

1.0 Scope.

This glossary presents preferred nomenclature and definitions of terms relating to blind rivets.

It is intended that this glossary serve as a guide to users and producers to assist them toward the use of a single system of terminology for the characteristics and properties of blind rivets and other related terms descriptive of their function, application, and performance as component parts in engineered assemblies.

2.0 General.

2.1 Blind Fastener. A blind fastener is a mechanical device which has the capability to join component parts in an assembly where access for fastener installation and activation is available from one side only.

2.2 Blind Rivet. A blind rivet is a blind fastener which has a self-contained mechanical or other feature which permits the formation of an upset on the blind end of the rivet and expansion of the rivet shank during rivet setting to join the component parts of an assembly.

Upset end and blind end of a blind rivet are one and the same. It is the end of the blind rivet that enters the hole in the workpiece first. In many applications it cannot be seen after it enters the setting hole. This is where the term "blind" originates.

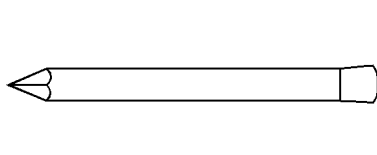
3.0 Classification of Blind Rivets.

3.1 Types of Blind Rivets.

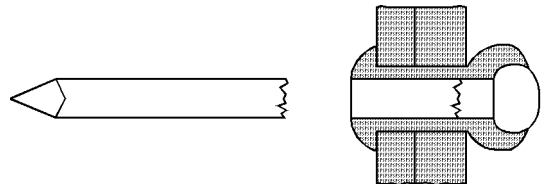
3.1.1 Pull Mandrel. A pull mandrel blind rivet is a multiple piece assembly consisting of at least a rivet body and a mandrel. In the setting operation, the rivet is inserted into the components to be joined, the mandrel is gripped, pulled axially, and its head upsets the rivet body forming a blind head. Pull mandrel blind rivets are further classified as follows:

3.1.1.1 Pull Through Mandrel. A pull through mandrel rivet is a pull mandrel type of blind rivet where, during the setting operation, the mandrel is pulled completely through the rivet body thus leaving a hollow rivet. See IFI specification 117 for inch requirements; see IFI specification 520 for soft metric requirements.

3.1.1.2 Break Pull Mandrel. A break pull mandrel rivet is a pull mandrel type of blind rivet where, during the setting operation, the mandrel is pulled into or against the rivet body and breaks at or near the junction of the mandrel and its upset end. See IFI specification 114 for inch requirements; see IFI specification 505 for soft metric requirements.



Pull Through Mandrel



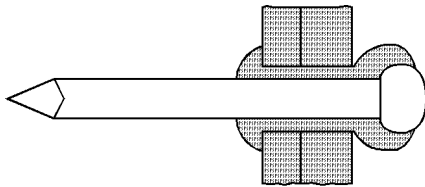
Break Pull Mandrel

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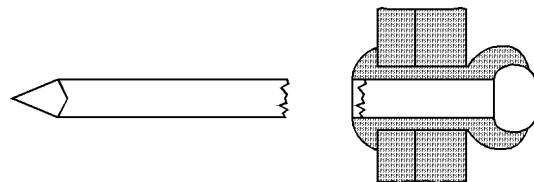
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3.1.1.3 Non-Break Pull Mandrel. A non-break pull mandrel is a pull mandrel type of blind rivet where during the setting operation the mandrel is pulled into or against the rivet body, but does not break. This type requires the mandrel to be dressed in a subsequent operation.

3.1.1.4 Structural Flush Break Pull Mandrel Self-Plugging. A structural flush break pull mandrel is a pull mandrel type of blind rivet where, during the setting operation, the mandrel is pulled into or against the rivet body and breaks at a point within or flush with the rivet head. Flush break means that the break plane of the mandrel occurs above the junction of rivet shank and head, thus the shear plane(s) of the joint will occur through rivet shank and mandrel. See IFI specification 119 for inch requirements; see IFI specification 531 for soft metric requirements.



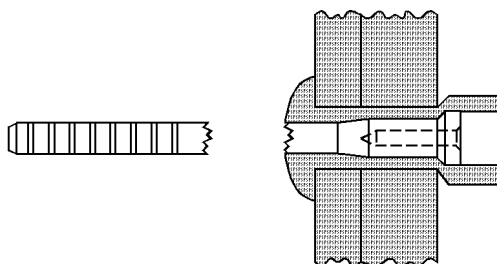
Non-Break Pull Mandrel



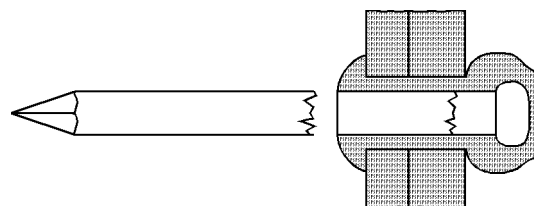
Structural Flush Break Pull Mandrel Self-Plugging

3.1.1.5 Multi-Grip Flush Break Pull Mandrel Self-Plugging. A multi-grip flush break pull mandrel self-plugging is a pull mandrel type of blind rivet where, during the setting operation, the mandrel is pulled into the rivet body and breaks essentially flush with the top of the rivet head. Because the break plane of the mandrel occurs above the junction of rivet shank and head, the shear plane(s) of the joint will occur through rivet shank and mandrel. Multi-grip means the rivet has the design capability to join component parts having a broad range of thicknesses. Positive lock means that during the rivet setting an intentional deformation occurs in the rivet mandrel and/or body which provides a mechanical resistance to mandrel removal from the body. See IFI specification 134 for inch requirements; see IFI specification 532 for soft metric requirements.

3.1.1.6 Break Mandrel Closed End Blind Rivets. Break mandrel closed end blind rivets are pull mandrel type blind rivets that have the head of the mandrel captured and enclosed in the closed upset end rivet body. During the setting operation, the mandrel is pulled within the rivet body and breaks at or near the junction of the mandrel shank and its upset end. See IFI specification 126 for inch requirements; see IFI specification 509 for soft metric requirements.



Multi-Grip Flush Break Pull Mandrel Self-Plugging



Break Mandrel Closed End

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