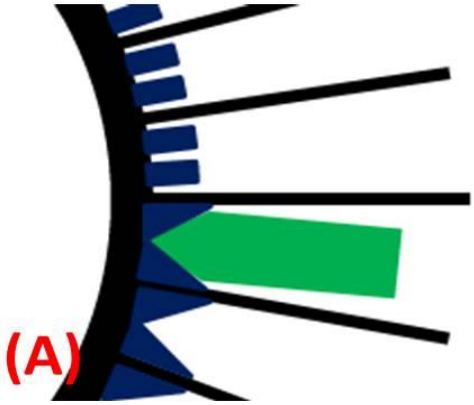
Base/Fin Swaging

Round Base Heat Sink

If the base is round shape with grooves on its surface, the fins can be radially inserted into the grooves. Via a slide riveting process, the base/fin interface can be swaged (Fig. A & B). Like the flat base case,the swaged base/fin interface is extremely intimate, leading to very high joint strength and low thermal interface resistance. This kind of solderless heat sink also has best performance/cost merit and 100% green to the environment.



This scheme is commonly applied to LED heat sinks for the sake of light weight,best natural convection and heat dissipation, low cost, good looking , .., etc. Typical examples are MR-16 small heat sink (Fig. C) and high bay big heat sink (Fig.D).