

Installation and Tooling Selection

600 Series, Structural Type

The characteristic design of this series will retain the fastener in the panel until time of assembly. Knurls under the head of the body of these internally threaded fasteners, grip the cover sheet and act as an anti-rotation feature.

Panel Preparation

Requires the following:

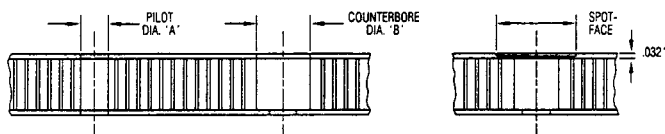
1. A two diameter hole through the panel.
2. A drill-counterbore combination or singly, or a step drill to standard diameters. See table below.
3. Access to both sides of the panel.
4. Residual core and bondline material must be removed to allow the sleeve to seat on the bottom skin.

Installation Drill Diameters

Fastener Size	1	2	3	4	5	6
"A" Pilot Drill Fig.1 $^{+.005}_{-.000}$.140	.166	.190	.257	.316	.377
"B" C'BORE Fig.2 $^{+.010}_{-.000}$.312	.375	.375	.500	.562	.625

Skin Thickness to .032:

Skin Thickness Greater Than .032:



Panel cover sheets up to .032" will dimple automatically to obtain a flush head condition. Thicker sheets may either require the use of the non-flush head style fastener, or if flushness is required, predimping or spotfacing is common practice in the industry.

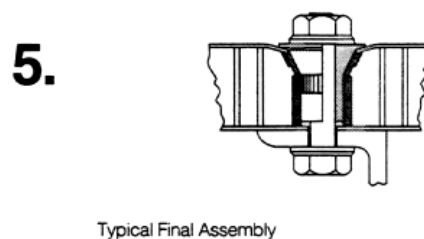
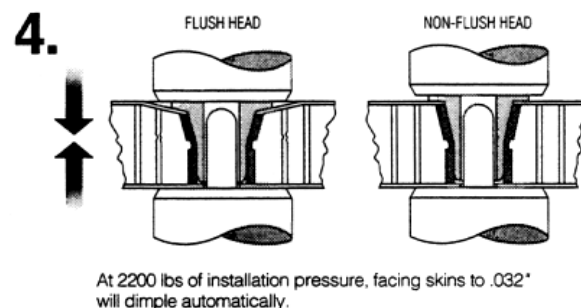
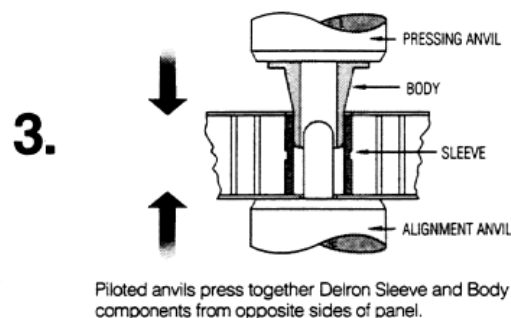
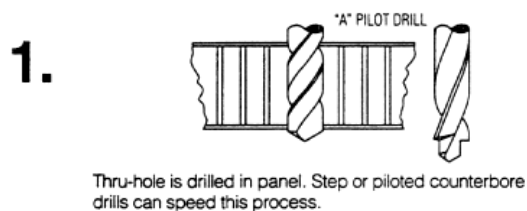
Fastener Installation

The most commonly used method, and that which is recommended, is the use of ram type equipment, such as an arbor press or hydraulic press.

1. Position fastener in prepared hole.
2. Select tools from Installation Tool Chart (Opposite).
3. With tools in place, apply pressure to head of fastener. Press body of insert into sleeve until head is flush with panel surface ('C' or 'D' head style) or until head is down against panel surface ('F' head style).
4. Release pressure and fastener is now completely installed. Since the head diameter of the fastener has the greatest area of contact, it may cause a slight spring back condition. However, when the component is bolted to the panel, the fastener will again become flush.

One time setting of insert is critical to a good installation. Do not 'bump' to set flush. Spring back is inherent in the panel and multiple resets of the insert results in a loose body. If within .015 or flush pull the head to flush by attaching the component part.

Installation Sequence



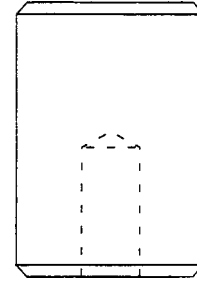
Tooling Part Numbers

Example: Insert Part Number 603D-48-50 requires Tool Kit Part Number: 1617-3

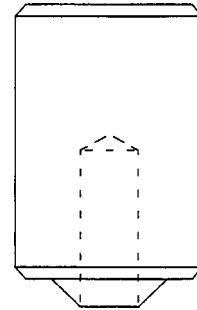
Fastener Series	Tool Kit Number	Consisting of:	
		Pressing Anvil	Alignment Anvil
601(*)1	1612	1612-1	1912-2
602(*)1	1613	1613-1	1613-2
601(*)2	1614-2	1614-2-1	1614-2-2
602(*)2			
601(*)3	1614-3	1614-3-1	1614-3-2
602(*)3			
601(*)4	1614-4	1614-4-1	1614-4-2
602(*)4			
601(*)5	1614-5	1614-5-1	1614-5-2
602(*)5			
601(*)6	1614-6	1614-6-1	1614-6-2
602(*)6			
601C1	1615-1	1615-1-1	1612-2
601C2	1615-2	1615-2-1	1614-2-2
601C3	1615-3	1615-3-1	1614-3-2
601C4	1615-4	1615-4-1	1614-4-2
601C5	1615-5	1615-5-1	1614-5-2
601C6	1675	1675-1	1614-6-2
602C1	1616-1	1616-1-1	1613-2
602C2	1616-2	1616-2-1	1614-2-2
602C3	1616-3	1616-3-1	1614-3-2
602C4	1616-4	1616-4-1	1614-4-2
602C5	1616-5	1616-5-1	1614-5-2
602C6	1616-6	1616-6-1	1614-6-2
603(*)1	1617-1	1613-1	1617-1-2
604(*)1			
603-2	1617-2	1614-2-1	1617-2-2
604(*)2			
603(*)3	1617-3	1614-3-1	1617-3-2
604(*)3			
603(*)4	1617-4	1614-4-1	1617-4-2
604(*)4			
603(*)5	1617-5	1614-5-1	1617-5-2
604(*)5			
603(*)6	1617-6	1614-6-1	1617-6-2
604(*)6			

(*) Fill in "D" or "F"

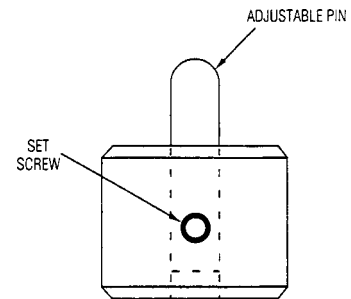
Pressing Anvils For 'D' & 'F' Style Heads



Pressing Anvil For 'C' Style Heads



Alignment Anvils For Thru Hole Type Fasteners



Spring Loaded Alignment Anvils For Threaded Type Fasteners

