

Installation and Tooling Selection

100 Series, Grommet Type

Permanently installed at sub-assembly, the 100 Series fasteners are self-retained through a telescopic press fit that is a function of the sleeve and plug sections. The use of threaded or threaded self-locking type permits the attachment of components without the use of additional lock nuts.

Panel Preparation

Requires the following:

1. A single diameter thru-hole
2. Standard drill sizes (comparable to body diameter). See table on opposite page
3. Access to both sides of the panel.

Fastener Installation

The most common method of applying the necessary pressure is the use of a hand arbor press, a hydraulic squeezer or any pneumatically operated press.

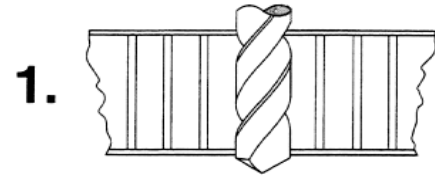
To assure proper alignment and to direct the pressure to the head of the fastener, the use of a piloted anvil type tool as illustrated is suggested. Alignment tools such as these can be manufactured by your own tooling facilities. Due to the simplicity of this type of tool Ros n does not stock them, but will make them to order for any given type or size.

An average of 1800 pounds for installation pressure is recommended. Excessive pressure may force the telescopic section to over-expand and become loose.

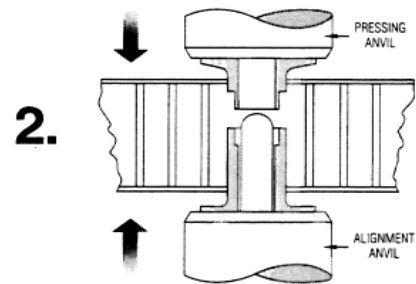
Panel facing sheets up to .032" will dimple automatically to obtain a flush head condition. Thicker sheets may require the use of the non-flush head style fastener. If flushness is required in these thicker facings, pre-dimpling or spot-facing is common practice in the industry.

Fasteners that cannot be installed by conventional methods (such as field installations), may be installed by hand operated pull up tools.

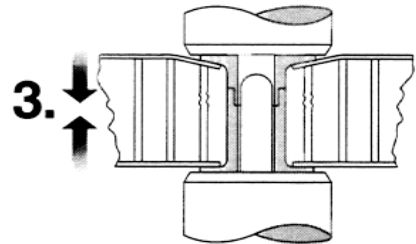
Installation Sequence



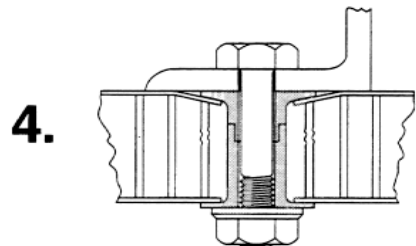
Thru-hole is drilled in panel; drill size is comparable to body diameter of 100 Series insert used.



Piloted anvils press sleeve and plug components from opposing sides of panel.



At 300 lbs of installation pressure, facing skins to .032" will dimple automatically.



Typical Final Assembly

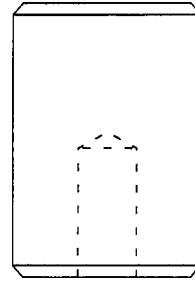
Tooling Part Numbers

Example: Insert Part Number 102C-10-1 requires Tool Kit Number: 1616-3.

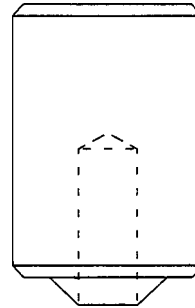
Fastener Series and Sizes	Installation Hole Size	Installation Tooling		
		Tool Kit Number	Pressing Anvil	Alignment Anvil
101(*)12	.290	1612	1612-1	1612-2
101C12		1615-1	1615-1-1	
102(*)4	.228	1613-0	1613-0-1	1613-0-2
102C4		1616-0	1616-0-1	
102(*)6	.290	1613	1613-1	1613-2
102C6		1616-1	1616-1-1	
101(*)15	.290	1614-2	1614-2-1	1614-2-2
102(*)8				
101C15		1615-2	1615-2-1	
102C8		1616-2	1616-2-1	
101(*)18	.323	1614-3	1614-3-1	1614-3-2
102(*)10				
101C18		1615-3	1615-3-1	
102C10		1616-3	1616-3-1	
101(*)25	.390	1614-4	1614-4-1	1614-4-2
102(*)25				
101C25		1615-4	1615-4-1	
102C25		1616-4	1616-4-1	
101(*)28	.421	1674	1674-1	1674-2
101c28		1676	1676-1	1676-2
101(*)31	.484	1614-5	1614-5-1	1614-5-2
102(*)31				
101C31		1615-5	1615-5-1	
102C31		1616-5	1616-5-1	
103(*)440	.228	1617-0	1617-0-1	1617-0-2
104(*)440	.323	1617-1	1613-1	1617-1-2
103(*)632				
106(*)632				
103(*)832	.290	1617-2	1614-2-1	1617-2-2
104(*)832				
106(*)832				
103(*)1032	.358	1617-3	1614-3-1	1617-3-2
104(*)1032				
106(*)1032				
103(*)428	.390	1617-4	1614-4-1	1617-4-2
104(*)428				
106(*)428				
103(*)524	.484	1617-5	1614-5-1	1617-5-2
104(*)524				
106(*)624				

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

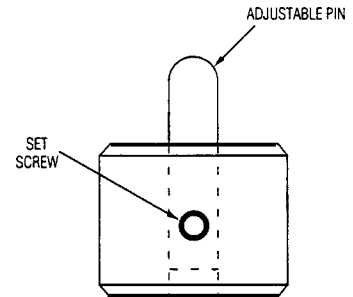
Pressing Anvils For 'D' & 'F' Style Heads



Pressing Anvil For 'C' Style Heads



Alignment Anvils For Thru Hole Type Fasteners



Spring Loaded Alignment Anvils For Threaded Type Fasteners

