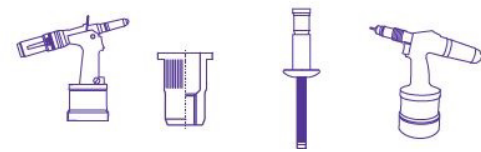


Trouble Shooting Guide for Setting Rivets



Pull Thru



Partial Pull Thru



Head Popper



**Loose Set
or
Plate Freeze**



High Mandrel Break



Sheared Secondary Head



PROPER SET

Potential Cause	Problem Type						
	Pull Thru	Partial Pull Thru	Head Popper	Loose Set	Plate Freeze	High Mandrel Break	Sheared Secondary Head
Over maximum hole size	✓	✓					
Under minimum hole size			✓	✓		✓	✓
Over maximum grip range			✓	✓			
Under minimum grip range	✓			✓		✓	✓
Improper Hole Condition							
Excessive variation in size	✓	✓	✓	✓		✓	✓
Non-circular hole	✓	✓	✓	✓			✓
Tapered hole	✓	✓	✓	✓			✓
Burrs and sharp edges	✓	✓	✓	✓			✓
Material too soft							
Non-perpendicular set / improper alignment of tool when setting	✓	✓	✓	✓	✓	✓	✓
Wrong nose-piece used	✓	✓		✓			
Gap between materials	✓	✓	✓	✓	✓		
Insufficient rear clearance				✓	✓		

= APPLICABLE