**QUICK OPERATING 1/4-TURN FASTENERS**  
91F SERIES

**Extra Heavy-Duty Stud Assemblies and Receptacles**

**Features:** Designed for heavy duty service in farm, construction equipment and other applications where high strength and clamping force are required.

**Stud Assemblies**

![Stud Assemblies Diagram]

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

Minimum Preload - 120 LBS

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Steel (Cadmium Plated)</td>
<td>91S2[-]</td>
<td>91S7[-]</td>
<td>91S2[-]W</td>
<td>91S7[-]W</td>
</tr>
</tbody>
</table>

**Maximum Service Temperature:** Self-Sealing parts have rubber seal and temperature limitation of 225°F. Standard: 450°F.; Plastic Knob Version: 140°F.

*S= .64 + (.03 x Dash No.)

**Receptacles**

![Receptacles Diagram]

**For use with dimpled panels**

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</thead>
<tbody>
<tr>
<td>Steel (Cadmium Plated)</td>
<td>119-18</td>
<td>Plain (.134)</td>
<td>.128</td>
<td>119-18D</td>
<td>C’Sunk (.159)</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>119-18A</td>
<td>Plain (.165)</td>
<td>–</td>
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**Steel (Oil Coated)**

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<tbody>
<tr>
<td>119-18C</td>
<td>–</td>
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</tbody>
</table>

**Maximum Service Temperature:** 450°F.

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A-64
**Specifications:**
Ultimate Tensile Strength: 1800 lbs.
Working Strength: 1200 lbs.
Stud Grip Increments: .030 inches.

**Stud Part Number Structure**
91S2-[ ]-WO

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

**Offset Fixed Wing**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Self-sealing Part No.</th>
<th>Part No.</th>
</tr>
</thead>
</table>

**Retaining Rings**

- For Weld Attachment
  - Part No. 119-18L

**Spiral Type**
Weight per 100 pcs.: 0.24 lbs.

<table>
<thead>
<tr>
<th>Material</th>
<th>Part No.</th>
<th>Max. Temp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless Steel</td>
<td>91S3-1</td>
<td>550°F</td>
</tr>
<tr>
<td>Steel (Cadmium Plated)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Snap-on Type**
Weight per 100 pcs.: 0.15 lbs.

<table>
<thead>
<tr>
<th>Material</th>
<th>Part No.</th>
<th>Max. Temp.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>91S45-1-1AA</td>
<td>450°F</td>
</tr>
</tbody>
</table>

Spiral Ring offers positive retention. It installs with the use of needle nose pliers.
Snap-on Type snaps into place over stud cross-pin for faster installation.
Panel Preparation and Installation Data

Panel Preparation for Stud Installation

To Select Stud Dash Number:

1. Determine “G” total thickness.

Note: Increase “G” to allow for thickness of paint or other finishes and for the compressed thickness of any gasket. If self-sealing stud assemblies are used, add .120 inch to “G” thickness when determining stud dash number.

2. Locate total thickness in the Stud Dash Number Selection table.

3. Then find the corresponding stud dash number in the column to the right.

Ordering Information/Stud Dash Number Selection

Example 1.
(For standard stud assemblies)
Stud Assembly Used: 91S2-?
“G” Total Thickness = 1.125 inch
Stud Dash Number From Table = -37
Complete Part Number: 91S2-37

Example 2.
(For self-sealing stud assemblies)
Stud Assembly Used: 91S7-?WO
“G” Total Thickness = 1.125 inch
Required Calculation: 1.125 + .120 = 1.245
Stud Dash Number From Table = -41
Complete Part Number: 91S7-41WO

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

Stud Part Number Structure

91S2-[?]-WO

Material and Finish
Stud Dash Number
(Based on Total Thickness, “G”)
Basic Part Number