



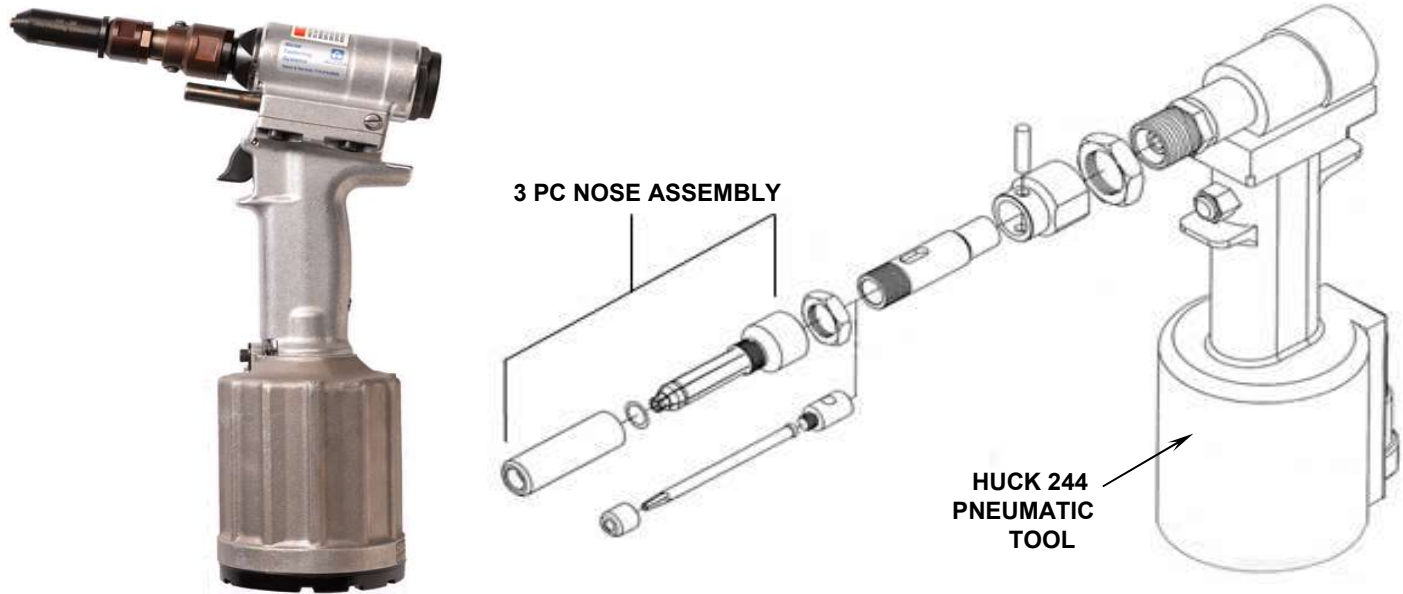
**HOWMET  
AEROSPACE**

# Slimsert™ insert Non-Impact Swage Tool



April 1, 2020

# SFT100-( ) Non-Impact Swage Tool

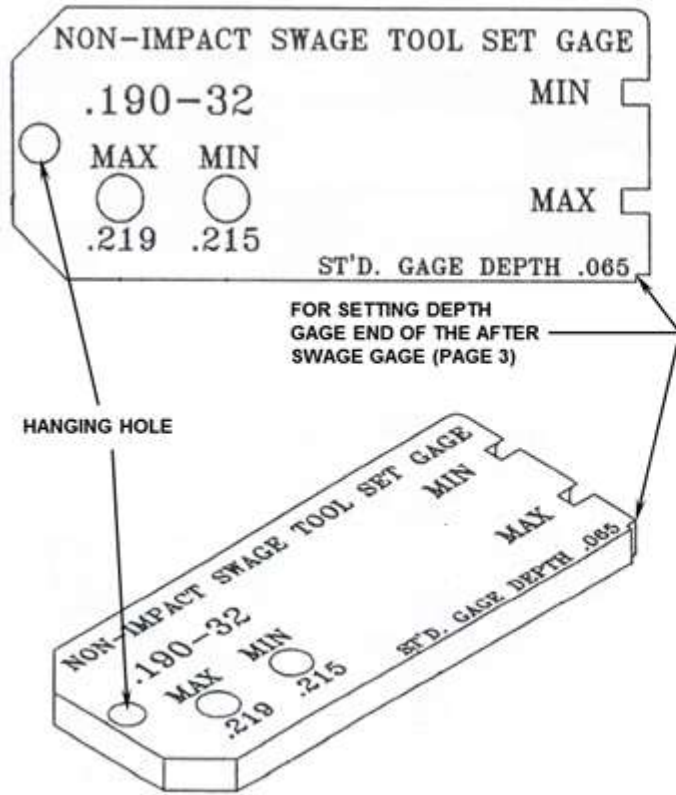


INSERT INTERNAL THREAD SIZE	COMPLETE INSTALLATION TOOL MODEL	NOSE ASSEMBLY	ADAPTER KIT
<b>UNIFIED THREADS</b>			
10-32 UNF	SFT100-192	SFT100F-192	SFT100ASH
1/4-28 UNF	SFT100-258	SFT100F-258	SFT100ALH
5/16-24 UNF	SFT100-314	SFT100F-314	SFT100ALH
3/8-24 UNF	SFT100-374	SFT100F-374	SFT100ALH
<b>METRIC THREADS</b>			
MJ5 x 0.8	SFT100-M0508	SFT100F-M0508	SFT100ASH
MJ6 x 1.0	SFT100-M0610	SFT100F-M0610	SFT100ALH
MJ7 x 1.0	SFT100-M0710	SFT100F-M0710	SFT100ALH
MJ8 x 1.0	SFT100-M0812	SFT100F-M0812	SFT100ALH
MJ10 x 1.25	SFT100-M1015	SFT100F-M1015	SFT100ALH

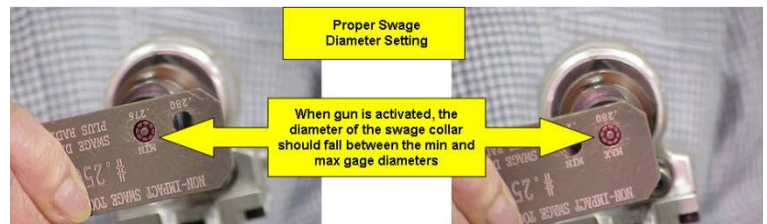
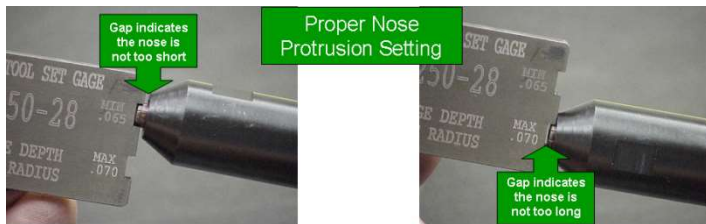
**NOTES:**

1. OTHER SIZES AVAILABLE. CONTACT YOUR HOWMET REPRESENTATIVE FOR INFORMATION ON AVAILABLE SIZES.
2. COMPLETE INSTALLATION TOOL INCLUDES HUCK 244 PNEUMATIC GUN, NOSE ASSEMBLY AND ADAPTER KIT.
3. NOSE ASSEMBLY AND ADAPTER KIT CAN BE PURCHASED SEPERATELY AND MOUNTED TO ANY EXISTING HUCK 244.
4. TOOL IS A SWAGING TOOL ONLY. INSERTS MUST STILL BE SCREWED IN BY HAND

# SET-UP GAGE



## MIN/MAX FIXTURE AIDS IN SET-UP OF NOSE PROTRUSION AND SWAGE DIAMETER

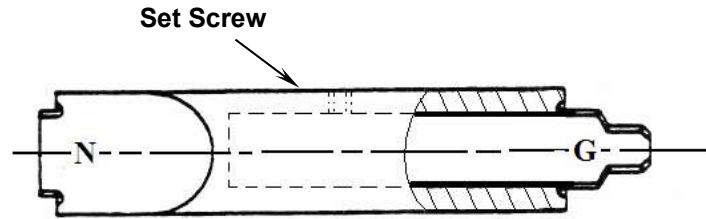


INSERT INTERNAL THREAD SIZE	GAGE MODEL NUMBER	NOSE PROTRUSION		SWAGE DIAMETER	
		MIN	MAX	MIN	MAX
<b>UNIFIED THREADS</b>					
10-32 UNF	SR192SUG	.1270	.1320	.215	.219
1/4-28 UNF	SR258SUG	.1250	.1300	.285	.289
5/16-24 UNF	SR314SUG	.1390	.1440	.351	.355
3/8-24 UNF	SR374SUG	.1460	.1510	.415	.419
<b>METRIC THREADS</b>					
MJ5 x 0.8	SRM0508SUG	.1100	.1150	.232	.236
MJ6 x 1.0	SRM0610SUG	.1140	.1190	.272	.276
MJ7 x 1.0	SRM0710SUG	.1260	.1310	.312	.316
MJ8 x 1.0	SRM0812SUG	.1420	.1470	.352	.356
MJ10 x 1.25	SRM1015SUG	.1620	.1670	.433	.437

# AFTER SWAGE GAGE



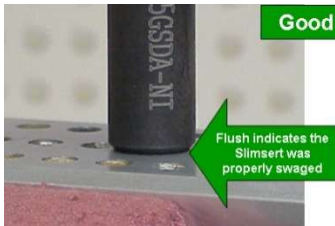
Go/No-Go Gage



Go Gage Pin

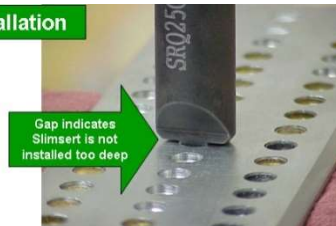
INSERT INTERNAL THREAD SIZE	GAGE MODEL NUMBER
<b>UNIFIED THREADS</b>	
10-32 UNF	SR19GSD-NI
1/4-28 UNF	SR25GSD-NI
5/16-24 UNF	SR31GSD-NI
3/8-24 UNF	SR37GSD-NI
<b>METRIC THREADS</b>	
MJ5 x 0.8	SRM0508GSD-NI
MJ6 x 1.0	SRM0610GSD-NI
MJ7 x 1.0	SRM0710GSD-NI
MJ8 x 1.0	SRM0812GSD-NI
MJ10 x 1.25	SRM1015GSD-NI

Go end should sit flush when inserted into installed fastener



Good Installation

No-Go end should have a gap when inserted into installed fastener



If gap occurs when Go end is inserted into fastener, installation is bad



Bad Installation

If gage is flush when No-Go end is inserted into fastener, installation is bad



# HOLE PREP AND HAND INSTALLATION TOOLS



## Hole Preparation

Hole preparation tools include step drills which will drill and counterbore the hole in one pass, and taps for the special tap sizes.

Manual Broach tools as well as Swivel Broach tools for use in Mills or CNC machining.

EDM Broaches are also available.

## Hand Installation Tools

Small Hand held installation wrench screws the insert in to the work piece. Using a separate hand held swaging tool, insert the tool pilot into the fastener and apply force either with a hammer blow, or with the use of a manual arbor press or hydraulic press, until the nylon stop bottoms out against the work piece. Insert is now properly swaged.



## Removal Tools

Tool is used in a drill motor. Pilots on insert threads and drills out insert I.D. thinning wall enough to allow for insert to be backed out.

## Gauges

After Swage Go-No Go Gauge. Inserted into swaged insert after the swaging operation. Go end must bottom out on the material surface to show full swage has been accomplished. The no go end must not bottom out on work surface to indicate the insert has not been installed too deep.

Note: Standard After Swage Gages can not be used after swaging with the Non-Impact Swaging Tool



## Howmet Fastening Systems

### **Assembly Tool Systems Division**

801 S. Placentia Avenue  
Fullerton, CA USA 92831  
714-278-8908 Telephone  
714-871-4821 FAX

Slimsert™ is a trademark of Howmet Aerospace Inc. and/or its subsidiaries.

© 2020 Howmet Aerospace Inc.