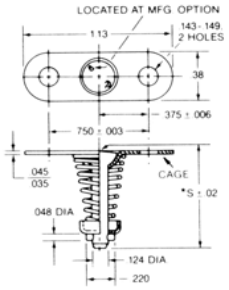
QUICK OPERATING FASTENERS 15F SERIES

Push Button and Push Panel Stud Assemblies and Receptacles

Features: One push locks. • Next push unlocks. • Push panel versions are concealed when door is closed.

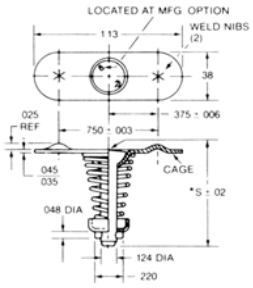
15F Series. Stud Assemblies

Note: Part numbers shown are basic part numbers only. See ordering information for required dash numbers.



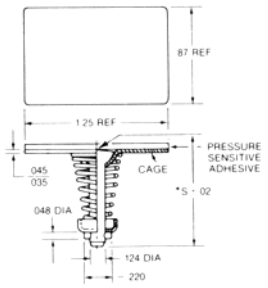
*S = .54 + (.03 x Dash No.)

Push Panel Mechanical Attachment



*S = .54 + (.03 x Dash No.)

Push Panel Spot Weld Attachment



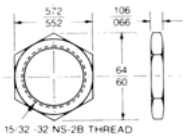
*S = .54 + (.03 x Dash No.)

Push Panel Adhesive Attachment

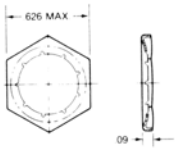
Material (Finish)	Part No.	Part No.	Part No.	
Steel (Cadmium, Clear Chromate)	15S20-[ ]-1AA	15S20-[ ]-2AA	15S20-[ ]-3AA	
Steel (Cadmium, Gold Chromate)	---	---	---	
Steel (Bright Nickel)	---	---	---	
Steel (Black Phosphate)	---	---	---	
Steel (Zinc Plated)	15S20-[ ]-1AC	---	15S20-[ ]-3AC	
Steel (Cadmium, Clear Chromate) Except cage has no finish	15S20-[ ]-1AB	15S20-[ ]-2AB	15S20-[ ]-3AB	
Brass and Steel (Chromium)	---	---	---	
Brass and Steel (Black Oxide)	---	---	---	

Note: *All push panel versions shown here have stud pins which are free to swivel in retainer cage. This feature helps compensate for misalignment between door and substructure.*

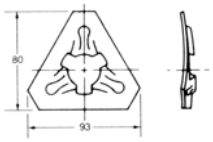
Receptacle Retaining Nuts and Push-on Retainer



Retaining Nut, Solid



Retaining Nut, Sheet Metal

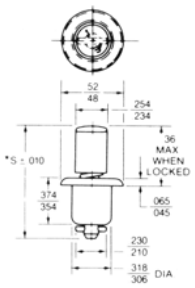


Push-on Retainer

Material (Finish)	Part No.	Weight (per 100 pcs.) (lbs.)	Part No.	Weight (per 100 pcs.) (lbs.)	Part No.	Weight (per 100 pcs.) (lbs.)
Steel (Cadmium, Clear Chromate Plated)	15R10-1AC	0.23	---	---	---	---
Steel (Cadmium, Gold Chromate Plated)	15R10-1AD		---	---	---	---
Steel (Zinc Plated)	---	---	---	---	15R16-1-1AA	0.25
Steel (Zinc Plated, Clear Chromate)	---	---	99N10-01A1	0.13	---	---

All specifications in inches unless otherwise specified.

Contact the Camloc Products Division for par weights not specified here.



*S = .88 + (.03 x Dash No.)

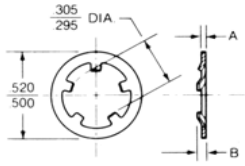
Push Button

	Part No.	Part No.
	15S1-[ ]-1AC	---
	15S1-[ ]-1AF	---
	15S1-[ ]-1AD	---
	15S1-[ ]-1AG	---
	---	---
	---	---

	---	

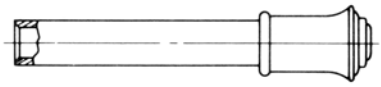
†Spacer: For stud dash no. 1 and 2 none required.
For stud dash no. 3 through 8 material nylon.
For stud dash no. 9 through 20 material brass, finish nickel plated.

Stud Retaining Ring
(For 15S1 and 15S52 Push Button Studs Only)



Part No.	Material (Finish)	A	B
15S11-1AC	Steel (Cadmium, Clear Chromate	.013 .007	.030
15S11-1AD	Steel (Cadmium, Gold Chromate)	.013 .007	.030
15S11-2AE	Steel (Cadmium, Olive Drab Chromate)	.018 .012	.035

Weight per 100 pcs.: 0.05 lbs.



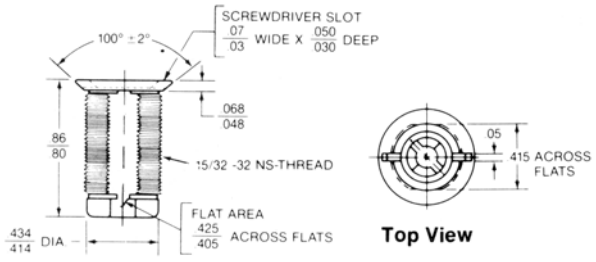
Installation Tool
For Stud Retaining Ring, P/N T107-1.

Stud Part Number Structure
15S20-[ ]-1AA

- Finish
- Material
- Stud Dash Number (Based on Total Thickness, "G")
- Basic Part Number

Stud Dash Number Selection Tables on Page B-6.

15R1 Receptacles
Used with all 15F Series stud assemblies in table above.



Installation Tool for Push-on Retainer, P/N T147-1-1AA.

Material (Finish)	Part No.
Zinc (Zinc, Clear Chromate Plated)	15R1-1AC
Zinc (Zinc, Gold Chromate Plated)	15R1-1AE
Zinc (Black Phosphate)	15R1-1AG

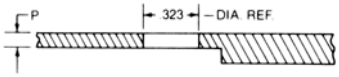
Weight per 100 pcs.: 0.99 lbs.

B

Panel Preparation and Installation Data

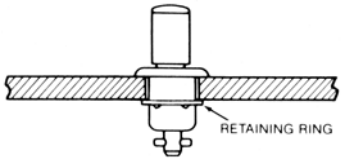
Panel Preparation For Studs

Push Button Version



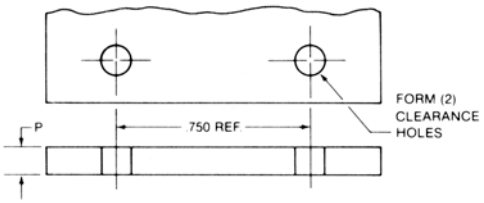
Determine panel thickness “P” and form through hole to .323 inch diameter.

Note: Panels with thickness greater than .188 inch must be back counterbored to a concentric .625 diameter with a remaining maximum material thickness of .188 inch.

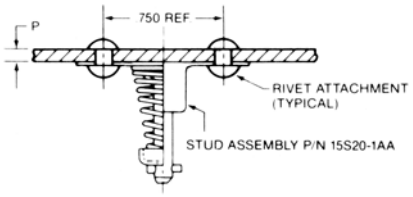


Insert stud through panel and attach retaining ring.

Push Panel Version/ Mechanical Attachment

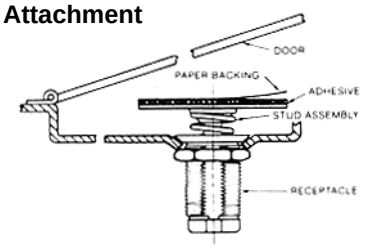


Locate centers and drill or punch holes for fastening method selected.



Install with 9/64 rivets or # size machine screws. Sheet metal or wood screws can also be used as appropriate.

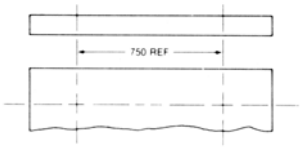
Push Panel Version/ Adhesive Attachment



Installation using adhesive backed stud assembly.

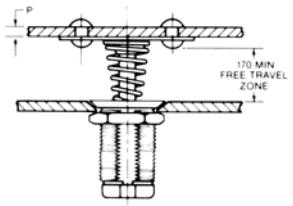
Push stud assembly into installed receptacle until stud assembly locks in place. Then peel off paper backing and close door. Apply pressure to afix adhesive. Stud assembly is now installed.

Push Panel Version/Spot Weld Attachment



Located centers and spot weld in place.

Required Clearance



Typical Installation, Locked Position.

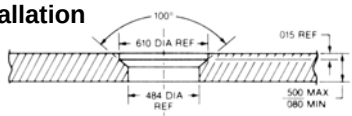
Push panel stud assemblies require clearance to allow .170 inch free travel in order to function. Soft gaskets may be used provided “P” panel can move .170 inch minimum before full compression is reached.

Note: For short length studs -6 and -7, spot weld or adhesive attachment is recommended to insure that free travel zone is maintained.

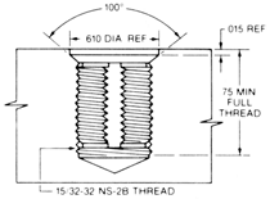
Panel Preparation For Receptacles

Flush Installation

Drilled Panel

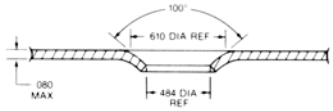


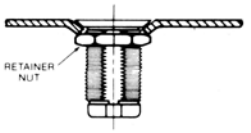
Threaded Installation



Dimpled Panel

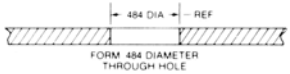
Drill .406 dia. hole then form to shape

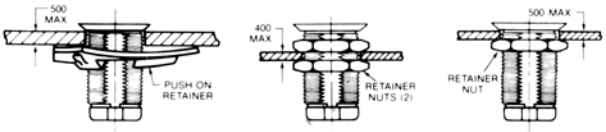




Typical Flush Installation

Protruding Installation





B

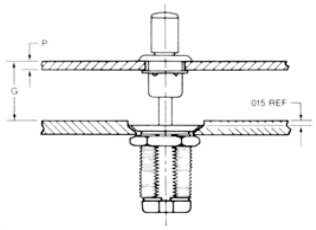
QUICK OPERATING FASTENERS 15F SERIES

Ordering Information/Stud Dash Number Selection

To Select Stud Dash Number

1. Determine "G" thickness.
Note: Increase "G" to allow for thickness of paint or other finishes.
2. Add. 015 inch to "G"
3. Locate "G + .015" in table.
4. Note corresponding stud dash number

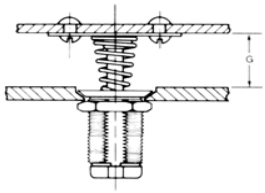
For Push Button Version



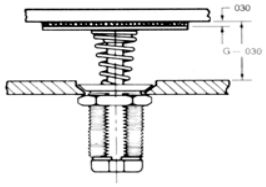
Stud Dash Number Selection	
G + .015	Dash No.
.030-.089	- 1
.090-.149	- 3
.150-.209	- 5
.270-.329	- 9
.330-.389	-11
.390-.449	-13
.450-.509	-15
.510-.569	-17
.570-.629	-19
.630-.689	-21
.690-.749	-23
.750-.809	-25

Important Note: *If the thickness "G + .015" is very near the top of the thickness range, selection of the next greater dash number is recommended. For "G + .015" thicknesses longer than those tabulated, contact the Camloc Products Division.*

For Push Panel Versions



Mechanical and Spot Weld Attachment



Adhesive Attachment

Stud Dash Number Selection	
G + .015	Dash No.
.18-.22	- 6*
.21-.25	- 7*
.24-.28	- 8
.27-.31	- 9
.30-.34	-10
.33-.37	-11
.36-.40	-12
.39-.43	-13
.42-.46	-14
.45-.49	-15

Important Note: *If the thickness "G + .015" is very near the top of the thickness range, selection of the next greater dash number is recommended. For "G + .015" thicknesses longer than those tabulated, contact the Camloc Products Division.*
**Spot weld or adhesive attachment is recommended when using -6 and -7 stud assemblies.*

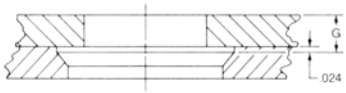
How to Order

Example 1.
(For 15S1 push button versions)
Stud Assembly Used: 15S1-[?]-1AC
"G" Total Thickness = .455 inch
Required Calculation: .455 + .015 = .470
Stud Dash Number From Table = .15
Complete Part Number: 15S1-15-1AC

Example 2.
(For 15S20 push panel versions)
Stud Assembly Used: 15S20-[?]-1AA
"G" Total Thickness = .350 inch
Required Calculation: .350 + .015 = .375 OR .38
Stud Dash Number From T able = .12
Complete Part Number: 15S20-12-1AA

Note: *If the total thickness "G," is very near the top of the thickness range, selection of the next greater dash number is recommended. For "G" thicknesses longer than those tabulated, contact Technical Support.*

15S51 and 15S52 Stud Dash Number Selection



G = PANEL + .024

Stud Dash Number Selection	
"G" Total Thickness	Stud Dash No.
.047-.079	-1
.079-.110	-2
.110-.142	-3
.142-.173	-4
.173-.205	-5
.205-.236	-6
.236-.268	-7
.268-.299	-8
.299-.331	-9
.331-.362	-10