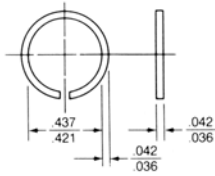


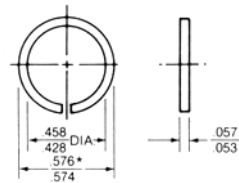
QUICK OPERATING 1/4-TURN FASTENERS 4002 SERIES

Retaining Rings for Ring Retained Grommets.



Standard Retaining Ring

Part No.	Material	Weight (per 100 pcs.) (lbs.)	Application	Tool
R4G	Steel (Cadmium Plated)	0.06	For use with all ring retained grommets except 40G1 Series	T26
40G26-1	Elgiloy (Non-Magnetic, Corrosion-Resistant)	0.07		



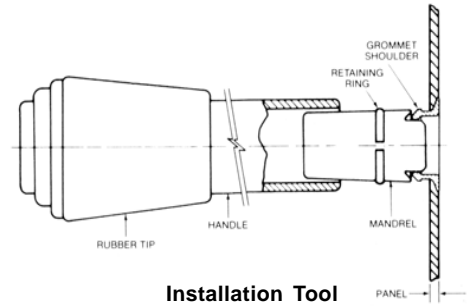
* WHEN MOUNTED ON
4570 DIA. MANDREL
4565

High Shear Retaining Ring

Part No.	Material	Weight (per 100 pcs.) (lbs.)	Application	Tool
R4T	Alloy Steel (Cadmium Plated)	0.15	For use with 40G1 Series High Shear Grommets only	T39-1

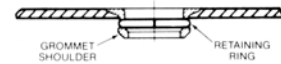
40G42 Elgiloy

Retaining Ring Installation



Installation Tool

1. Place grommet in prepared hole.
2. Place mandrel into grommet.
3. Place retaining ring over mandrel as shown.
4. Push handle over mandrel until sharp ring is fully seated behind shoulder of grommet.



Installed Grommet

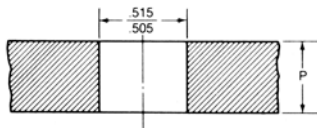
Retaining Ring Installation Tool and Replacement Components.

Description	Part No.
Complete Installation Tool	T-26
Rubber Tip	T-26-1
Mandrel	T-26-2

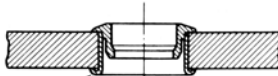
4002 Series. Panel Preparation and Installation Data (continued)

For Flare Retained Grommets

Plus Flush Grommets



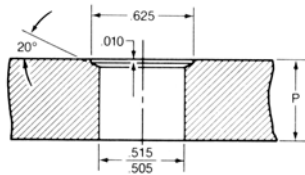
Form .515-.505 mounting hole. Insert grommet into panel and flare using appropriate flaring tools from table at right.



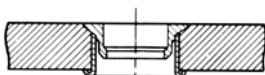
SLEEVE SHOULD BE COMPLETELY FLARED OVER

Typical Installation

Flush Mounting Grommets



Form .515-.505 mounting hole. Countersink with C'Sink tool P/N 4-GC-500. Insert grommet into panel and flare using appropriate flaring tool set from table at right.



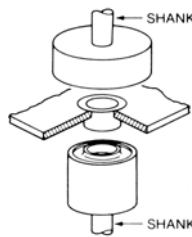
SLEEVE SHOULD BE COMPLETELY FLARED OVER

Typical Installation

Installation Tools

Flaring Tools

Used to flare grommets in place.



Tool Part Numbers		
Grommet Part No.	Punch	Die
4002- { P2 P3 P4	4-GM-[]	4-PF-[]
40G15 40g16	4-GM-[]	T92-[]

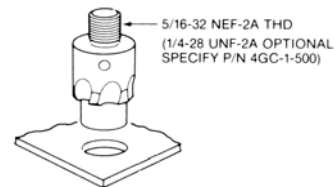
Determine basic part number from table above. Flaring tools are available in a number of shank diameters and shank lengths. Select from table below and list corresponding dash number as a suffix to basic part number

Shank Diameters and Lengths		
Dash Number	Shank Diameter	Shank Length
-1	1/4	9/16
-2	5/16	5/8
-3	5/16	7/8
-4	3/8	7/8

Example: To specify Flaring Die P/N 4-PF-1[?], with 5/16" shank diameter and 7/8" shank length, complete the part number with a-3. Completed part number: 4-PF-3.

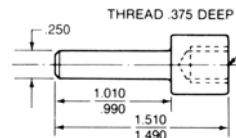
Countersinking Tool 4GC-500

Forms C'Sink required for Flush Mounting Grommets.



Adaptors for Countersinking Tools

May be used to adapt any C'Sinking tool for use in drill chuck.



C'Sink Tool Thread	Adaptor Part Number
5/16-32NEF-2B	T19
1/4-28UNF-2B	T19-1

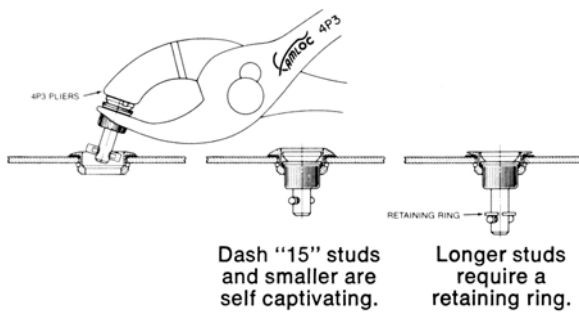


QUICK OPERATING 1/4-TURN FASTENERS 4002 SERIES

4002 Series. Stud Assembly Installation

Installing Stud Into Panel

4002 Series studs must be used in conjunction with a grommet. (See Page A-51 for grommet selection.) Compress stud assembly spring using Camloc pliers P/N 4P43 as shown. Insert stud through grommet and release when cross pin clears. Studs with dash numbers greater than -15 require retaining rings. These longer studs may be installed without compressing the stud assembly spring (pliers not required).

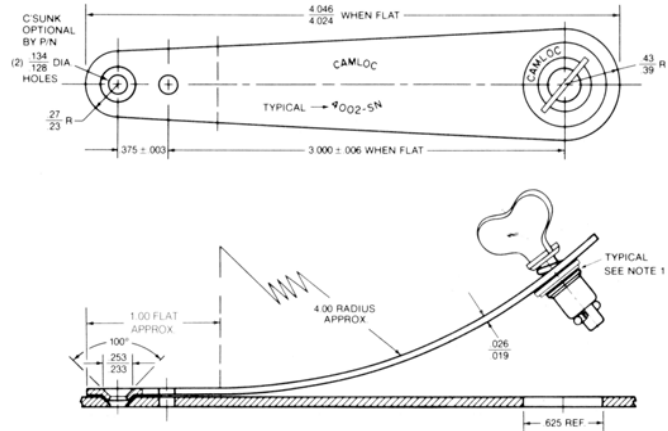


Dash "15" studs and smaller are self capturing.

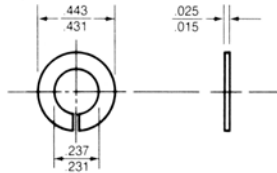
Longer studs require a retaining ring.

Stud Ejector Spring (Optional)

Provides full retraction of stud assembly to allow opening and closing of equipment without the possibility of jamming or damage.



Retaining Rings



Part No.	Material	Maximum Service Temperature
4002-SW	Spring Steel (Cadmium Plated)	450°F.
4002-SW-SS	Stainless Steel	700°F.

Material	Part Numbers		Rivet Holes
	For use with Flush Grommets	For use with Plus Flush Grommets	
Spring Steel (Cadmium Plated)	4002 SG		Plain
		4002 SN	
	4002 SGD		Dimpled
		4002 SND	
	4002 SGF*		Plain
	4002 SNF*		

*Ejector P/N 4002 SNF is flat; i.e. no 4" radius bend.

Retaining Ring Installation

- To install, place retaining ring on stud with slot aligned over left side of cross pin as shown on figure 1.
- Snap retaining ring under cross pin using needle nose pliers, then rotate retaining ring 180° until ring is over right side of cross pin as shown on figures 2 and 3.
- To complete installation, snap retaining ring over the right side of cross pin.
- Completed installation is shown in figure 4.

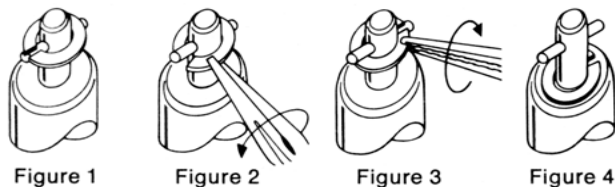


Figure 1

Figure 2

Figure 3

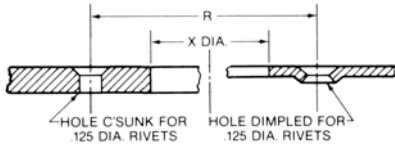
Figure 4

- Notes:
1. Thru hole in Ejector Spring Part Numbers 4002SN, SND and SNF is formed to allow grommet to seat flush to top surface of Ejector Spring.
 2. When using Stud Ejector Springs, Retaining Ring/Retained style grommets must be used.
 3. Maximum Service Temperature: 450°F.
 4. Add .021 to total material thickness "G" when using these parts. See Page A-61.
 5. Weight per 100 pieces:
Ejector Spring used with Flush Grommet: 1.84 lbs.
Ejector Spring used with Plus Flush Grommet: 1.86 lbs.

4002 Series. Receptacle Installation Data

Standard Mounting Receptacles

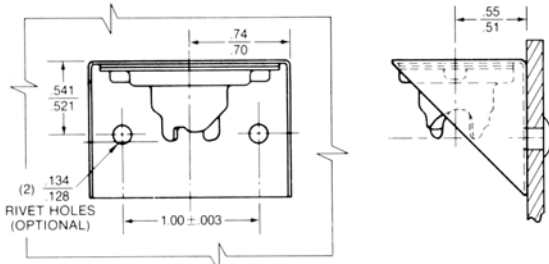
1. Drill #30 (.1285) diameter pilot hole.
2. Drill holes for .125 rivets using drill jig specified.
3. Enlarge pilot hole to X diameter.
4. Rivet receptacle in place.



Typical Installation
(Thin panels may be dimpled)

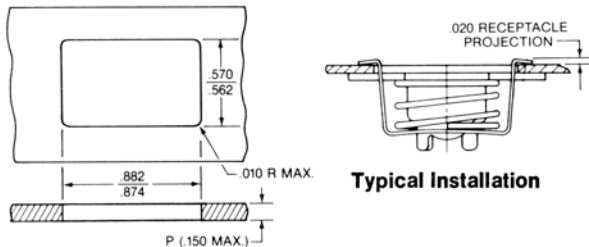
Receptacle	X Dia. (Ref.)	Hole Saw	R Rivet Hole Spacing (Ref.)	Drill Jig
244-22 Series Standard Mount	.812	HS-812	1.375	T22
All Other Standard Mount	.688	H-687	1.00	T1

Side Mounting Receptacle



Typical Installation

Snap-in Receptacle (P/N 40R39-1-1AA)

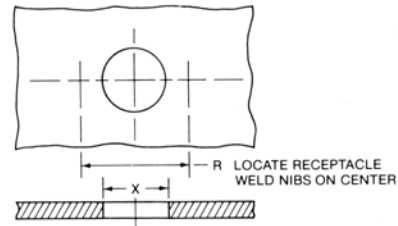


Typical Installation

Panel Preparation

Two piece floating receptacles Spot weld attachment

1. Form through hole to X diameter.
2. Place receptacle element into cage.
3. Locate receptacle assembly on center and spot weld in place.



Typical Installation

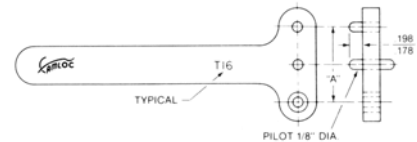
Receptacle Assembly	X Dia. (Ref.)	R (Ref.)	Hole Saw
1/16" Float Versions 751, 751E/756W, 757W	.687	1.00	HS-687
1/8" Float Versions 701, 701E/706W	.812	1.375	HS-812

Optional Installation Tools

Drill Jigs

Provide convenient means for accurately locating rivet holes relative to receptacle mounting hole.

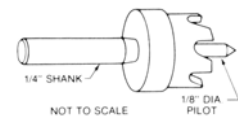
Drill Jig	A
T16	1.000
T22	1.375



Hole Saws

Accurately size mounting holes.

Hole Saw	Forms Hole Dia.
HS-687	.687
HS-812	.812



When using hole saw, first drill #30 (.1285) pilot hole.