

Rivet Guns

A rivet gun is a tool used to install blind rivets in FRC. It works by pulling a mandrel through the rivet body, expanding it and locking materials together permanently.

Types of Rivet Guns

Hand Rivet Gun

- Manually operated with handles
- Most common in FRC teams
- Good for small to medium build volume

Pneumatic Rivet Gun

- Powered by compressed air
 - Much faster and requires less effort
 - Used in high-volume assembly during build season
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How a Rivet Gun Works

1. Insert rivet into the drilled hole
 2. Place rivet gun nose onto the mandrel
 3. Squeeze or activate the tool
 4. The mandrel is pulled, expanding the rivet
 5. The mandrel snaps off once fully set
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Proper Use

- Ensure correct rivet size and grip range before installing
 - Keep the gun aligned straight with the rivet
 - Apply steady force until the mandrel breaks cleanly
 - Make sure the rivet head sits flush against the material
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Common Mistakes

- Pulling at an angle (can weaken the joint)
 - Not fully setting the rivet
 - Using the wrong nose piece for the rivet size
 - Reusing partially set rivets
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Maintenance

- Empty broken mandrels from the tool regularly
 - Keep jaws clean for proper gripping
 - Check nose pieces for wear or damage
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Key Idea

Rivet guns turn a simple blind rivet into a strong, permanent joint. Proper alignment, correct sizing, and full actuation are essential for reliable FRC construction.

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