

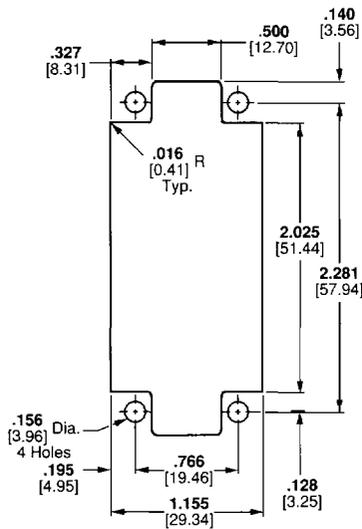
## Special Application Connectors

### High Current 12 Position U.L. Voltage Rating: 1800V

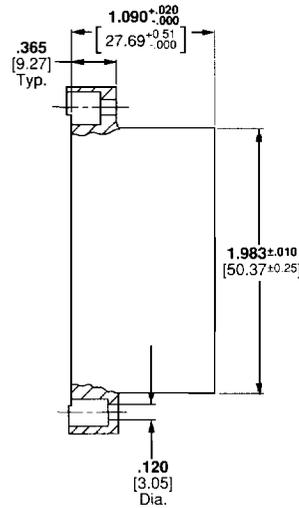
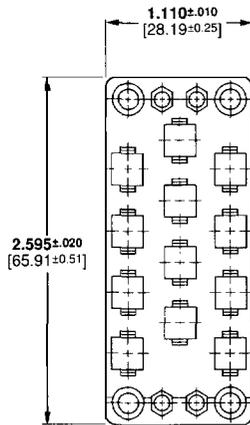
#### Material and Finish:

**Housing**—Phenolic, 94V-0 rated,  
black

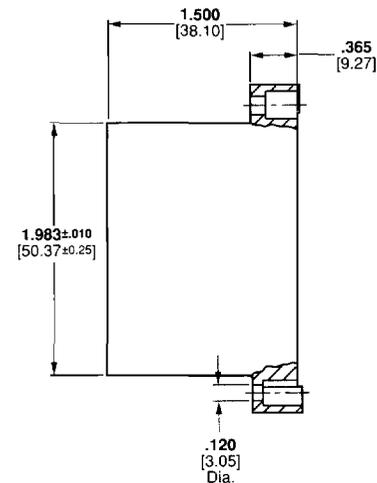
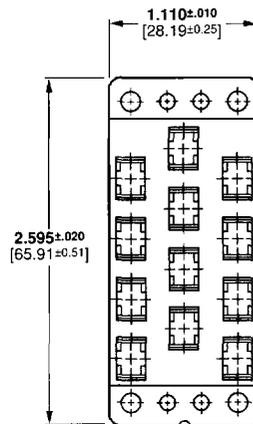
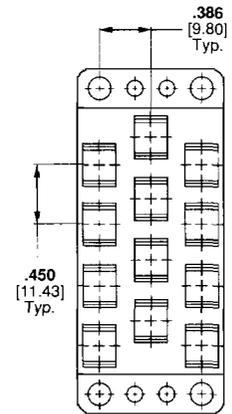
Contacts must be ordered  
separately.



Recommended Panel Cutout



Plug Housing



Receptacle Housing

Phenolic Housing Part No.		Contacts Accepted		
Plug	Receptacle	Quantity	Contact Type	Page Ref.
205042-1	205043-1	12	Type XII	39

**Note:** 12 position connector uses Standard 75 Position Hardware. Refer to appropriate column of Application Charts for Hardware Selection pages 14 through 29.

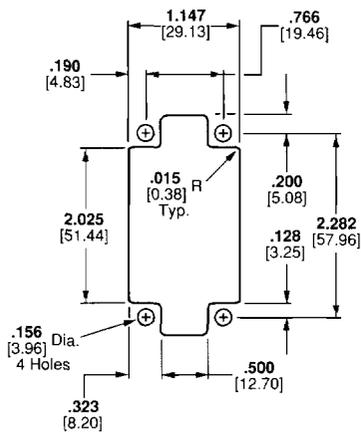
## Special Application Connectors (Continued)

### Mixed 29 CF Position (with Center Fastener)

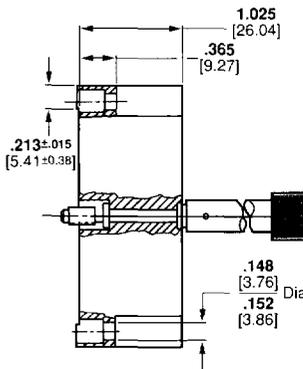
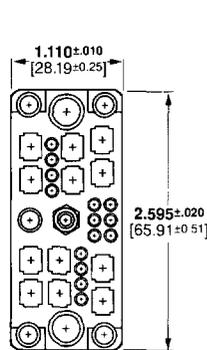
#### Material and Finish:

**Housing**—Phenolic, 94V-0 rated,  
black

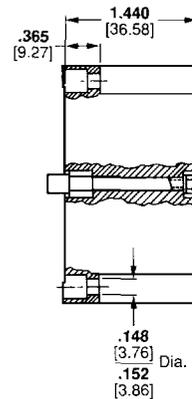
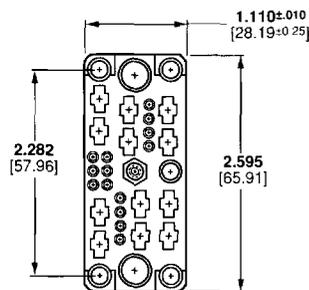
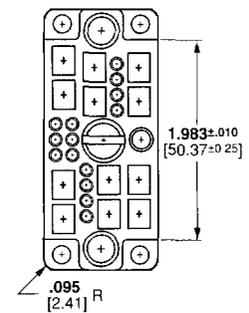
Contacts must be ordered  
separately.



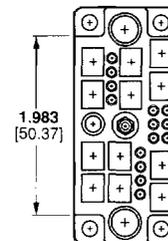
Recommended Panel Cutout



Plug Housing



Receptacle Housing



Phenolic Housing Part No.		Contacts Accepted		
Plug	Receptacle	Quantity	Contact Type	Page Ref.
202479-2	202478-2	14*	Type II	34
			Type III+	35-38
			Subminiature COAXICON	41-42
		2	Type XII	39
		1	Standard COAXICON	—
			Type I	40
			Miniature COAXICON	43-45

\*Quantity may be all of the same type, or a combination of those types listed.  
See Hardware Section for appropriate hardware for this connector. See pages 14 and 29.

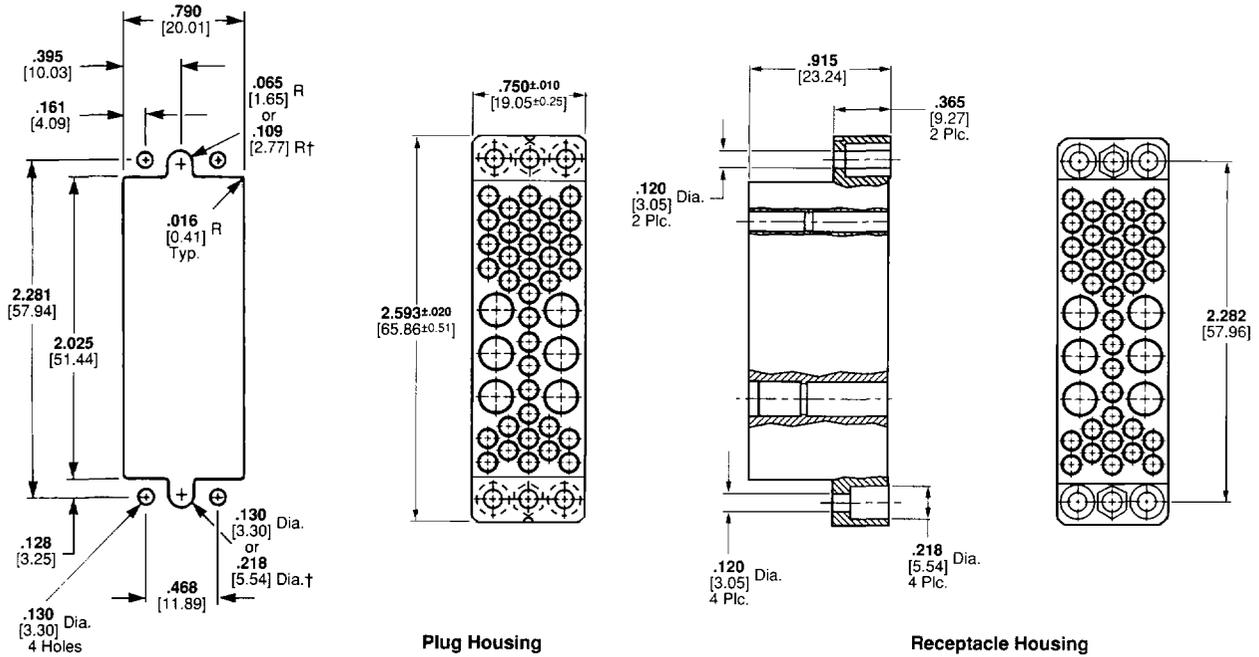
## Special Application Connectors (Continued)

### Mixed 42 Position

#### Material and Finish:

**Housing**—Phenolic, black or diallyl phthalate, blue, 94V-0 rated

Contacts must be ordered separately.



#### Recommended Panel Cutout

Phenolic Housing Part No.		Diallyl Phthalate Housing Part No.		Contacts Accepted		
Plug	Receptacle	Plug	Receptacle	Quantity	Contact Type	Page Ref.
202515-1	202516-1	202515-3	202516-3	36*	Type II	34
					Type III+	35-38
					Subminiature COAXICON	41-42
				6*	Type I	40
					Miniature COAXICON	43-45

\*Quantity may be all of the same type, or a combination of those types listed.  
**Note:** 42 position connector uses Standard 50 Position Hardware. Refer to appropriate column of Application Chart for Hardware Selection pages 14 through 29.

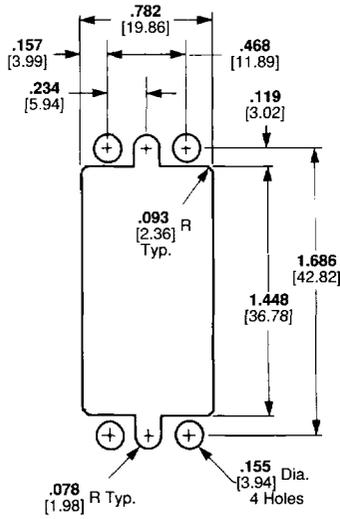
## Special Application Connectors (Continued)

**High Voltage 20 Position**  
**U.L. Voltage Rating:**  
**1800V**

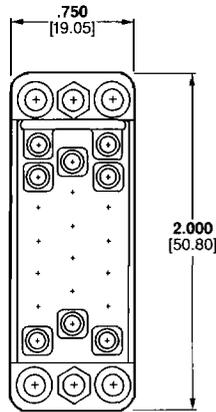
**Material and Finish:**

**Housing**—Diallyl phthalate, 94V-0 rated, blue

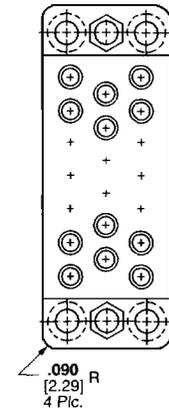
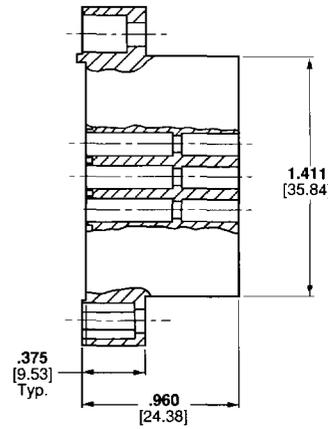
Contacts must be ordered separately.



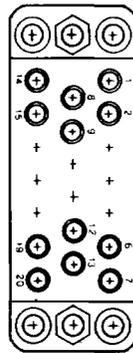
Recommended Panel Cutout



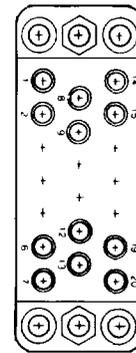
Plug Housing



Receptacle Housing



Plug Housing  
Wiring Side



Receptacle Housing  
Wiring Side

Diallyl Phthalate Housing Part No.		Contacts Accepted		
Plug	Receptacle	Quantity	Contact Type	Page Ref.
203908-2	203909-2	20*	Type II	34
			Type III+	35-38
			Subminiature COAXICON	41-42

\*Quantity may be all of the same type, or a combination of those types listed.

**Note:** 20 Position connector uses Standard 34 Position Hardware. Refer to appropriate column of Application Chart for Hardware Selection pages 14 through 29.

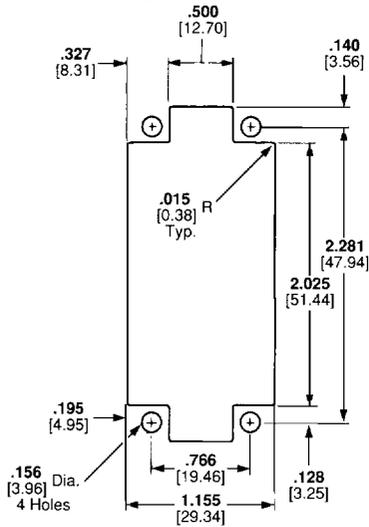
## Special Application Connectors (Continued)

### High Voltage 28 Position U.L. Voltage Rating: 1800V

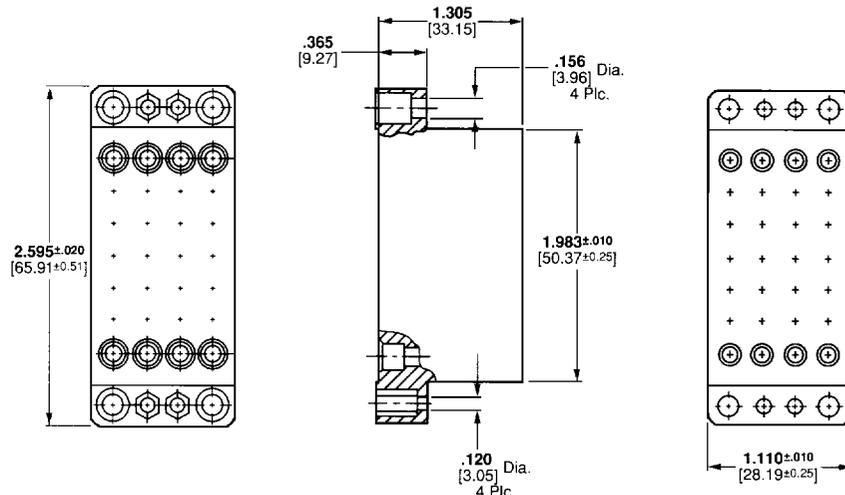
#### Material and Finish:

**Housing**—Phenolic, 94V-0 rated, black

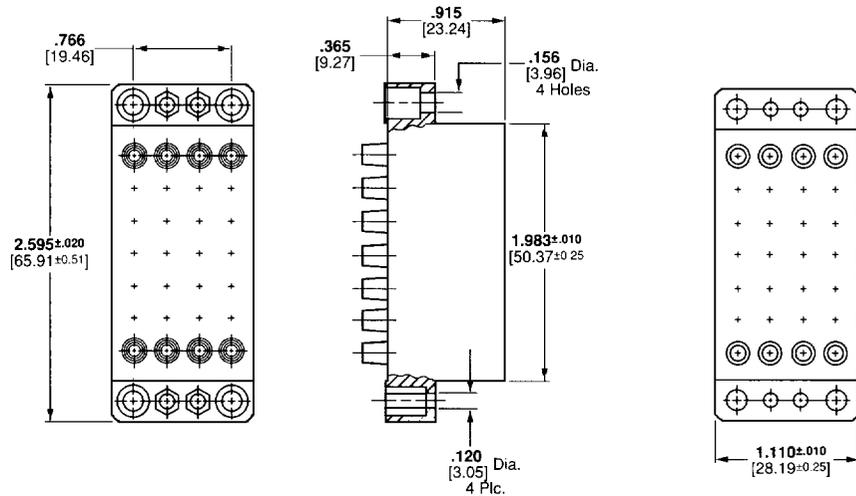
Contacts must be ordered separately.



Recommended Panel Cutout



Plug Housing



Receptacle Housing

Phenolic Housing Part No.		Contacts Accepted		
Plug	Receptacle	Quantity	Contact Type	Page Ref.
205689-2	205690-2	28*	Type II	34
			Type III+	35-38
			Subminiature COAXICON	41-42

\*Quantity may be all of the same type, or a combination of those types listed.

**Note:** 28 Position connector uses Standard 75 Position Hardware. Refer to appropriate column of Application Chart for Hardware Selection Pages 14 through 29.

## Special Application Connectors (Continued)

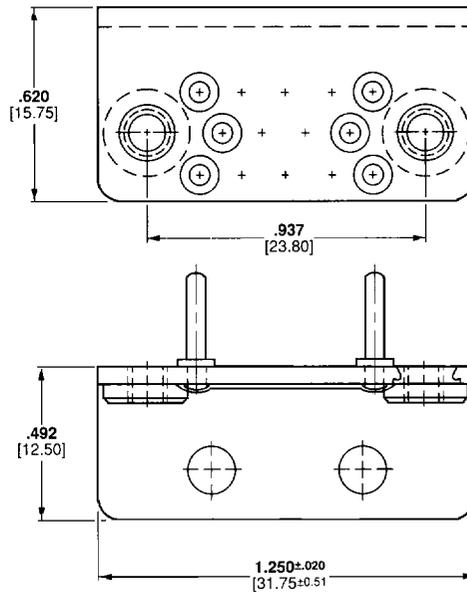
### Grounding Blocks

#### Material and Finish:

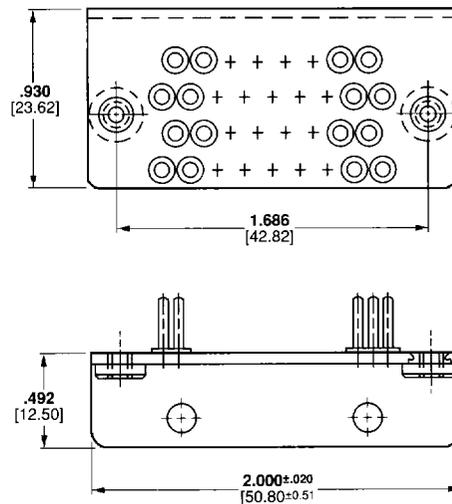
**Plate**—Brass, tin plated

**Clinch Nuts**—Stainless steel

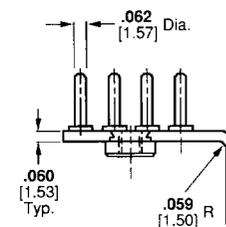
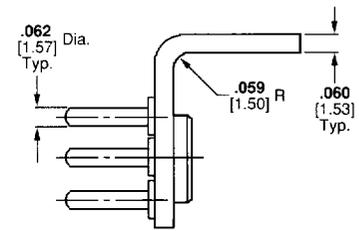
**Pin Contacts**—Phosphor bronze, gold over nickel plated



14-Position, Part No. 203540-1\*



34-Position, Part No. 204814-1\*



Grounding blocks mate with standard 14 and 34 position receptacle housings.

**Note:** Use referenced turnable jackscrews on mating housings when mating to grounding blocks.

\*CSA certification pending.

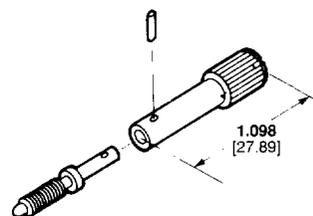
**Fastening Hardware**—For use in connector housings to mate with grounding blocks

### Jackscrews

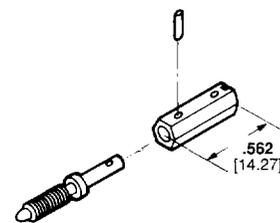
#### Material and Finish:

**Jackscrew Body**—Die cast zinc, (clear chromate) conversion coating

**Jackscrew Tip, Roll Pin**—Stainless steel



Short Turnable  
Jackscrew, Male  
Part No. 203618-1  
(2 Req'd.)



Short-Short Turnable  
Jackscrew, Male  
Part No. 203535-2  
(2 Req'd.)

## Fastening Hardware (Continued)

### Jackscrews

#### Material and Finish:

**Turnable Jackscrew Body**—Die cast zinc, chromate conversion coating

**Turnable Jackscrew Tip**—Stainless steel

**Roll Pin**—Stainless steel

#### For Fixed Jackscrews:

**Lockwasher**—Steel

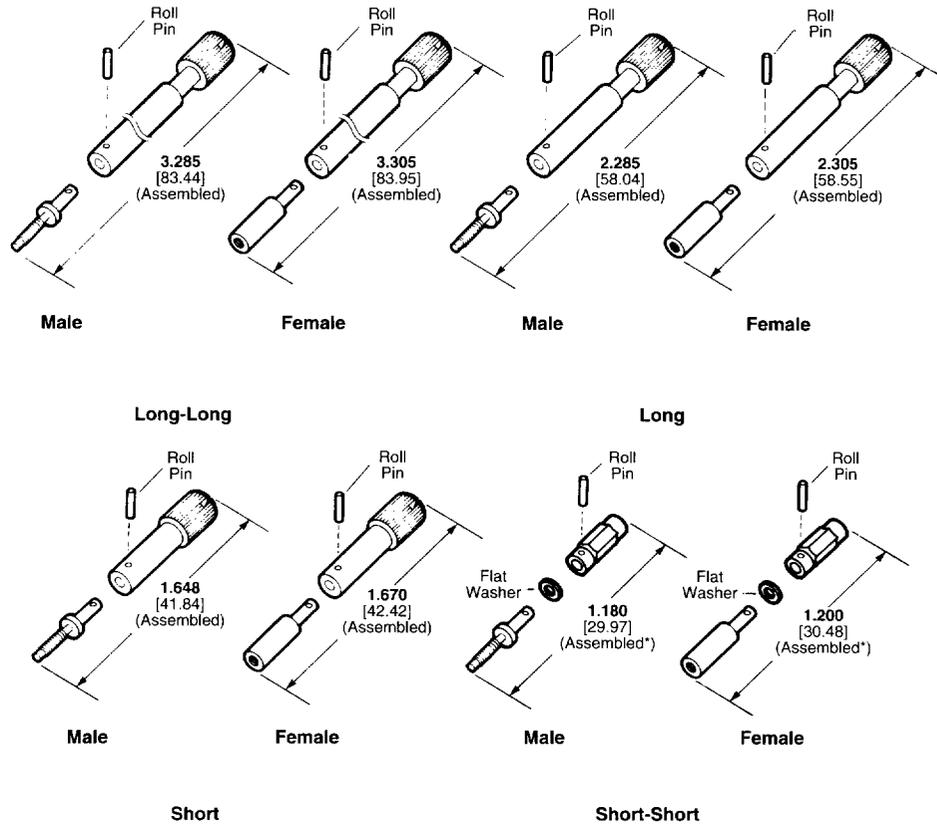
**Hex Nut**—Steel, zinc plated

Jackscrews are used as an aid in mating and unmating connectors and for holding mated connectors together, mostly larger sizes (34-position and up). They can also be used for polarization.

Turnable jackscrews are free to rotate in a connector housing and are always used opposite mating fixed jackscrews. Where provided, roll pins are used to hold a male or female tip onto the turnable jackscrew body. AMP Assembly Tool No. 91016-2 (shown below) is available for properly assembling the turnable jackscrews on a connector housing.

Fixed jackscrews can be readily assembled to a connector housing with the Nut Driver Tool (also shown below).

### Turnable Jackscrews



\*Assembled dimension includes metal thickness of Pin Hood or Strain Relief Clamp. Remove washer when both Pin Hood and Strain Relief Clamp are used.

### Turnable Jackscrews

Style	Jackscrew Part No.		Connectors Used on (No. of Positions)				
	6-32 [M3.5 x 0.6] Double Lead Thread	6-32 [M3.5 x 0.6] Single Lead Thread	Standard	Posted	Special Application		
					High Current	Mixed	High Voltage
Long-Long Male <sup>1</sup>	201911-1	207234-1	50 (90° shield only), 75 and 104	—	12	42	28
Long-Long Female <sup>1</sup>	201910-1	207235-1					
Long Male	200871-1	201413-1	20, 26, 34, 41 and 50	20, 26, 34, 41, and 50	12	15, 16 and 42	20 and 28
Long Female	200867-1	201414-1					
Short Male	200868-1	201087-1	6, 14, 20, 26, 34, 41, 50, 75 and 104	6, 14, 20, 26, 34, 41, 50, 75 and 104	12	15, 16 and 42	20 <sup>1</sup> and 28
Short Female	200870-1	201088-1					
Short-Short Male	201388-1	201827-1	6, 14, 20, 26, 34, 41, 50, 75 and 104	6, 14, 20, 26, 34, 41, 50, 75 and 104	12	15, 16 and 42	20 and 28
Short-Short Female	201389-1	201828-1					

<sup>1</sup>Long-Long Turnable Jackscrews are used only with Two-Piece Shields on the connector sizes listed.

**Notes:** 1. Turnable Jackscrews mate with any Fixed Jackscrew listed below having the same thread size.

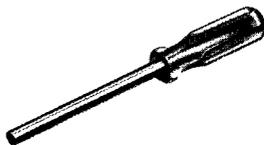
2. Special Turnable Jackscrews for use in connector housings to mate with Grounding Blocks are presented on page 75.

3. Single-lead versions are designed to mate with competitive Jackscrews.

**Roll pins for turnable jackscrews, Long-Long, Long, Short Part No. 201501-1, Short-Short Part No. 201501-2.**



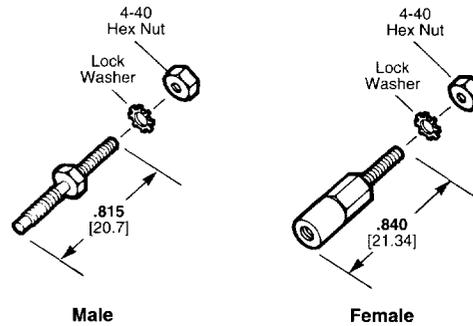
**AMP Assembly Tool  
No. 91016-2  
(for Roll Pins)**



**Nut Driver  
No. 811262-1 (4-40)**

## Fastening Hardware (Continued)

### Fixed Jackscrews



### Fixed Jackscrews

Type	Jackscrew Part No.	
	6-32 [M3.5 x 0.6] Double Lead Thread	6-32 [M3.5 x 0.6] Single Lead Thread
Male	200874-1	201092-1
Female	200875-1	201089-1

- Notes:**
1. Fixed Jackscrews mate with any Turnable Jackscrew listed above having the same thread size.
  2. Single-lead versions are designed to mate with competitive Jackscrews.

## Fastening Hardware (Continued)

### Locking Springs

#### Material and Finish:

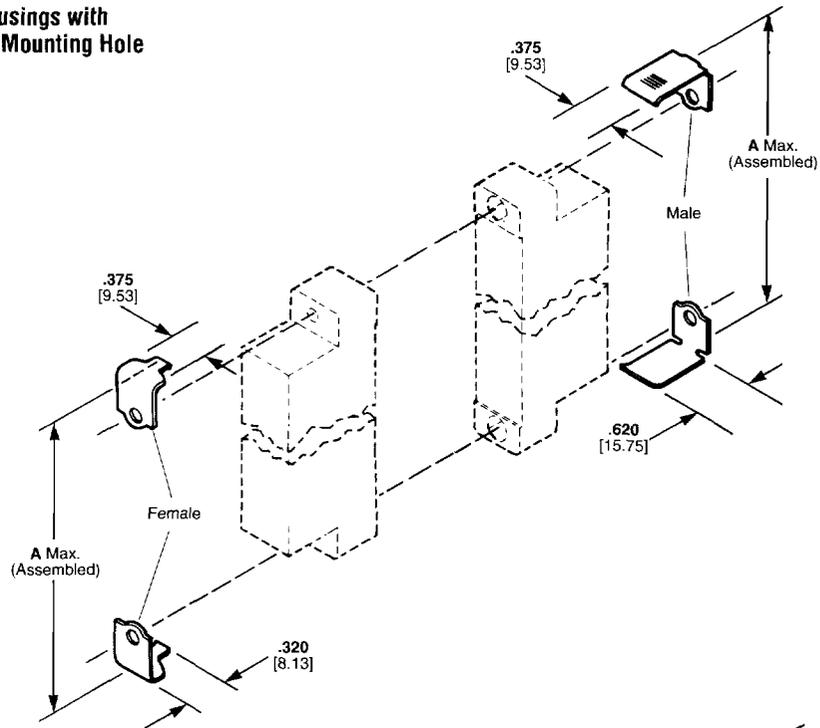
**Male (Spring Member)**—Spring steel, nickel plated

**Female (Latching Member)**—Stainless steel

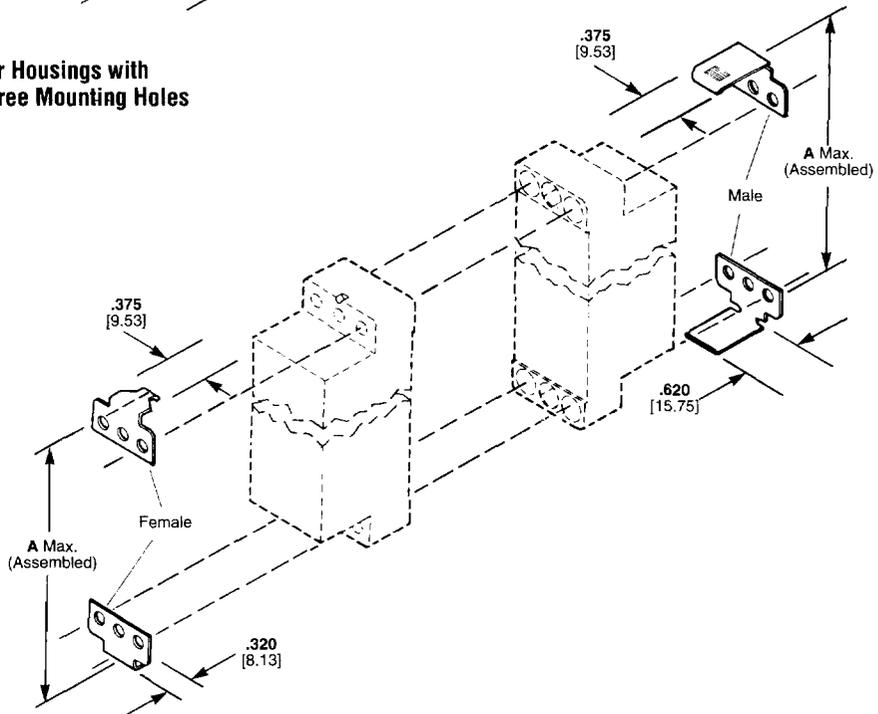
Locking Springs are used to hold mated connectors together. Although Locking Springs can be used on connectors up to 50 positions, they are primarily used on smaller size connectors (less than 34 positions).

In all applications, a Male (Spring Member) is used opposite a Female (Latching Member). They can be secured to a connector housing using Guide Pins and Sockets or 4-40 x .250 [6.35] fillister head screws and nuts. Locking Springs can be used with all hardware, except Closed-End Pin Hoods.

#### For Housings with Single Mounting Hole



#### For Housings with Three Mounting Holes



Standard Connector Size*	A Max.
6	1.413 35.89
14	1.662 42.21
20	1.975 50.17
26	2.037 51.74
34	2.412 61.26
41	3.047 77.39
50	3.006 76.35

\*A dimension also applies to other comparably sized connector types listed in the chart at the right.

Locking Spring Part No.		Connectors Used On (No. of Positions)				
Male (Spring Member)	Female (Latching Member)	Standard	Posted	Special Application		
				High Current	Mixed	High Voltage
201921-1	201922-1	6, 14, 20 and 41	6, 14, 20 and 41	—	—	—
201923-1	201918-1*	26	26	—	15	—
201925-1	201926-1	34 and 50	34 and 50	—	16 and 42	20

\*Single female latch, two must be ordered per assembly.