

REVISION HISTORY				
REV.	DESCRIPTION	ER NUMBER	DATE	APPROVAL
1.0	INITIAL RELEASE.	ER-49506	01/18/23	A.LETSO

Documentation and specifications herein are the sole property of Staco Systems, Inc, issued in strict confidence, and shall not be used to reproduce, manufacture, or allow for the sale or transfer of design herein without the explicit and written permission of Staco Systems, Inc.

CUSTOMER	
APPROVALS	DATE
Drawn A.LETSO	12/02/22

7 MORGAN, IRVINE CA 92618 www.stacosystems.com

stacosystems
One Step Ahead

TEL: (949) 297-8700
FAX: (949) 297-8749

A COMPONENTS CORPORATION OF AMERICA COMPANY

THIRD ANGLE PROJECTION



UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOLERANCES

DECIMALS	ANGLES	FRACTIONS
X ± .03	± 1/2°	± 1/64
XX ± .010		
.XXX ± .005		

CHECKED	SEE ER
PROJ ENG	
MGMT	

TITLE
TECHNICAL BULLETIN TB-230, INSTALLATION
PROCEDURE FOR S250 PUSHBUTTON SWITCHES

DO NOT SCALE DRAWING

SIZE A	CAGE CODE 12522	DWG NO TB-230	REV 1.0
SCALE NONE	WT	SHEET SHEET 1 OF 7	

1.0 PURPOSE

The purpose of this technical bulletin is to provide necessary instructions for proper installation of Series 250 switches.

2.0 APPLICABLE DOCUMENTS

The following documents form a part of this document to the extent specified herein. Where specific paragraphs are called out, all subordinate paragraphs also apply. Where individual paragraphs are not specified, the document is applicable in its entirety.

2.1. Staco Systems Documents

Series 250 SCD Specification Control Document, Series 250, Light-Emitting Diode (LED) Lighted Pushbutton Switches and Indicators

3.0 KEY COMPONENTS

- 3.1. Pushbutton removal tool P/N 15193
- 3.2. S250 switch with mounting spacers
- 3.3. Torque screwdriver (capable of torquing 10-inch ounces)
- 3.4. Molykote 33 Lubricant
- 3.5. Isopropyl Alcohol

4.0 PROCEDURE

4.1. Receptacle Assembly Removal – For Crimp Termination Only

Prior to extracting pushbutton from switch or indicator housing, the receptacle assembly should be extracted from switch body. This can be accomplished by turning receptacle mounting screw counterclockwise. It is important to note that the screw is captive and should not disengage itself from the receptacle completely. See Figure 1.

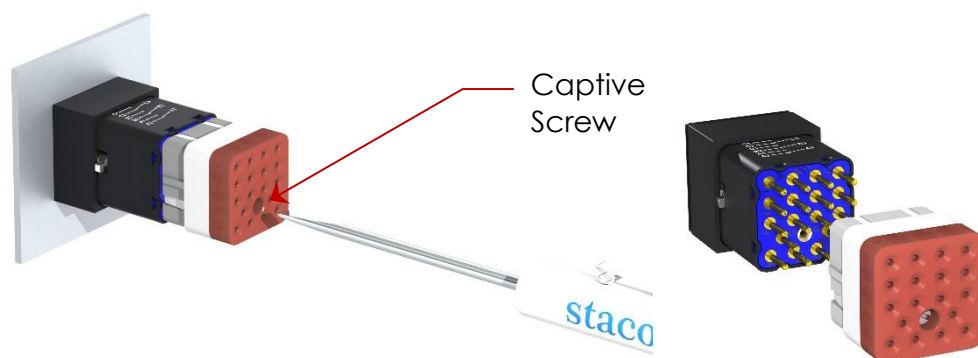


Figure 1
Receptacle Assembly Removal
(crimp pin termination version shown)

Use or disclosure of data contained on this sheet is subject to restrictions of the title page of this document.

SIZE
A

CAGE CODE
12522

DWG NO
TB-230

REV
1.0

SEE SHEET 1

DO NOT SCALE DRAWING

SCALE
NONE

WT

SHEET

2 OF 7

4.2. Mounting Procedure

4.2.1. Extract pushbutton from switch/indicator housing

Using the pushbutton extraction tool, see Figure 4, position the tool's gripping tabs around the two indentations located on the pushbutton's retainer as shown in Figure 5. Clamp/squeeze the tool gently but firmly and pull the pushbutton away from the switch/indicator housing. The removal force should be in the range of two (2) to five (5) pounds.

This gives access to the heads of the locking screws located inside the front portion of the switch/indicator as shown in Figure 7.

Note: To prevent damage to the flex circuit and/or the pushbutton, pushbutton shall be pulled away from switch housing opening no greater than 0.500". See Figure 6.

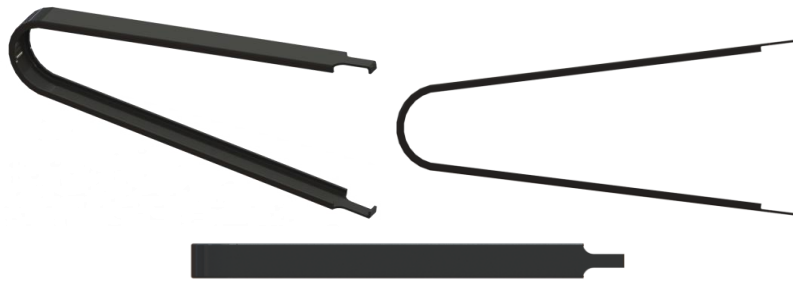


Figure 4

Pushbutton Extraction Tool (P/N 15193)

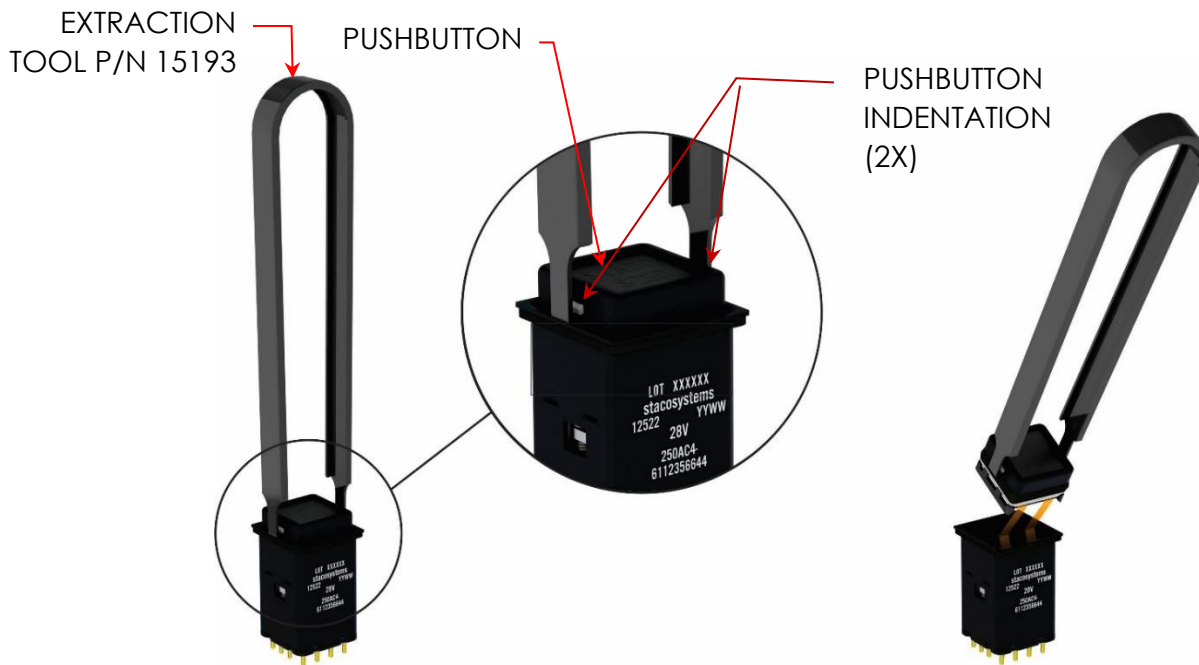


Figure 5

Pushbutton Extraction

Use or disclosure of data contained on this sheet is subject to restrictions of the title page of this document.

SIZE
A

CAGE CODE
12522

DWG NO
TB-230

REV
1.0

SEE SHEET 1

DO NOT SCALE DRAWING

SCALE
NONE

WT

SHEET
3 OF 7

LOCKING
SCREW (2X)

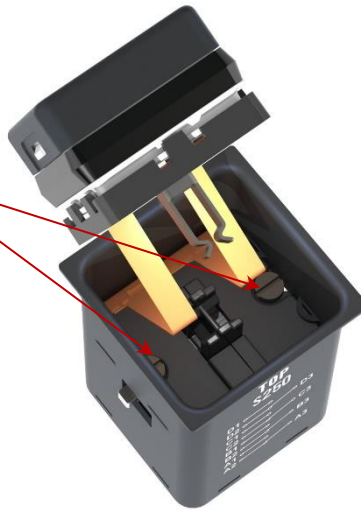


Figure 7
Locking Screw

4.2.2. Remove Panel Spacer and Mounting Sleeve from
Switch/Indicator Assembly

Rotate the two locking screws counterclockwise a ½ turn with screwdriver. This will release mounting cams. **WARNING, DO NOT TRY TO COMPLETELY UNSCREW THE CAM LOCKING SCREWS FROM THE CAMS. THE SCREWS ARE CAPTIVE AND DOING THIS WILL CAUSE DAMAGE TO THE SWITCH.** Slide mounting sleeves and panel spacer off the switch/indicator assembly. See Figures 8 and 8A.

NOTE: S250 uses Molykote 33 Lubricant on seal, noted in yellow. If accidentally wiped off or is insufficient for smooth operation, please brush a light coat of Molykote 33 Lubricant all around seal.

MOUNTING SLEEVES
AND PANEL SPACER

NOTE:

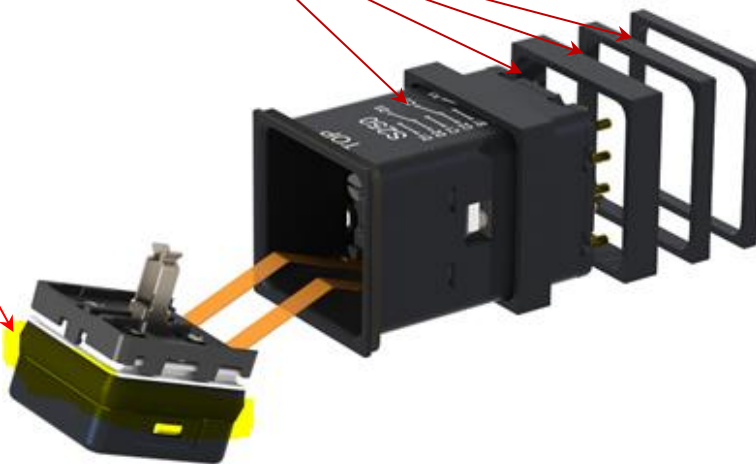


Figure 8

Use or disclosure of data contained on this sheet is subject to restrictions of the title page of this document.

SIZE
A

CAGE CODE
12522

DWG NO
TB-230

REV
1.0

SEE SHEET 1

DO NOT SCALE DRAWING

SCALE
NONE

WT

SHEET
4 OF 7

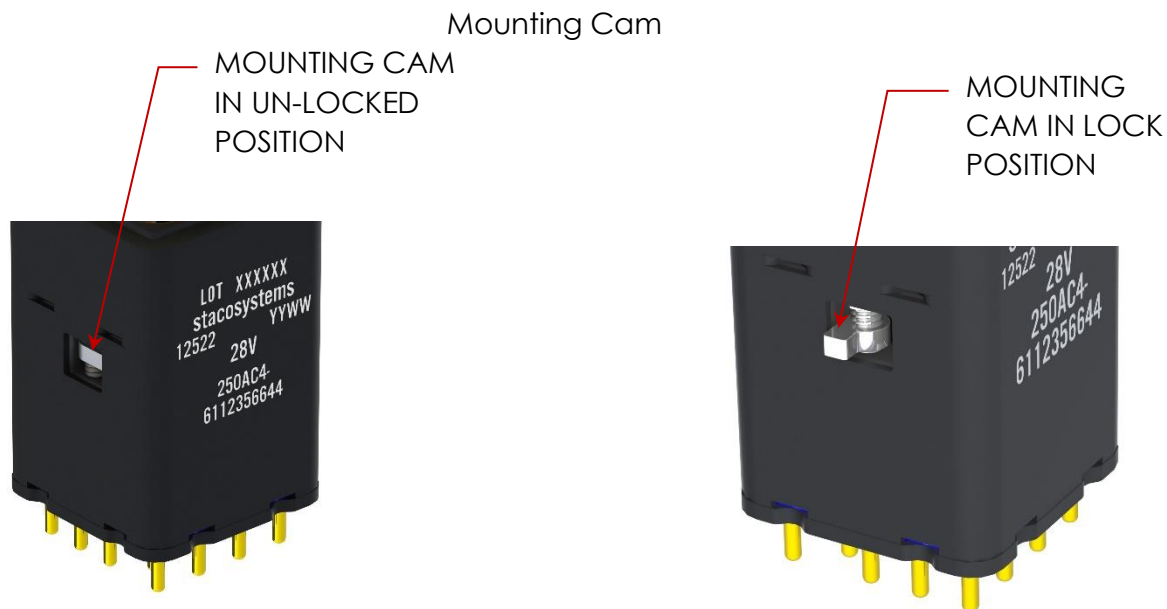


Figure 8A
Mounting Cam

4.2.3. Install Switch/Indicator Assembly onto Mounting Panel

Install pushbutton switch/indicator through panel cut-out from front of panel. switch / indicator is marked with word "TOP" to help properly orient position of the assembly in the panel. See Figure 9.

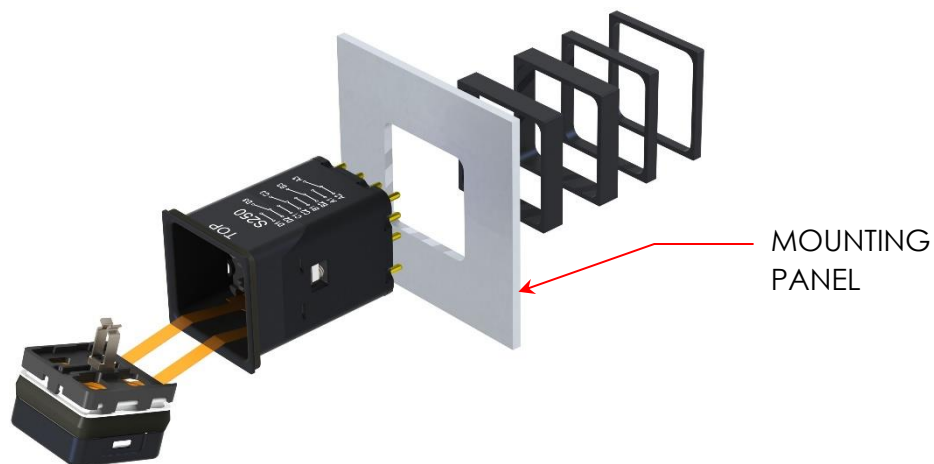


Figure 9
Switch Orientation
(flush mount version shown)

To determine the use of the panel seal panel spacer, mounting sleeves and the maximum panel thickness refer to pages 17-21 of Series 250 SCD. For the application shown in this Technical Bulletin we will be installing the switch onto a panel in the flush mount condition.

Use or disclosure of data contained on this sheet is subject to restrictions of the title page of this document.	SIZE	CAGE CODE	DWG NO	REV
	A	12522	TB-230	1.0
SEE SHEET 1	DO NOT SCALE DRAWING	SCALE	SHEET	
	NONE	WT	5 OF 7	

The panel spacer, with three different thickness mounting sleeves, 0.150" (2), 0.080", and 0.060", provide various options for fitting the switch/indicator assembly to mounting panels with thickness from zero to a maximum of 0.440".

Replace panel spacer and mounting sleeves as appropriate for the panel thickness as shown in Figure 10.

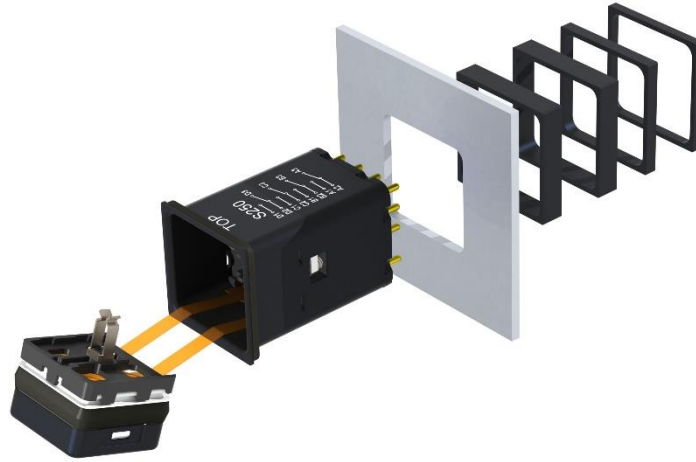


Figure 10
Mounting Cam in Un-Locked Position
(flush mount version shown)

Rotate locking screws clockwise to bring mounting cams to lock position. Recommended mounting torque is 10 ± 2 -ounce inches (0.071 ± 0.014 Nm). See Figure 10.

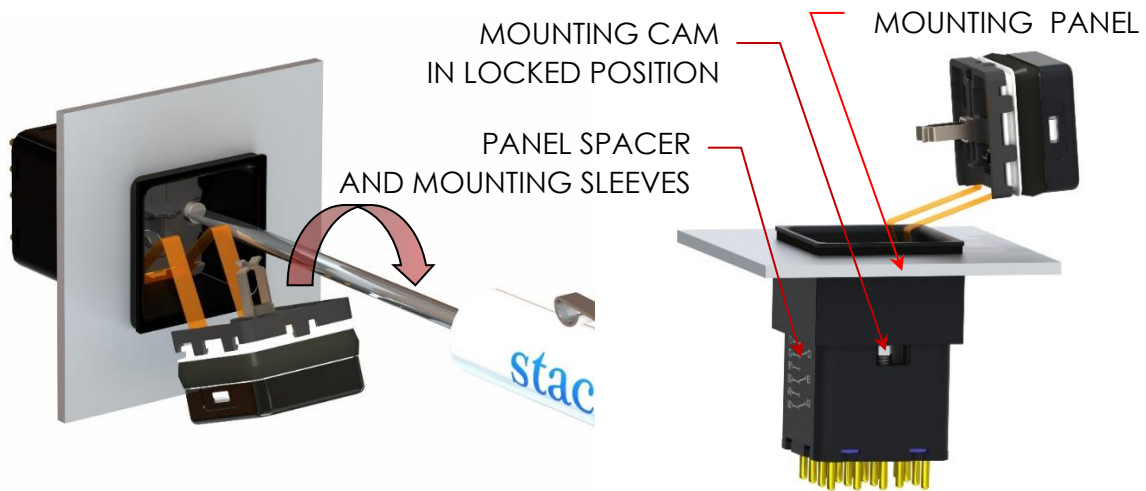


Figure 11
Mounting Cam in Locked Position
(flush mount version shown)

Use or disclosure of data contained on this sheet is subject to restrictions of the title page of this document.

SIZE
A

CAGE CODE
12522

DWG NO
TB-230

REV
1.0

SEE SHEET 1

DO NOT SCALE DRAWING

SCALE
NONE

WT

SHEET
6 OF 7

4.2.4. Pushbutton Installation

To insert the pushbutton, align the pushbutton shaft located at bottom center of the pushbutton to the shaft mate which is located inside the top portion of the switch/indicator of the switch housing. Gently push until the pushbutton is properly seated. See Figure 12.

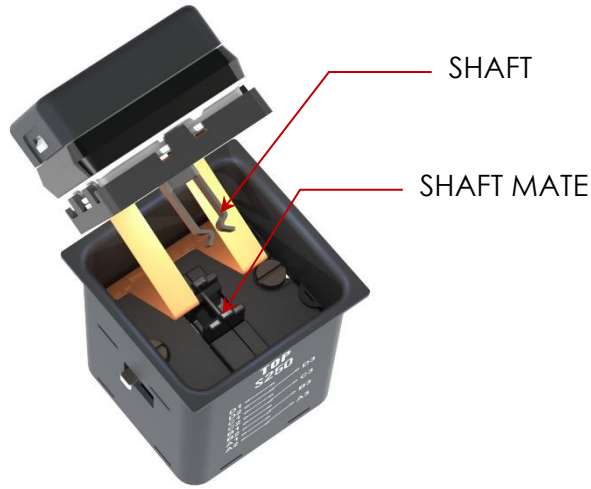


Figure 12
Pushbutton Installation
(panel omitted for clarity)

4.2.5. Receptacle Assembly Installation – For Crimp Pin Termination Only

Once the switch/indicator has been properly installed, place receptacle assembly back onto switch/indicator. It is important that all crimp pins and mounting holes are properly aligned. See Figure 13.

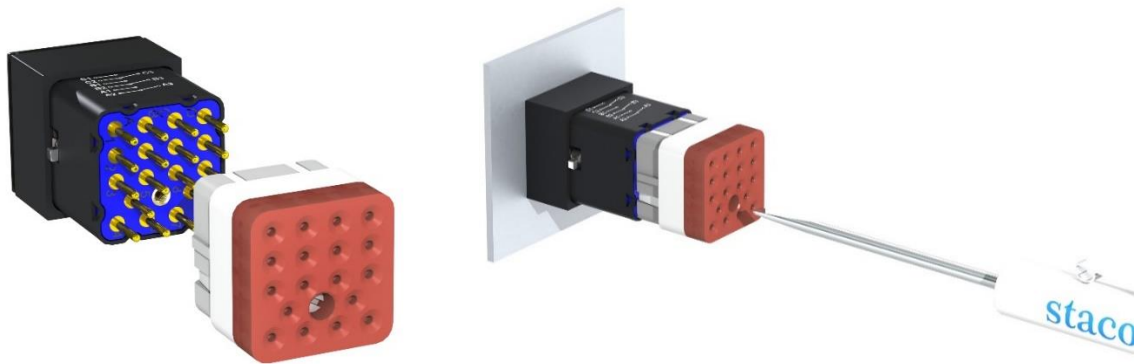


Figure 13
Receptacle Installation

While holding receptacle on switch/indicator, tighten receptacle mounting screw clockwise. Recommended torque is 8 ± 2 inch-ounces.

Use or disclosure of data contained on this sheet is subject to restrictions of the title page of this document.

SIZE
A

CAGE CODE
12522

DWG NO
TB-230

REV
1.0

SEE SHEET 1

DO NOT SCALE DRAWING

SCALE
NONE

WT

SHEET

7 OF 7