails mounted too high will play dead. The world’s best tires ride badly if mounted and balanced improperly.

THEY STILL LOOK A LITTLE HIGH TO ME: Sometimes, the cushions may be as much as 1/16" higher than the rail laminate. *THIS IS OK.* Rail height is measured from the slate surface up. Avoid setting the cushions so they are flush with the rail laminate and ignoring the critical measurement from the slate surface.

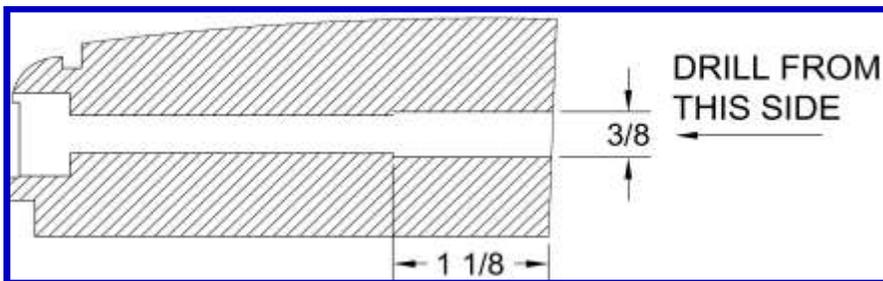
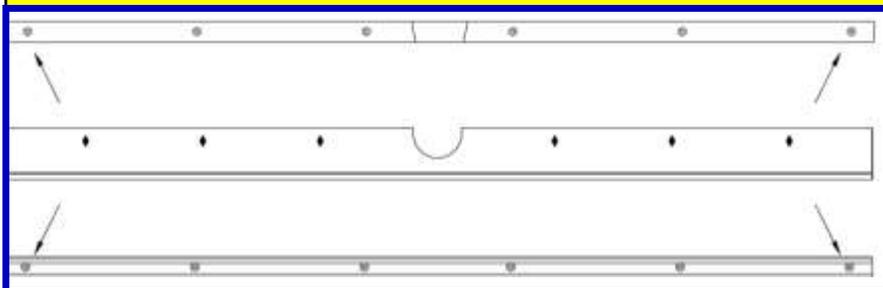
Also, the wooden rail backing extends into the groove between slate and side wall for more solid mounting of both slate and rail. Accumulated glue on the slate from repeated recovering over time raises the surface. Always strip the slate of excess glue when recovering.



INSTALLING REPLACEMENT RAILS ON OLDER VALLEY TABLES

Current VALLEY rails will only fit tables using rail bolts to attach the rails (beginning with the model 510 series: from late 1969-present). If the rails are attached with wood screws, the best option will be to have the rubber replaced on the current rails, and have them covered in new felt.

If your Valley table is of 1970 -1999 vintage, current rails can be used once **your table has this modification** for proper attachment and mounting.



Drill the end mounting holes on the side rail using a **3/8" diameter** drill bit. From the cushion side, drill no deeper than **1 1/8"**. This will allow just enough movement of the rail bolt so it can be angled to attach securely

End rails need no modification

Years of remounting cushion rails can wear into the wood of older tables or tables where the rails have been frequently changed. Over time, you may need to add washers under the rail bolts to keep them from extending too far into the wood and causing the rubber to bulge.

