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STICKSCREW® SMALL SCREW INSERTION SYSTEM

SST[™]



THE STICKSCREW® SYSTEM

The STICKSCREW[®] system offers manufacturers an extremely fast, accurate and efficient method of small screw insertion. The StickShooter[®] driver is designed to accommodate interchangeable nose assemblies allowing quick changeover from one hex size to another.

This simple, low cost system combines a lightweight driver and "sticks" of up to 130 per 12" serially connected hex head screws. Simply insert the stick in the driver, advance to the second screw, squeeze the trigger, place the tip of the rotating screw into the hole and the screw is driven home, twisting off cleanly when precise seating torque is reached.

Custom screw designs, finishes, and coatings are available to meet the needs of specific applications.

The STICKSCREW® system benefits include:

- Self-contained system. No expensive tooling, jigs, or fixtures are required.
- Eliminates manual driving of screws. Saving time and reducing operator fatigue.
- **Torque reliability.** Seating torque is built into the screw eliminating torque testing and ensuring the assembly is properly fastened.
- Minimum operator training. System can be applied to your production line with minimal training.
- Inventory control simplified. No loose or mixed screws. Less shelf space required.
- Major productivity increase in small screw insertion. Productivity increases are greater as screw diameters decrease
 since difficulty in handling loose screws is eliminated.
- Interchangeable nose assemblies enable quick tooling changeover for all screw hex sizes.

STANDARD PART NUMBERS

(Generally available for immediate delivery)





All dimensions are in inches

| | Thread Size | Thread Type (1) | Catalog Part Number | Fastener Material | Hex (Nom.) | Screw Length ±.006 | Hole Size +.003000 | Head Height ±.010 | OD Thread Major +.004"003" | Screws Per Stick | Break-off Diameter ±.003 | Break-off Torque ± 15 in oz. |
|---|----------------|--------------------|---------------------------|----------------------------|---------------|--------------------------|-----------------------|-------------------------|----------------------------------|------------------------|--------------------------------|------------------------------------|
| | #2-56 | Thread Cutting | 00STC258 | 400 series stainless steel | 5/32" | .125 | .073 | .035 | .084 | 73 | .052 | 60 |
| D | #2-56 | Thread Cutting | 00STC2512 | 400 series stainless steel | 5/32" | .187 | .073 | .035 | .084 | 52 | .052 | 60 |
| Ш | #3-48 | Thread Cutting | 00STC358 | 400 series stainless steel | 5/32" | .125 | .086 | .040 | .097 | 70 | .058 | 94 |
| z | #3-48 | Thread Cutting | 00STC3512 | 400 series stainless steel | 5/32" | .187 | .086 | .040 | .097 | 50 | .058 | 94 |
| | #4-40 | Thread Cutting | 00STC458 | 400 series stainless steel | 5/32" | .125 | .096 | .040 | .110 | 70 | .059 | 95 |
| | #4-40 | Thread Cutting | 00STC4512 | 400 series stainless steel | 5/32" | .187 | .096 | .040 | .110 | 50 | .059 | 95 |
| | #6-32 | Thread Cutting | 00STC6512 | 400 series stainless steel | 3/16" | .187 | .124 | .045 | .136 | 49 | .070 | 120 |
| | #6-32 | Thread Cutting | 00STC6516 | 400 series stainless steel | 3/16" | .250 | .124 | .045 | .136 | 38 | .070 | 120 |

All dimensions are in millimeters (except hex size).

| твіс | Thread Size | Thread Type (1) | Catalog Part Number | Fastener Material | Hex (Nom.) | Screw Length ±0.15 | Hole Size +0.08 | Head Height ±0.25 | OD Thread Major +0.1 -0.15 | Screws Per Stick | Break-off Diameter ±0.08 | Break-off Torque ± 0.1 (N-m) |
|------|----------------|--------------------|---------------------------|----------------------------|---------------|--------------------------|--------------------|-------------------------|----------------------------------|------------------------|--------------------------------|------------------------------------|
| ΞV | M3 x 0.5 | Thread Cutting | 00STCM358 | 400 series stainless steel | 5/32" | 3.18 | 2.62 | 1.07 | 2.97 | 69 | 1.58 | 0.7 |
| - | M3 x 0.5 | Thread Cutting | 00STCM3512 | 400 series stainless steel | 5/32" | 4.75 | 2.62 | 1.07 | 2.97 | 49 | 1.58 | 0.7 |

(1) Thread cutting screw may be used in tapped hole. Performance may vary. Consult our technical department. For evaluation purposes, we will be happy to demonstrate and/or test standard product in your application.



CUSTOM SCREWS

(If standard part will not meet your requirements)

To order a custom screw, simply choose the product variable from each of the 7 categories listed below. Our technical staff will be happy to assist you to select the proper size and type of screw to meet your requirements.

| 0 | Thread Type | Machine Thread Forming Thread Cutting |
|---|---------------------------------|---|
| 2 | Thread Size | #0-80 #1-72 #2-56 #3-48 #4-40 #5-40 #6-32 #8-32 M2 M2.5 M3 M3.5 M4 |
| ß | Material | Steel CDA-360 Brass ⁽²⁾ 2011 Aluminum 400 Series Stainless Steel 300 Series Stainless Steel |
| 4 | Hex Size | 3/32 1/8 5/32 3/16 2.4mm 3.2mm 4.8mm |
| 6 | Screw Length (Any increment) | From 1/16 to 5/16 From 1.5mm to 8mm |
| 6 | Head Height | From .030" to .060" From 0.76mm to 1.5mm |
| 7 | Finish | Zinc ⁽³⁾ Black Oxide Wax MicroLoc [™] Plain ⁽⁴⁾ Dri-Loc [®] Vibra-Seal [®] Teflon [®] |
| | | (2) Chromate finish is available on brass screws to prevent tarnishing. (3) Standard on steel. (4) Standard for brass, aluminum, and stainless steel. |

CUSTOM SCREW PART NUMBER DESIGNATION



Design Version of any other XXXTC6112 part numbers that have other special process or product characteristics. This could be any of the dimensional characteristics (head height, hex diameter, body diameter, etc. that are different from previous revisions); plus any additional heat-treating, plating, coating, lubing, etc.



OPERATION



 Load - Insert the stick into the back of the driver and advance to the second screw.



2) Drive - Squeeze the trigger to start the driver. Place the tip of the rotating screw into the hole and the screw is driven home, twisting off cleanly when precise seating torque is reached. The next screw is automatically indexed into the driving position.

Go to StickScrew portion of our website to see <u>video</u> of tool operation.

TOOLS

Our StickShooter[®] air tools are lightweight, ergonomic, and quiet. These tools provide years of reliable operation. If needed, service and parts are available from the factory.

- Trigger activates pneumatic motor.
- Non-marring tip.
- Interchangeable and adjustable nose assemblies.
- Operates on 90 P.S.I. using 1/4" air line.

| Adjustable Nose Assembly No. | Screw Hex Size | Nose Assembly Length |
|---------------------------------|-------------------|-------------------------|
| 0D50019 | 3/32 (.09375") | 1″ |
| 0D50020 | 3/32 (.09375") | 2" |
| 0D50022 | 1/8 (.125") | 1″ |
| 0D50023 | 1/8 (.125") | 2" |
| 0D50024 | 5/32 (.15625") | 1″ |
| 0D50025 | 5/32 (.15625") | 2" |
| 0D50026 | 3/16 (.1875") | 1" |
| 0D50027 | 3/16 (.1875") | 2" |



In-Line StickShooter® Model IL-2000



Nose assemblies are easily interchangeable



All PEM[®] products meet our stringent quality standards. If you require additional industry or other specific <u>quality certifications</u>, special procedures and/or part numbers are required. Please contact your local sales office or representative for further information.

Regulatory compliance information is available in Technical Support section of our website. Specifications subject to change without notice. See our website for the most current version of this bulletin.

PennEngineering®



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