Southco® Captive Fasteners
Polished, Spring-ejected Series, M3 Thread
• Highly polished appearance

Material and Finish
SCREW: 302 Stainless steel.
STANDOFF: 305 Stainless steel.
BOTH PARTS are passivated or are passivated plus black organic coating.
SPRING: 302 Stainless steel.
RETAINER: Natural color nylon.

Note: Each part number represents a screw and standoff shipped unassembled, protectively packaged (bright standoffs are bulk packaged).

To Install Standoff
Assemble seating end of spring into recess retainer.

To Captivate Screw
Insert screw (with spring and retainer) into standoff.

Material
Hardened steel.

Standoff Installation Tools
(Order separately).

Material
Hardened steel.

Caution: Do not exceed 0.4 N•m tightening torque when fastening.
Southco® Captive Fasteners

Polished, Spring-ejected Series, 4-40 and 6-32 Thread

• Highly polished appearance

Material and Finish

NO. 4 SCREW: 303 Stainless steel. NO. 6 SCREW: 302 Stainless steel. STANDOFF: 305 Stainless steel. SCREWS and STANDOFFS are passivated or are passivated plus black organic coating. SPRING: 302 Stainless steel, passivated. RETAINER: NO. 4 size, natural color nylon; No. 6 size, black nylon.

Fasteners are ordered by their assembly part number but are shipped and identified as components of the finished assembly.

To Install Standoff

1. Assemble, seating end of spring into recess in retainer.
2. Insert screw (with spring and retainer) into standoff.
3. Press to snap retainer into standoff.

Standoff Installation Tools

(Order separately).

Material

Hardened steel.

To Captivate Screw

1. Assemble, seating end of spring into recess in retainer.
2. Insert screw (with spring and retainer) into standoff.
3. Press to snap retainer into standoff.

Material

Hardened steel.

• Products identified with this symbol are stocked subject to prior sale in one or more of our global locations. If unavailable from our facility nearest you, allow for shipping time from another facility.
Southco® Captive Fasteners

Polished, Spring-ejected Series, M4, M5 and M6 Thread
• Highly polished appearance

To select proper screw assembly
1. Measure your outer panel thickness and enter SCREW ASSEMBLY SELECTION TABLE (right) with your thickness.
2. Read across to find P dimension and installation method (A or B).
3. Enter ASSEMBLY PART NUMBER TABLE (right) with your P dimension, at section having your desired thread size, and read across to find correct assembly part number.

Screw Assembly Selection Table

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Thread Size</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>P Ø H D F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 10.3</td>
<td>1.6 6.0</td>
<td>M4 X 0.7</td>
</tr>
<tr>
<td>4.8</td>
<td>3.2 11.1</td>
<td>M5 X 0.8</td>
</tr>
<tr>
<td>6.3</td>
<td>4.8 14.3</td>
<td>M6 X 1.0</td>
</tr>
<tr>
<td>6.3</td>
<td>6.3</td>
<td></td>
</tr>
</tbody>
</table>

Note: Longer screw lengths and unslotted head styles are available on special order.

To Install Standoff

Method A

Countersink as shown. Back-up tool must be used.

Method B

No further preparation required. Flare standoff behind panel as shown. Back-up tool must be used.

Material and Finish

SCREW: 302 Stainless steel. STANDOFF: 305 Stainless steel. SCREWS and STANDOFFS: Passivated or are passivated plus black organic coating. SPRING and RETAINER: 302 Stainless steel, passivated.

Each part number represents a screw and standoff shipped unassembled, protectively packaged (bright standoffs are bulk packaged).
Southco® Captive Fasteners

Polished, Spring-ejected Series, M4, M5 and M6 Thread

Installation

To Captivate Screw

1. Slip spring over shank of screw. Spring must be oriented as shown in diagram.

2. Insert screw (with spring) through hole in standoff.

3. Insert retainer into recess in end of tool.

4. Hold screw head and rotate tool until retainer is threaded onto throat of screw.

Split Ring Retainer

Material

Hardened steel.

Material

Mild steel.

Installation Tools (Order separately).

For larger metric spring-ejected NO. 53 assemblies

For Retainers

For Standoff

Back-up Tool

millimeter (inch)
millimeter (inch)
Dimensions without tolerances are for reference only.
Southco® Captive Fasteners

Polished, Spring-ejected Series, 8-32, 10-32 and 1/4-20 Thread
• Highly polished appearance

To Select Proper Screw Assembly
1. Measure your outer panel thickness and enter table (below) with your thickness.
2. Read across to find \( P \) dimension and installation method (A or B).
3. Enter part number table with your \( P \) dimension and read across to find correct assembly part number under head and thread size desired.

### Slotted BLACK screw assemblies

<table>
<thead>
<tr>
<th>( P )</th>
<th>( \theta_{H} = (.44) )</th>
<th>( \theta_{H} = (.56) )</th>
<th>( \theta_{H} = (.69) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-32</td>
<td>53-17-710-26</td>
<td>53-11-410-26</td>
<td>53-11-110-26</td>
</tr>
<tr>
<td>10-32</td>
<td>53-16-710-26</td>
<td>53-11-410-26</td>
<td>53-11-110-26</td>
</tr>
<tr>
<td>1/4-20</td>
<td>53-16-710-26</td>
<td>53-11-410-26</td>
<td>53-11-110-26</td>
</tr>
</tbody>
</table>

Screws will fully retract

---

### Slotted BRIGHT POLISHED screw assemblies

<table>
<thead>
<tr>
<th>( P )</th>
<th>( \theta_{H} = (.44) )</th>
<th>( \theta_{H} = (.56) )</th>
<th>( \theta_{H} = (.69) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-32</td>
<td>53-17-710-24*</td>
<td>53-16-710-24*</td>
<td>53-11-410-24*</td>
</tr>
<tr>
<td>10-32</td>
<td>53-16-710-24*</td>
<td>53-11-410-24*</td>
<td>53-11-110-24*</td>
</tr>
<tr>
<td>1/4-20</td>
<td>53-16-710-24*</td>
<td>53-11-410-24*</td>
<td>53-11-110-24*</td>
</tr>
</tbody>
</table>

Screws will fully retract

---

To Install Standoff

**Method A**

1. Drill \( \theta (.437 + .005) \) into panel (before knurl)
2. Countersink as shown. No further preparation required
3. Flare standoff into countersink. Back-up tool must be used.

**Method B**

1. Drill \( \theta (.437 + .005) \) into panel
2. No further preparation required
3. Flare standoff behind panel as shown. Back-up tool must be used.

---

Material and Finish

SCREW, SPRING, and RETAINER: 302 Stainless steel, passivated.

STANDOFF: 305 Stainless steel, passivated plus black organic coating.

SPRING and RETAINER: 302 Stainless steel, passivated.

Note: Fasteners are ordered by their assembly part number but are shipped and identified as components of the finished assembly.

---

Southco® Captive Fasteners
Polished, Spring-ejected Series, 8-32, 10-32 and 1/4-20 Thread
• Highly polished appearance

To Select Proper Screw Assembly
1. Measure your outer panel thickness and enter table (below) with your thickness.
2. Read across to find \( P \) dimension and installation method (A or B).
3. Enter part number table with your \( P \) dimension and read across to find correct assembly part number under head and thread size desired.

### Slotted BLACK screw assemblies

<table>
<thead>
<tr>
<th>( P )</th>
<th>( \theta_{H} = (.44) )</th>
<th>( \theta_{H} = (.56) )</th>
<th>( \theta_{H} = (.69) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-32</td>
<td>53-17-710-26</td>
<td>53-11-410-26</td>
<td>53-11-110-26</td>
</tr>
<tr>
<td>10-32</td>
<td>53-16-710-26</td>
<td>53-11-410-26</td>
<td>53-11-110-26</td>
</tr>
<tr>
<td>1/4-20</td>
<td>53-16-710-26</td>
<td>53-11-410-26</td>
<td>53-11-110-26</td>
</tr>
</tbody>
</table>

Screws will fully retract

---

### Slotted BRIGHT POLISHED screw assemblies

<table>
<thead>
<tr>
<th>( P )</th>
<th>( \theta_{H} = (.44) )</th>
<th>( \theta_{H} = (.56) )</th>
<th>( \theta_{H} = (.69) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-32</td>
<td>53-17-710-24*</td>
<td>53-16-710-24*</td>
<td>53-11-410-24*</td>
</tr>
<tr>
<td>10-32</td>
<td>53-16-710-24*</td>
<td>53-11-410-24*</td>
<td>53-11-110-24*</td>
</tr>
<tr>
<td>1/4-20</td>
<td>53-16-710-24*</td>
<td>53-11-410-24*</td>
<td>53-11-110-24*</td>
</tr>
</tbody>
</table>

Screws will fully retract

---

To Install Standoff

**Method A**

1. Drill \( \theta (.437 + .005) \) into panel (before knurl)
2. Countersink as shown. No further preparation required
3. Flare standoff into countersink. Back-up tool must be used.

**Method B**

1. Drill \( \theta (.437 + .005) \) into panel
2. No further preparation required
3. Flare standoff behind panel as shown. Back-up tool must be used.

---

Material and Finish

SCREW, SPRING, and RETAINER: 302 Stainless steel, passivated.

STANDOFF: 305 Stainless steel, passivated plus black organic coating.

SPRING and RETAINER: 302 Stainless steel, passivated.

Note: Fasteners are ordered by their assembly part number but are shipped and identified as components of the finished assembly.

---

Southco® Captive Fasteners
Polished, Spring-ejected Series, 8-32, 10-32 and 1/4-20 Thread
• Highly polished appearance

To Select Proper Screw Assembly
1. Measure your outer panel thickness and enter table (below) with your thickness.
2. Read across to find \( P \) dimension and installation method (A or B).
3. Enter part number table with your \( P \) dimension and read across to find correct assembly part number under head and thread size desired.

### Slotted BLACK screw assemblies

<table>
<thead>
<tr>
<th>( P )</th>
<th>( \theta_{H} = (.44) )</th>
<th>( \theta_{H} = (.56) )</th>
<th>( \theta_{H} = (.69) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-32</td>
<td>53-17-710-26</td>
<td>53-11-410-26</td>
<td>53-11-110-26</td>
</tr>
<tr>
<td>10-32</td>
<td>53-16-710-26</td>
<td>53-11-410-26</td>
<td>53-11-110-26</td>
</tr>
<tr>
<td>1/4-20</td>
<td>53-16-710-26</td>
<td>53-11-410-26</td>
<td>53-11-110-26</td>
</tr>
</tbody>
</table>

Screws will fully retract

---

### Slotted BRIGHT POLISHED screw assemblies

<table>
<thead>
<tr>
<th>( P )</th>
<th>( \theta_{H} = (.44) )</th>
<th>( \theta_{H} = (.56) )</th>
<th>( \theta_{H} = (.69) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-32</td>
<td>53-17-710-24*</td>
<td>53-16-710-24*</td>
<td>53-11-410-24*</td>
</tr>
<tr>
<td>10-32</td>
<td>53-16-710-24*</td>
<td>53-11-410-24*</td>
<td>53-11-110-24*</td>
</tr>
<tr>
<td>1/4-20</td>
<td>53-16-710-24*</td>
<td>53-11-410-24*</td>
<td>53-11-110-24*</td>
</tr>
</tbody>
</table>

Screws will fully retract

---

To Install Standoff

**Method A**

1. Drill \( \theta (.437 + .005) \) into panel (before knurl)
2. Countersink as shown. No further preparation required
3. Flare standoff into countersink. Back-up tool must be used.

**Method B**

1. Drill \( \theta (.437 + .005) \) into panel
2. No further preparation required
3. Flare standoff behind panel as shown. Back-up tool must be used.

---

Material and Finish

SCREW, SPRING, and RETAINER: 302 Stainless steel, passivated.

STANDOFF: 305 Stainless steel, passivated plus black organic coating.

SPRING and RETAINER: 302 Stainless steel, passivated.

Note: Fasteners are ordered by their assembly part number but are shipped and identified as components of the finished assembly.
Southco® Captive Fasteners

Polished, Spring-ejected Series, 8-32, 10-32 and 1/4-20 Thread

Installation

To Captivate Screw

1. Slip spring over shank of screw. Spring must be oriented as shown in diagram.
2. Insert screw (with spring in place) through hole in standoff.
3. Insert retainer into recess in end of tool.
4. Hold screw head and rotate tool until retainer is threaded onto throat of screw.

Split Ring Retainer

Installation Tool for Retainers

<table>
<thead>
<tr>
<th>SCREW THREAD SIZE</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 8</td>
<td>1.139</td>
</tr>
<tr>
<td>No. 10-32</td>
<td>1.165</td>
</tr>
<tr>
<td>1/4-20</td>
<td>1.225</td>
</tr>
<tr>
<td>No. 10-24</td>
<td>1.149</td>
</tr>
</tbody>
</table>

Standoff Installation Tools

<table>
<thead>
<tr>
<th>FLARING PUNCH</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>29-53-101-10</td>
<td>90-2824-11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BACK-UP TOOL</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-2825-11</td>
<td></td>
</tr>
</tbody>
</table>

Material

Steel, hardened.

Dimensions without tolerances are for reference only.
Southco® Captive Fasteners

Polished Series, M3 Thread
- Simple design
- Highly polished appearance

To select proper screw
measure your outer panel
Enter table with your thick

To select proper screw assembly:
Measure your outer panel thickness.
Enter table with your thickness range.

<table>
<thead>
<tr>
<th>YOUR OUTER PANELTHICKNESS</th>
<th>DIMENSION</th>
<th>THREAD SIZE</th>
<th>PART NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN.</td>
<td>MAX.</td>
<td>Ø H</td>
<td>F</td>
</tr>
<tr>
<td>1.3</td>
<td>2.1</td>
<td>2.9</td>
<td>7.1</td>
</tr>
<tr>
<td>BLACK screw assemblies</td>
<td></td>
<td></td>
<td>M3 x 0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.3</td>
</tr>
<tr>
<td>BRIGHT POLISHED screw assemblies</td>
<td></td>
<td></td>
<td>M3 x 0.5</td>
</tr>
</tbody>
</table>

To Install Standoff
1. Insert standoff into hole and flare into countersink as shown.

Standoff Installation Tools

<table>
<thead>
<tr>
<th>Flaring punch</th>
<th>PART NUMBER</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 12.7 101.6 0.48 ± 0.1</td>
<td>54-0-5467-11</td>
<td>Hardened steel.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Back-up tool</th>
<th>PART NUMBER</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 12.7 12.7 Ø 6.6 ± 0.09 Ø 0.13 RAD.</td>
<td>54-0-5466-11</td>
<td>Hardened steel.</td>
</tr>
</tbody>
</table>

Material and Finish

SCREWS: 302 Stainless steel.
STANDOFFS: 304 Stainless steel.
Both parts are passivated or are passivated plus black organic coating.

NOTE: Each part number represents a screw and standoff shipped unassembled, protectively packaged (bright standoffs are bulk packaged).

NOTE: Longer screw lengths and unslotted head styles are available on special order.
**Southco® Captive Fasteners**

**Polished Series, 4-40 and 6-32 Thread**

- Simple design
- Highly polished appearance

Dimensions without tolerances are for reference only.

*Products identified with this symbol are stocked subject to prior sale in one or more of our global locations. If unavailable from our facility nearest you, allow for shipping time from another facility.*

---

**To Captivate Screw**

1. Thread screw through hole in top surface of standoff.
2. Bring panels together. Thread screw tightly into frame until under surface of screw head completely flattens the raised helix. Withdraw screw to ensure it is fully captivated.

**Material and Finish**

NO. 4 SCREW: 303 Stainless steel
NO. 6 SCREW: 302 Stainless steel.
STANDOFF: 305 Stainless steel.
SCREWS and STANDOFFS are passivated. BLACK screw assemblies have black organic coating.

Fasteners are ordered by their assembly part number but are shipped and identified as components of the finished assembly.

---

**To Install Standoff**

1. Prepare panel.
2. Insert standoff into hole and flare into countersink as shown.

**Material**

Hardened steel.

---

**Standoff Installation Tools** (order separately).

Flaring punch

- Ø (.5) (4)
- Ø (.188 ± .005)

PART NUMBER 54-0-5467-11 •

Back-up tool

- Ø (.5) (4)
- Ø (.261 ±.003)

Break corners (.005) RAD.

PART NUMBER 54-0-5466-11 •

---

**Black screw assemblies**

<table>
<thead>
<tr>
<th>OUTER PANEL THICKNESS</th>
<th>4-40</th>
<th>6-32</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN. NOM. MAX.</td>
<td>Ø H = ( .31 )</td>
<td>Ø H = ( .31 )</td>
<td></td>
</tr>
<tr>
<td>(.05) (.06) (.07)</td>
<td>51-10-406-26</td>
<td>51-18-406-26</td>
<td>(.06)</td>
</tr>
<tr>
<td>(.08) (.09) (.10)</td>
<td>51-10-506-26</td>
<td>51-18-506-26</td>
<td>(.09)</td>
</tr>
<tr>
<td>(.11) (.12) (.13)</td>
<td>51-10-606-26</td>
<td>51-18-606-26</td>
<td>(.13)</td>
</tr>
</tbody>
</table>

**Bright polished screw assemblies**

<table>
<thead>
<tr>
<th>OUTER PANEL THICKNESS</th>
<th>4-40</th>
<th>6-32</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN. NOM. MAX.</td>
<td>Ø H = ( .31 )</td>
<td>Ø H = ( .31 )</td>
<td></td>
</tr>
<tr>
<td>(.05) (.06) (.07)</td>
<td>51-10-406-24 •</td>
<td>51-18-406-24 •</td>
<td>(.06)</td>
</tr>
<tr>
<td>(.08) (.09) (.10)</td>
<td>51-10-506-24 •</td>
<td>51-18-506-24 •</td>
<td>(.09)</td>
</tr>
<tr>
<td>(.11) (.12) (.13)</td>
<td>51-10-606-24 •</td>
<td>51-18-606-24 •</td>
<td>(.13)</td>
</tr>
</tbody>
</table>
Southco® Captive Fasteners

Polished Series, M4, M5, and M6 Thread
• Simple design
• Highly polished appearance

Captive Fasteners
Captive Screws

Dimensions without tolerances are for reference only.

Southco®

Captive Fasteners

Polished Series, M4, M5, and M6 Thread

To Captivate Screw

1. Thread screw through hole in top surface of standoff.
2. Bring panels together.
3. Thread screw tightly into frame until under-surface of screw head completely flattens the raised helix. Withdraw screw to ensure it is fully captivated.

To Install Standoff

Method A

Counter sunk as shown.

Method B

No further preparation required.

Flare standoff into countersink. Back-up tool must be used.

Flare standoff behind panel as shown. Back-up tool must be used.

To Select Proper Screw Assembly

1. Measure your outer panel thickness and enter SCREW ASSEMBLY SELECTION TABLE (right) with your thickness.
2. Read across to find P dimension and installation method (A or B).
3. Enter ASSEMBLY PART NUMBER TABLE (right) with your P dimension, at section having your desired thread size, and read across to find correct assembly part number.

Part Numbers

Each part number represents a screw and standoff shipped unassembled, protectively packaged (bright standoffs are bulk packaged).

Material and Finish

SCREWS: 302 Stainless steel.
STANDOFFS: 305 Stainless steel.

Both Parts are passivated or are passivated with black organic coating.
Southco® Captive Fasteners

Polished Series, 8-32, 10-32 and 1/4-20 Thread

• Simple design
• Highly polished appearance

To Captivate Screw

1. Thread screw through hole in top surface of standoff.
2. Bring panels together.
3. Thread screw tightly into frame until under surface of screw head completely flattens the raised helix. Withdraw screw to ensure it is fully captivated.

Material and Finish

SCREWS: 302 Stainless steel.
STANDOFFS: 305 Stainless steel.
SCREWS and STANDOFFS are passivated or are passivated and have black organic coating.

To Select Proper Screw Assembly

1. Measure your outer panel thickness and enter table (below) with your thickness.
2. Read across to find P dimension and installation method (A or B).
3. Enter part number table with your P dimension and read across to find correct assembly part number under head and thread size desired.

Material

Mild steel.

Hardened steel.

Standoff Installation Tools
(Order separately)

Back-up tool

Material

Mild steel.

Hardened steel.

To Install Standoff

Method A

Method B

Dimensions without tolerances are for reference only.
**Southco® Captive Fasteners**

**Basic Series**
- Generous knob for hand operation
- Highly polished appearance
- Captivated by retainer

**Dimensions without tolerances are for reference only.**

**Captive Fasteners**

**Captive Screws**

**Installation Tool (order separately)**

**Panel Preparation**

**Material and Finish**
- SCREW: 302 Stainless steel, passivated.
- BLACK screws have black organic coating.
- RETAINERS: 302 Stainless steel, passivated.

**Split Ring Retainer**

**English Thread Sizes**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>PART NUMBERS</th>
<th>Ø H = 11.1 (.44)</th>
<th>Ø H = 14.3 (.56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>T</td>
<td>8-32</td>
<td>10-32</td>
</tr>
<tr>
<td>25 (1.00)</td>
<td>16 (.63)</td>
<td>58-27-310-24</td>
<td>58-26-310-24</td>
</tr>
<tr>
<td>27 (.09)</td>
<td>17.5 (.69)</td>
<td>58-27-311-24</td>
<td>58-26-311-24</td>
</tr>
</tbody>
</table>

**Metric Thread Sizes**

<table>
<thead>
<tr>
<th>Ø H = 10.3 (.41)</th>
<th>Ø H = 11.1 (.44)</th>
<th>Ø H = 14.3 (.56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>T</td>
<td>M4 x 0.7</td>
</tr>
<tr>
<td>26 (1.02)</td>
<td>16 (.63)</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** For screws with BLACK Finish, change the last digit of your Part Number from a “4” to a “6”. Example: 58-27-309-26

**Material and Finish**
- SCREW: 302 Stainless steel, passivated.
- BLACK screws have black organic coating.
- RETAINERS: 302 Stainless steel, passivated.