

Installation and Tooling Selection

600 Series, Flared 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

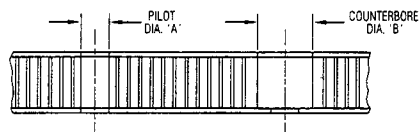
Requires the following:

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.

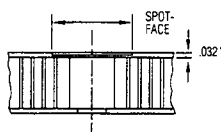
Installation Drill Diameters

Fastener Size	0	1	2	3	4	5	6
"A" Pilot Drill Fig. 1, $+.005/-0.000$.152	.177	.228	.228	.295	.358	.421
"B" C'bore Fig. 2, $+.010/-0.000$.250	.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, predimpling or spotfacing is common practice in the industry.

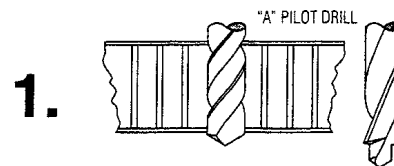
Fastener Installation

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.

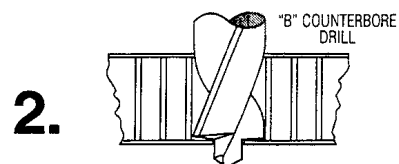
1. Position fastener in prepared hole.
2. Select tools from Installation Tool Chart (Opposite).
3. Position panel over alignment tool with the guide anvil projecting through the pilot hole. See figure 3.
4. Position fastener in prepared hole and apply pressure with the pressing anvil until the fastener head becomes flush with the top skin. See figure 4.
5. Replace alignment tool with flaring anvil and again apply pressure with pressing anvil until flaring anvil becomes flush with the bottom skin. See figure 5.
6. 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.

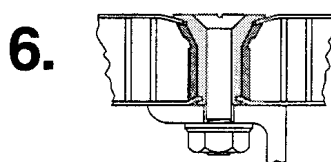
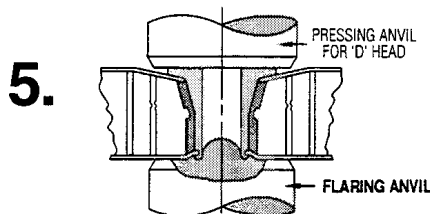
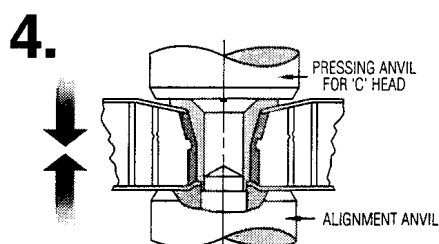
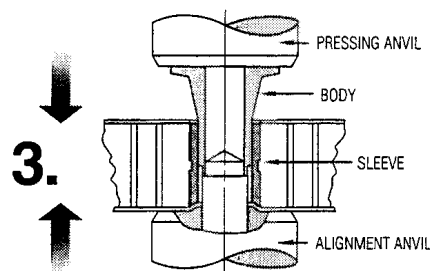
Installation Sequence



Thru-hole is drilled in panel. Step or piloted counterbore drills can speed this process.



Counterbore is drilled through top skin to inside surface of bottom. Remove core and bond line residual.



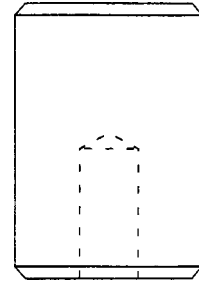
Tooling Part Numbers

Example: Insert Part Number 603D3-47F50 requires Tool Kit Part Number: 1632K3

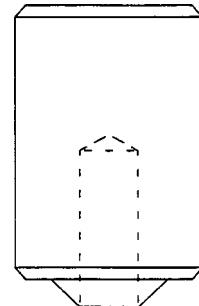
Fastener Series	Tool Kit Number	Consisting of:			
		Alignment Anvil	Pressing Anvil Countersink	Pressing Anvil Flat	Flaring Anvil
601(*)0	1632K0	1632-001	1632-002	1632-003	1632-004
602(*)0					
603(*)0					
604(*)0					
601(*)1	1632K1	1632-11	1632-12	1632-13	1632-14
602(*)1					
603(*)1					
604(*)1					
601(*)2	1632K2	1632-21	1632-22	1632-23	1632-24
602(*)2					
603(*)2					
604(*)2					
606(*)1	1632K3	1632-21	1632-32	1632-23	1632-24
601(*)3					
602(*)3					
603(*)3					
604(*)3	1632K4	1632-41	1632-42	1632-43	1632-44
601(*)4					
602(*)4					
603(*)4					
604(*)4	1632K5	1632-51	1632-52	1632-53	1632-54
606(*)2					
606(*)3					
601(*)5					
602(*)5	1632K6	1632-61	1632-62	1632-63	1632-64
603(*)5					
604(*)5					
606(*)4					
601(*)6	1632K6	1632-61	1632-62	1632-63	1632-64
602(*)6					
603(*)6					
604(*)6					
606(*)5					

(*) Fill in 'C', 'D' or 'F' as applicable.

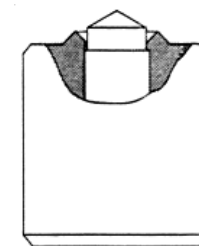
Pressing Anvils For 'D' and 'F' Style Heads



Pressing Anvils For 'C' Style Heads



Alignment Anvil



Flaring Anvil

