

LEE IMH 5mm Short Betaplug®

INSTALLATION HOLE

The installation hole for the 5mm Short Betaplug has an included taper angle, Beta, of 4.3°, which matches the tapered outside diameter of the Short Betaplug. This included draft angle of 4.3° is very easy to achieve with a core pin in a die-cast or molded part, or to machine using a tapered tool.

A tolerance of $\pm 0.3^\circ$ on the taper angle of 4.3° is specified to guarantee that the Short Betaplug's rated performance is achieved. If the taper angles are out of tolerance, the plug will either wedge first at the top or at the bottom, reducing sealing burst pressure. Tapered reamers are available, see table below for part number.

The Lee Company recommends that the Short Betaplug be installed below the surface of the housing to ensure optimum performance.

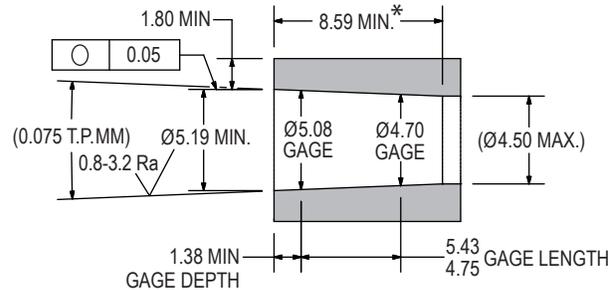
The use of coatings or surface treatments in the area of the installation hole where the Short Betaplug is to be installed is not recommended.

BETAPLUG INSTALLATION

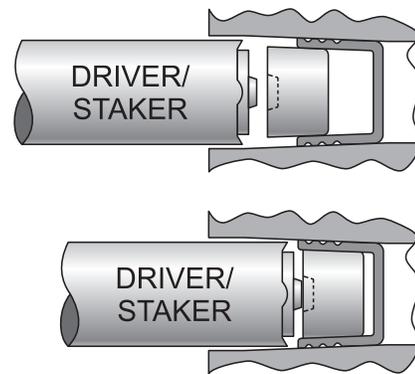
The installation of Lee Short Betaplugs, whether performed manually or automatically, is very easy and economical. First, the preassembled Short Betaplug is inserted into the tapered installation hole narrow end first. The pin is then driven into the plug using the recommended Lee Company Installation/Staking Tool until the pin is below flush and the plug is staked. The installation tool is designed to install the pin below flush while staking over the back edge of the plug (see illustration at right). The Short Betaplug pin should be installed 0.38 to 0.46mm (0.015" to 0.018") below flush.

The Installation/Staking Tool contains a centering feature which ensures proper tool alignment during installation. All Short Betaplug pins are coated with a wax that produces a thin, solid lubricating film that reduces friction, allowing the pin to be driven to its correct position relative to the plug. Do not clean prior to installation.

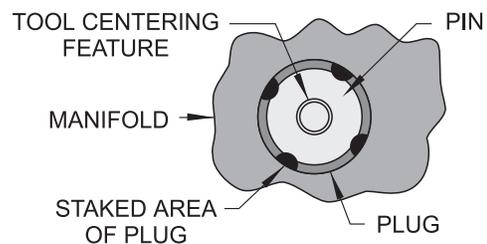
The installation force required to drive the pin into the Short Betaplug is a function of boss material, installation hole and boss geometry, and plug size. A boss made of a stronger material or having a larger wall thickness will require a greater installation force than one made of a weaker material or having thinner walls. Typical installation force for A380 die-cast aluminum is shown in the table below.



* Depth of tapered hole from depth of 5.19 minimum diameter. All dimensions are in millimeters.



Top View of Installed Short Betaplug



INSTALLATION/STAKING TOOL PART NUMBER	TAPERED REAMER PART NUMBER	TYPICAL INSTALLATION FORCE (kN)
PLBT0570031S	PLBT0570020S	4.5 (1,010 lbf.)