



Haeger® By
PEM®

Manual Tooling Catalog

A comprehensive guide to ordering Haeger® tooling
for the manual installation of self-clinching fasteners

June 2025

For more information, or to place an order, go to www.haeger.com.

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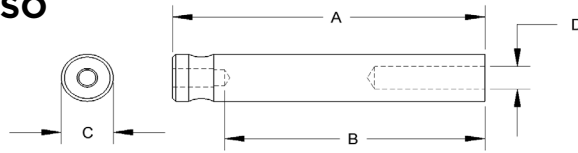
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Basic Tooling

SO, BSO, TSO, DSO
CSS, CSOS, SKC
Standoff



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in
H-109-4/M3S	4-40	1.5	1.0	.50	.168
H-109-6/M3.5S	64-40, 6-32	1.5	1.0	.50	.215
H-109-8-10/M5S	86-32, 8-32 & 10-32	1.5	1.0	.50	.283
H-109-4/M3L	4-40	3.0	2.5	.50	.168
H-109-6/M3.5L	64-40, 6-32 & SKC-660	3.0	2.5	.50	.215
H-109-8-10M5L	86-32, 8-32 & 10-32	3.0	2.5	.50	.283

Notes:

Maximum length inch standoff for H-109___S is 1 in

Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm
H-109-4/M3S	M3	38.1	25.4	12.7	4.26
H-109-6/M3.5S	3.5M3	38.1	25.4	12.7	5.46
H-109-8-10/M5S	M4 & M5	38.1	25.4	12.7	7.18
H-109-4/M3L	M3	76.2	63.5	12.7	4.26
H-109-6/M3.5L	3.5M3 & SKC-61.5	76.2	63.5	12.7	5.46
H-109-8-10/M5L	M4 & M5	76.2	63.5	12.7	7.18

Notes:

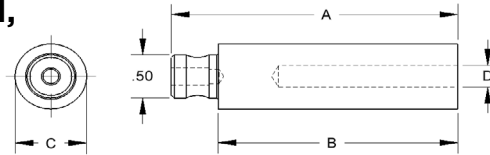
Maximum length metric standoff is 27 mm.

Caution:

When using short tooling (H-109-___S) and bottom screw to secure, ensure the screw allows adequate clearance for the standoff.

Basic Tooling

**FH, FHL, TFH, HFH,
HFE, CHA, CHC**
Stud



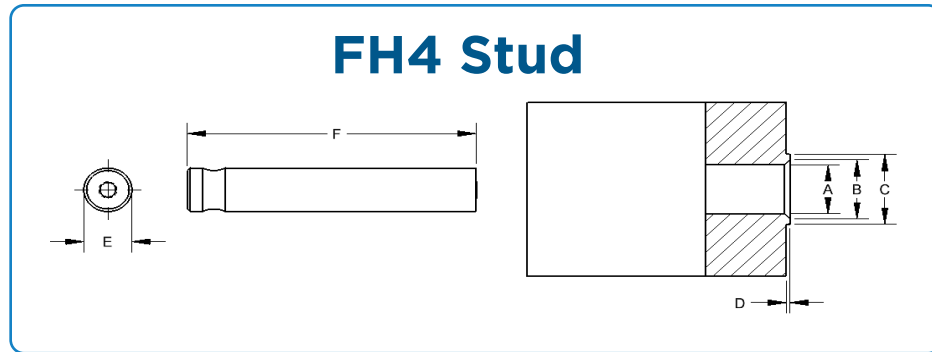
Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in
H-103-2S	2-56	1.50	1.00	.500	.087
H-103-4S	4-40	1.50	1.00	.500	.113
H-103-6S	6-32	1.50	1.00	.500	.140
H-103-8S	8-32	1.50	1.00	.500	.166
H-103-10S	10-32	1.50	1.00	.500	.193
H-103-04S	1/4-20	1.50	1.00	.500	.250
H-103-05S	5/16-18	2.25	1.75	.750	.313
H-103-06S	3/8-16	2.25	1.75	.750	.377
H-103-2L	2-56	3.00	2.50	.500	.087
H-103-4L	4-40	3.00	2.50	.500	.113
H-103-6L	6-32	3.00	2.50	.500	.140
H-103-8L	8-32	3.00	2.50	.500	.166
H-103-10L	10-32	3.00	2.50	.500	.193
H-103-04L	1/4-20	3.00	2.50	.500	.250
H-103-05L	5/16-18	3.00	2.50	.750	.313
H-103-06L	3/8-16	3.00	2.50	.750	.377

Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm
H-103-M2S	M2	38.1	25.4	12.7	2.07
H-103-M2.5S	M2.5	38.1	25.4	12.7	2.56
H-103-M3S	M3	38.1	25.4	12.7	3.07
H-103-M3.5S	M3.5	38.1	25.4	12.7	3.55
H-103-M4S	M4	38.1	25.4	12.7	4.06
H-103-M5S	M5	38.1	25.4	12.7	5.05
H-103-M6S	M6	38.1	25.4	12.7	6.04
H-103-M8S	M8	57.2	44.5	19.1	8.02
H-103-M10S	M10	57.2	44.5	19.1	10.03
H-103-M2L	M2	76.2	63.5	12.7	2.07
H-103-M2.5L	M2.5	76.2	63.5	12.7	2.56
H-103-M3L	M3	76.2	63.5	12.7	3.07
H-103-M3.5L	M3.5	76.2	63.5	12.7	3.55
H-103-M4L	M4	76.2	63.5	12.7	4.06
H-103-M5L	M5	76.2	63.5	12.7	5.05
H-103-M6L	M6	76.2	63.5	12.7	6.04
H-103-M8L	M8	76.2	63.5	19.1	8.02
H-103-M10L	M10	76.2	63.5	19.1	10.03

Basic Tooling



Inch

Part #	Fastener Size	Dia. A in	Dia. B in	Dia. C in	Dim. D in	Dia. E in	Dim. F in
H-181-4S	4-40	.113	.144	.174	.010	.500	1.50
H-181-6S	6-32	.140	.170	.200	.010	.500	1.50
H-181-8S	8-32	.166	.202	.236	.010	.500	1.50
H-181-10S	10-32	.191	.235	.275	.010	.500	1.50
H-181-04S*	1/4-20	.252	.324	.360	.020	.750	1.50
H-181-4L	4-40	.113	.144	.174	.010	.500	3.00
H-181-6L	6-32	.140	.170	.200	.010	.500	3.00
H-181-8L	8-32	.166	.202	.236	.010	.500	3.00
H-181-10L	10-32	.191	.235	.275	.010	.500	3.00
H-181-04L*	1/4-20	.252	.324	.360	.020	.750	3.00

Metric

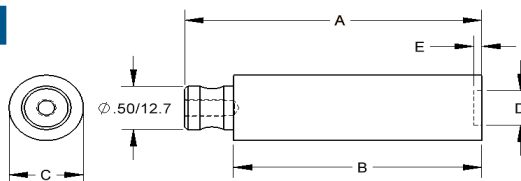
Part #	Fastener Size	Dia. A mm	Dia. B mm	Dia. C mm	Dim. D mm	Dia. E mm	Dim. F mm
H-181-M3S	M3	3.04	3.81	4.57	2.54	12.7	38.1
H-181-M4S	M4	4.03	4.95	5.81	2.54	12.7	38.1
H-181-M5S	M5	5.08	6.14	7.16	2.54	12.7	38.1
H-181-M6S*	M6	6.04	7.87	8.78	5.08	19.05	38.1
H-181-M3L	M3	3.04	3.81	4.57	2.54	12.7	76.2
H-181-M4L	M4	4.03	4.95	5.81	2.54	12.7	76.2
H-181-M5L	M5	5.08	6.14	7.16	2.54	12.7	76.2
H-181-M6L*	M6	6.04	7.87	8.78	5.08	19.05	76.2

Notes:

* 1/4-20 and M6 fasteners require 23,000 lbs of force for proper installation. These tools will not fit into the standard lower tool holder. H-147-2 or 15-03905 will be needed.

Basic Tooling

HFH Stud Head Punch



Inch

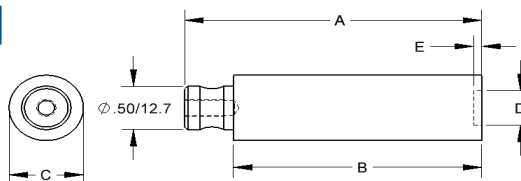
Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in	Dim. E in
H-184-10S	10-32	1.50	1.00	.500	.323	.036
H-184-04S	1/4-20	1.50	1.00	.500	.394	.045
H-184-05S	5/16-18	1.50	1.00	.750	.505	.063
H-184-06S	3/8-16	1.50	1.00	.750	.595	.077
H-184-10L	10-32	3.00	2.50	.500	.323	.036
H-184-04L	1/4-20	3.00	2.50	.500	.394	.045
H-184-05L	5/16-18	3.00	2.50	.750	.505	.063
H-184-06L	3/8-16	3.00	2.50	.750	.595	.077

Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm	Dim. E mm
H-184-10S	M5	38.1	25.4	12.7	8.2	0.91
H-184-04S	M6	38.1	25.4	12.7	10.0	1.14
H-184-05S	M8	38.1	25.4	19.0	12.8	1.60
H-184-M10S	M10	38.1	25.4	19.0	16.1	2.11
H-184-10L	M5	76.2	63.5	12.7	8.2	0.91
H-184-04L	M6	76.2	63.5	12.7	10.0	1.14
H-184-05L	M8	76.2	63.5	19.0	12.8	1.60
H-184-M10L	M10	76.2	63.5	19.0	16.1	2.11

Basic Tooling

HFE Stud Head Punch



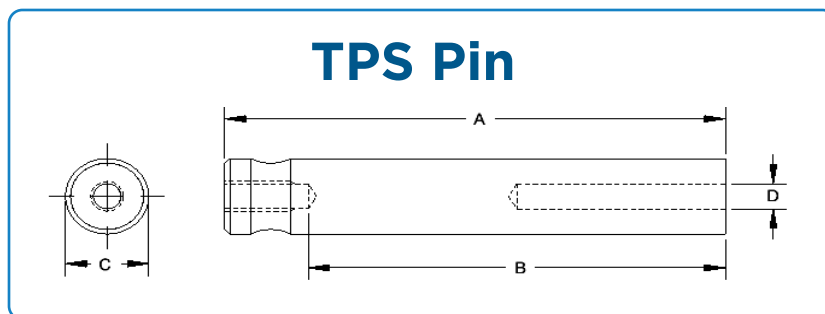
Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in	Dim. E in
H-189-10S	10-32	1.50	1.00	.750	.374	.044
H-189-04S	1/4-20	1.50	1.00	.750	.482	.055
H-189-05S	5/16-18	1.50	1.00	.750	.592	.078
H-189-10L	10-32	3.00	2.50	.750	.374	.044
H-189-04L	1/4-20	3.00	2.50	.750	.482	.055
H-189-05L	5/16-18	3.00	2.50	.750	.592	.078

Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm	Dim. E mm
H-189-10S	M5	38.1	38.1	19.0	9.5	1.12
H-189-04S	M6	38.1	38.1	19.0	12.2	1.40
H-189-05S	M8	38.1	38.1	19.0	15.0	1.98
H-189-10L	M5	76.2	63.5	19.0	9.5	1.12
H-189-04L	M6	76.2	63.5	19.0	12.2	1.40
H-189-05L	M8	76.2	63.5	19.0	15.0	1.98

Basic Tooling



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in
H-106-125S	125	1.50	1.00	.500	.130
H-106-187S	187	1.50	1.00	.500	.192
H-106-250S	250	1.50	1.00	.500	.255
H-106-125L	125	3.00	2.50	.500	.130
H-106-187L	187	3.00	2.50	.500	.192
H-106-250L	250	3.00	2.50	.500	.255

Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm
H-106-3MMS	3MM	38.1	25.4	12.7	3.11
H-106-4MMS	4MM	38.1	25.4	12.7	4.11
H-106-5MMS	5MM	38.1	25.4	12.7	5.13
H-106-6MMS	6MM	38.1	25.4	12.7	6.12
H-106-3MML	3MM	76.2	63.5	12.7	3.11
H-106-4MML	4MM	76.2	63.5	12.7	4.11
H-106-5MML	5MM	76.2	63.5	12.7	5.13
H-106-6MML	6MM	76.2	63.5	12.7	6.12

Notes:

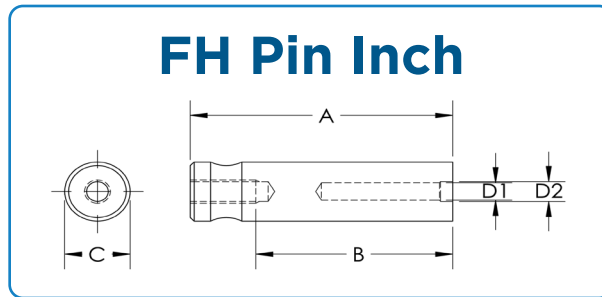
Maximum Length Pins

- The **maximum** length pin for all H-106-__S is 1 in
- The **maximum** length pin for all H-106-__L is 1.5 in

Caution:

When using short tooling (H-106-__S) and bottom screw to secure, ensure the screw allows adequate clearance for the stud.

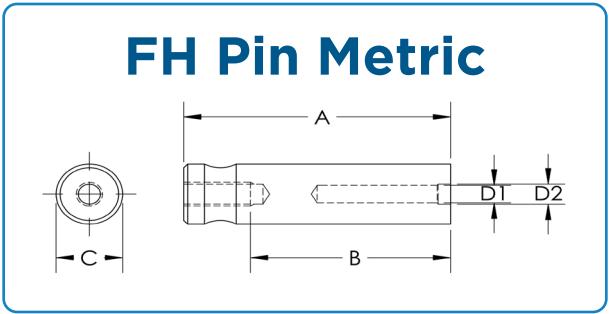
Basic Tooling



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D1 in	Dim. D2 in
H-136-073S	073	1.50	1.00	.500	.078	.089
H-136-084S	084	1.50	1.00	.500	.089	.103
H-136-094S	094	1.50	1.00	.500	.099	.115
H-136-103S	103	1.50	1.00	.500	.109	.122
H-136-106S	106	1.50	1.00	.500	.110	.129
H-136-116S	116	1.50	1.00	.500	.121	.141
H-136-120S	120	1.50	1.00	.500	.125	.141
H-136-137S	137	1.50	1.00	.500	.144	.161
H-136-141S	141	1.50	1.00	.500	.147	.167
H-136-160S	160	1.50	1.00	.500	.166	.193
H-136-167S	167	1.50	1.00	.500	.172	.193
H-136-173S	173	1.50	1.00	.500	.180	.201
H-136-207S	207	1.50	1.00	.500	.213	.240
H-136-215S	215	1.50	1.00	.500	.221	.254
H-136-223S	223	1.50	1.00	.500	.228	.254
H-136-273S	273	1.50	1.00	.500	.277	.316
H-136-281S	281	1.50	1.00	.500	.290	.316
H-136-073L	073	3.00	2.50	.500	.078	.089
H-136-084L	084	3.00	2.50	.500	.089	.103
H-136-094L	094	3.00	2.50	.500	.099	.115
H-136-103L	103	3.00	2.50	.500	.109	.122
H-136-106L	106	3.00	2.50	.500	.110	.129
H-136-116L	116	3.00	2.50	.500	.121	.141
H-136-120L	120	3.00	2.50	.500	.125	.141
H-136-137L	137	3.00	2.50	.500	.144	.161
H-136-141L	141	3.00	2.50	.500	.147	.167
H-136-160L	160	3.00	2.50	.500	.166	.193
H-136-167L	167	3.00	2.50	.500	.172	.193
H-136-173L	173	3.00	2.50	.500	.180	.201
H-136-207L	207	3.00	2.50	.500	.213	.240
H-136-215L	215	3.00	2.50	.500	.221	.254
H-136-223L	223	3.00	2.50	.500	.228	.254
H-136-273L	273	3.00	2.50	.500	.277	.316
H-136-281L	281	3.00	2.50	.500	.290	.316

Basic Tooling



Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D1 mm	Dim. D2 mm
H-136-116S	3MM	38.1	25.4	12.7	3.1	3.61
H-136-4MMS	4MM	38.1	25.4	12.7	4.1	4.19
H-136-5MMS	5MM	38.1	25.4	12.7	5.1	5.61
H-136-116L	3MM	80.0	63.5	12.7	3.1	3.61
H-136-4MML	4MM	80.0	63.5	12.7	4.1	4.19
H-136-5MML	5MM	80.0	63.5	12.7	5.1	5.61

Notes:

Maximum Length Pins

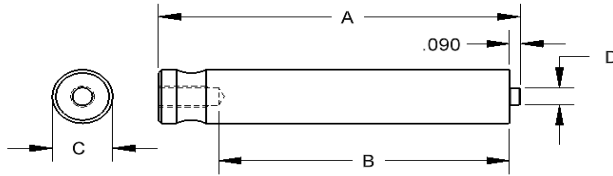
- a. The **maximum** length pin for H-136-073L & H-136-073S is .625 in
- b. The **maximum** length pin for H-136-084L & H-136-084S is .750 in
- c. The **maximum** length pin for H-136-094L & H-136-094S is .750 in
- d. The **maximum** length pin for H-136-106L & H-136-106S is .750 in
- e. The **maximum** length pin for all other H-136-__S is 1 in
- f. The **maximum** length pin for all other H-136-__L is 1.5 in

Caution:

When using short tooling (H-136-__S) and bottom screw to secure, ensure the screw allows adequate clearance for the stud.

Basic Tooling

**S, CLS, CLA, RT, SL,
SMPS, H, SH, SMPS**
Nut Pin Style



Inch

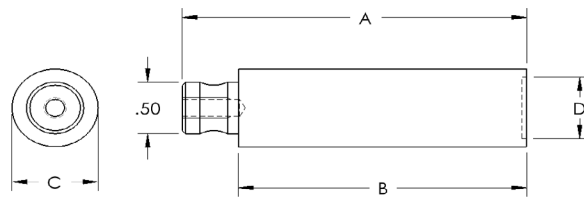
Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in
10-00271	2-56	1.5	1.0	.500	.066
10-00272	4-40	1.5	1.0	.500	.085
10-00273	6-32	1.5	1.0	.500	.102
10-00274	8-32	1.5	1.0	.500	.132
10-00275	10-32	1.5	1.0	.500	.154
10-00276	1/4-20	1.5	1.0	.500	.196
10-00277	5/16-18	1.5	1.0	.500	.250
10-00304	3/8-16	1.5	1.0	.500	.306
10-00278	2-56	3.0	2.5	.500	.066
10-00279	4-40	3.0	2.5	.500	.085
10-00280	6-32	3.0	2.5	.500	.102
10-00281	8-32	3.0	2.5	.500	.132
10-00282	10-32	3.0	2.5	.500	.154
10-00283	1/4-20	3.0	2.5	.500	.196
10-00284	5/16-18	3.0	2.5	.500	.250
10-00303	3/8-16	3.0	2.5	.500	.306
10-00305	1/2-13	3.0	2.5	.500	.396

Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm
10-00285	M2.5	38.1	25.4	12.7	1.95
10-00286	M3	38.1	25.4	12.7	2.36
10-00287	M3.5	38.1	25.4	12.7	2.76
10-00288	M4	38.1	25.4	12.7	3.17
10-00289	M5	38.1	25.4	12.7	4.06
10-00290	M6	38.1	25.4	12.7	4.87
10-00291	M8	38.1	25.4	12.7	6.65
10-00302	M 10	38.1	25.4	12.7	8.33
10-00306	M 12	38.1	25.4	12.7	10.05
10-00292	M2.5	76.2	63.5	12.7	1.95
10-00293	M3	76.2	63.5	12.7	2.36
10-00294	M3.5	76.2	63.5	12.7	2.76
10-00295	M4	76.2	63.5	12.7	3.17
10-00296	M5	76.2	63.5	12.7	4.06
10-00297	M6	76.2	63.5	12.7	4.87
10-00298	M8	76.2	63.5	12.7	6.65
10-00301	M 10	76.2	63.5	12.7	8.33
10-00305	M 12	76.2	63.5	12.7	10.05

Basic Tooling

S, CLS, RT, SL, SH
Nut Pocket
Style



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in
H-101-2-4/M3S	2-56 & 4-40	1.5	1.0	.500	.265
H-101-6/M3.5S	6-32	1.5	1.0	.500	.295
H-101-8/M4S	8-32	1.5	1.0	.500	.325
H-101-10/M5S	10-32	1.5	1.0	.500	.355
H-101-04/M6S	1/4-20	1.5	1.0	0.625	.450
H-101-05/M8S	5/16-18	1.5	1.0	.625	.515
H-101-06S	3/8-16	1.5	1.0	.750	.593
H-101-2-4/M3L	2-56 & 4-40	3.0	2.5	.500	.265
H-101-6/M3.5L	6-32	3.0	2.5	.500	.295
H-101-8/M4L	8-32	3.0	2.5	.500	.325
H-101-10/M5L	10-32	3.0	2.5	.500	.355
H-101-04/M6L	1/4-20	3.0	2.5	.500	.450
H-101-05/M8L	5/16-18	3.0	2.5	.625	.515
H-101-06L	3/8-16	3.0	2.5	.750	.593

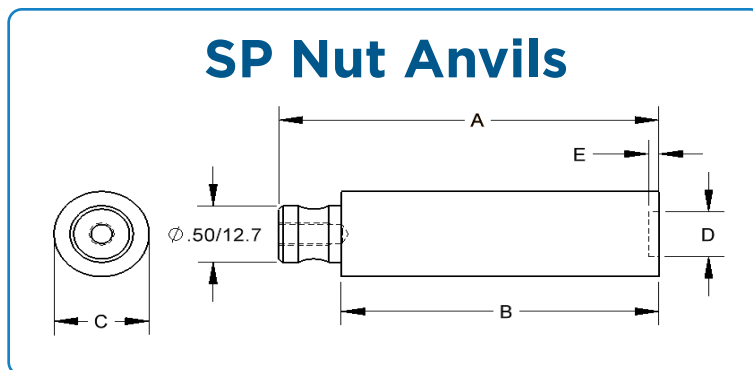
Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm
H-101-2-4/M3S	M2,M2.5,M3	38.1	25.4	12.70	6.73
H-101-6/M3.5S	M3.5	38.1	25.4	12.70	7.49
H-101-8/M4S	M4	38.1	25.4	12.70	8.25
H-101-10/M5S	M5	38.1	25.4	12.70	9.01
H-101-04/M6S	M6	38.1	25.4	15.88	11.43
H-101-05/M8S	M8	38.1	25.4	15.88	13.08
H-101-2-4/M3L	M2,M2.5,M3	76.2	63.5	12.70	6.73
H-101-6/M3.5L	M3.5	76.2	63.5	12.70	7.49
H-101-8/M4L	M4	76.2	63.5	12.70	8.25
H-101-10/M5L	M5	76.2	63.5	12.70	9.01
H-101-04/M6L	M6	76.2	63.5	12.70	11.43
H-101-05/M8L	M8	76.2	63.5	15.88	13.08

Notes:

M10 nut tools are available as custom tooling.

Basic Tooling



Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm	Dim. E in / mm
H-183-4/M3-S	4-40 & M3	1.50/38.1	1.00/25.4	.625/15.9	.255/6.5	.064/1.63
H-183-6/M3.5-S	6-32 & M3.5	1.50/38.1	1.00/25.4	.625/15.9	.286/7.3	.064/1.63
H-183-8/M4-S	8-32 & M4	1.50/38.1	1.00/25.4	.625/15.9	.317/8.1	.082/2.08
H-183-10/M5-S	10-32 & M5	1.50/38.1	1.00/25.4	.625/15.9	.348/8.8	.082/2.08
H-183-04/M6-S	1/4-20 & M6	1.50/38.1	1.00/25.4	.750/19.0	.443/11.3	.163/4.14
H-183-4/M3-L	4-40 & M3	3.00/76.2	2.50/63.5	.625/15.9	.255/6.5	.064/1.63
H-183-6/M3.5-L	6-32 & M3.5	3.00/76.2	2.50/63.5	.625/15.9	.286/7.3	.064/1.63
H-183-8/M4-L	8-32 & M4	3.00/76.2	2.50/63.5	.625/15.9	.317/8.1	.082/2.08
H-183-10/M5-L	10-32 & M5	3.00/76.2	2.50/63.5	.625/15.9	.348/8.8	.082/2.08
H-183-04/M6-L	1/4-20 & M6	3.00/76.2	2.50/63.5	.750/19.0	.443/11.3	.163/4.14

Basic Tooling

Inch / Metric

Part #	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm
H-108-0018S	1.5/38.1	1.0/25.4	.25/6.4
H-108-0019S	1.5/38.1	1.0/25.4	.50/12.7
H-108-0020S	1.5/38.1	1.0/25.4	1.00/25.4
H-108-062S	1.5/38.1	1.0/25.4	.625/15.9
H-108-075S	1.5/38.1	1.0/25.4	.750/19.0
H-108-0018L	3.0/76.2	2.5/63.5	.25/6.4
H-108-0019L	3.0/76.2	2.5/63.5	.50/12.7
H-108-0020L	3.0/76.2	2.5/63.5	1.00/25.4
H-108-062L	3.0/76.2	2.5/63.5	.625/15.9
H-108-075L	3.0/76.2	2.5/63.5	.750/19.0

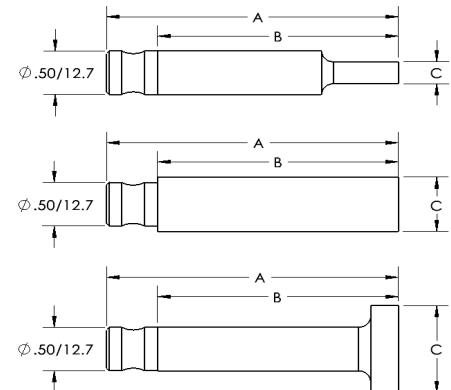
Inch / Metric

Part #	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm
H-145	2/50.8	1.25/31.8	.75/19.1

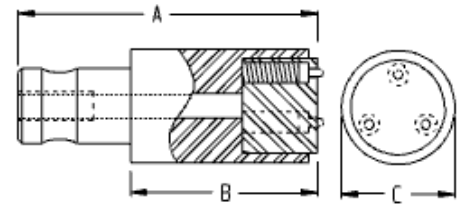
Notes:

1. This tool has an epoxy board face which is used to minimize marring of soft materials.
2. Spring loaded Continuity Pins extend above the epoxy board to permit operating in the Conductive Mode.

Flat Tools

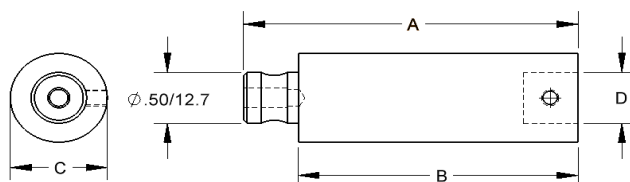


Soft Face Tool



Basic Tooling

Adapters & Extenders



Inch / Metric

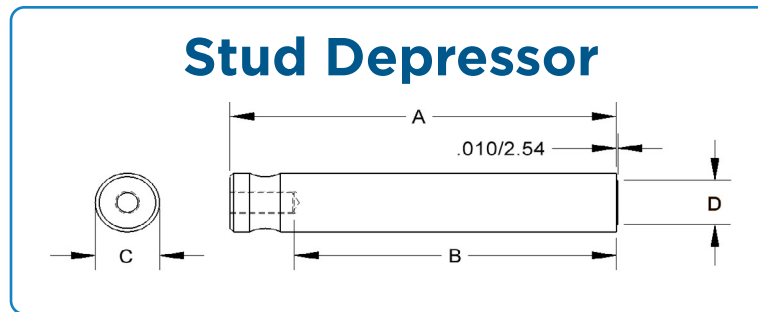
Part #	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm
H-110-375-2	2.0/50.8	1.5/38.1	.62/15.9	.375/9.5
H-110-500-2	2.0/50.8	1.5/38.1	.75/19.1	.500/12.7
H-110-375-3	3.0/76.2	2.5/63.5	.62/15.9	.375/9.5
H-110-500-3	3.0/76.2	2.5/63.5	.75/19.1	.500/12.7

Notes:

H-110-375-__ may be used to adapt and extend PEMSERTER manual tools with .375" base.

H-110-500-__ may be used to extend the length of HAEGER tooling with the .500" base.

Basic Tooling



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in
H-111-2S	2-56	1.5	1.0	.50	.165
H-111-4S	4-40	1.5	1.0	.50	.180
H-111-6S	6-32	1.5	1.0	.50	.220
H-111-8S	8-32	1.5	1.0	.50	.250
H-111-10S	10-32	1.5	1.0	.50	.275
H-111-O4S	1/4-20	1.5	1.0	.50	.375
H-111-2L	2-56	3.0	2.5	.50	.165
H-111-4L	4-40	3.0	2.5	.50	.180
H-111-6L	6-32	3.0	2.5	.50	.220
H-111-8L	8-32	3.0	2.5	.50	.250
H-111-10L	10-32	3.0	2.5	.50	.275
H-111-O4L	1/4-20	3.0	2.5	.50	.375

Metric

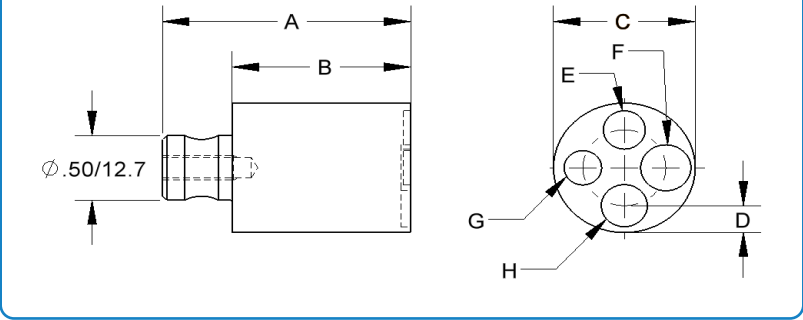
Part #	FASTENER SIZE	Dim. A in	Dim. B in	Dia. C in	Dia. D in
H-111-4S	M2.5 & M3	38.1	25.4	12.7	4.6
H-111-6S	M3.5	38.1	25.4	12.7	5.6
H-111-8S	M4	38.1	25.4	12.7	6.3
H-111-10S	M5	38.1	25.4	12.7	7.0
H-111-O4S	M6	38.1	25.4	12.7	9.5
H-111-4L	M2.5 & M3	76.2	63.5	12.7	4.6
H-111-6L	M3.5	76.2	63.5	12.7	5.6
H-111-8L	M4	76.2	63.5	12.7	6.3
H-111-10L	M5	76.2	63.5	12.7	7.0
H-111-O4L	M6	76.2	63.5	12.7	9.5

Notes:

This tooling is used to ensure that the stud's head is inserted flush with, or recessed slightly below, the surface of the workpiece.

Rotary Tooling

S, SS, CLS, CLSS, C, CS
Rotary Nut Tooling



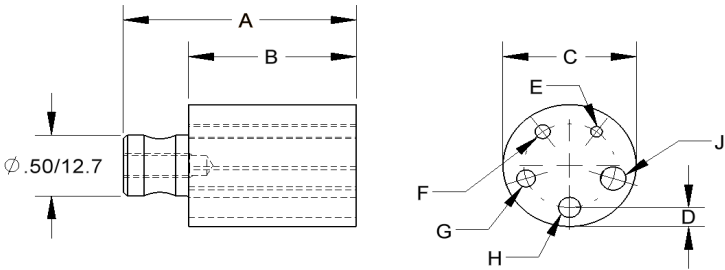
Inch / Metric

Part #	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dim. D in / mm
H-104	1.75/44.4	1.25/31.8	1.00/25.4	.208/5.3

Fastener Size E	Fastener Size F	Fastener Size G	Fastener Size H
2-56/4-40	6-32	8-32	10-32
M2, M2.5, M3	M3.5	M4	M5

Rotary Tooling

FH, FHS, FHA, CH, CHC, CHA
Rotary Stud Tooling



Inch

Part #	Dim. A in	Dim. B in	Dia. C in	Dim. D in
H-105	1.75	1.25	1.00	.157

Fastener Size E	Fastener Size F	Fastener Size G	Fastener Size H	Fastener Size J
2-56	4-40	6-32	8-32	10-32

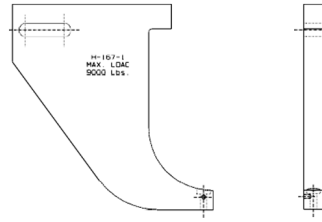
Metric

Part #	Dim. A in	Dim. B in	Dia. C in	Dim. D in
H-105-M	44.4	31.8	25.4	4.0

Fastener Size E	Fastener Size F	Fastener Size G	Fastener Size H
M3	M3.5	M4	M5

J-Frame Tooling

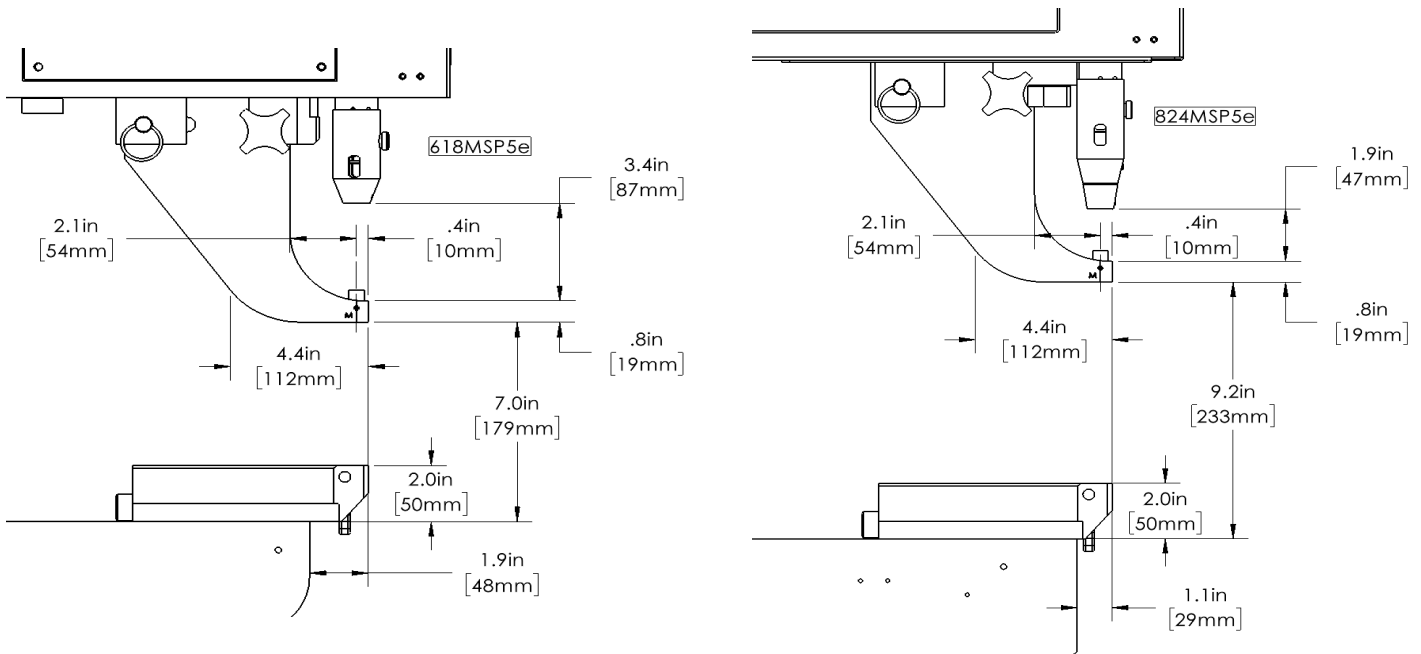
J-Frame Tool Holder



Part #	Description
H-167-1	J-Frame Tool Holder MSP
15-03224	J-Frame Tool Holder 824WT

Notes:

The **Maximum Load** on the J-Frame Tool Holder is **9,000 lbs/40 kN**. This Tool Holder may be used with both inch and metric tooling.



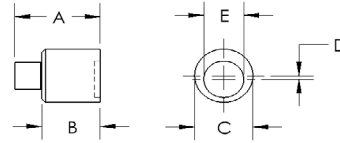
Notes:

These dimensions apply only to Haeger's current 618MSPe and 824MSPe models. For all other models, some of the dimensions may vary slightly.

J-Frame Tooling

S, CLS, CLA, RT, SL, SH

Nut Pocket Style



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Offset D in	Dia. E in
H-100-2-4/M3	2-56 & 4-40	.73	.312	.50	.067	.265
H-100-6/M3.5	6-32	.73	.312	.50	.052	.295
H-100-8/M4	8-32	.73	.312	.50	.037	.325
H-100-10/M5	10-32	.73	.312	.50	.022	.355
H-100-04/M6	1/4-20	.73	.312	.50	.000	.455
H-100-0	Flat Anvil	.73	.312	.50	n/a	n/a

Metric

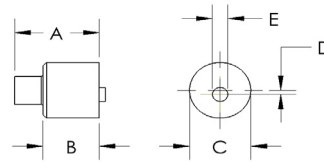
Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Offset D in	Dia. E in
H-100-2-4/M3	M2,M2.5,M3	18.5	7.9	12.7	1.7	6.73
H-100-6/M3.5	M3.5	18.5	7.9	12.7	1.3	7.49
H-100-8/M4	M4	18.5	7.9	12.7	.9	8.25
H-100-10/M5	M5	18.5	7.9	12.7	.6	9.01
H-100-04/M6	M6	18.5	7.9	12.7	.0	11.55
H-100-0	Flat Anvil	18.5	7.9	12.7	n/a	n/a

Notes:

These tools may also be used in the Square Tip Tool Holder, H-170-1.

J-Frame Tooling

S, CLS, CLA, RT, SL, SH
Nut Pin Style



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Offset D in	Dia. E in
10-00650	2-56	.73	.312	.50	.067	.065
10-00651	4-40	.73	.312	.50	.067	.085
10-00652	6-32	.73	.312	.50	.052	.102
10-00653	8-32	.73	.312	.50	.037	.132
10-00654	10-32	.73	.312	.50	.022	.154
10-00655	1/4-20	.73	.312	.50	.000	.196

Metric

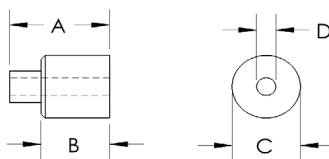
Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Offset D in	Dia. E in
10-00656	M2.5	18.5	7.9	12.7	1.7	1.95
10-00657	M3	18.5	7.9	12.7	1.7	2.36
10-00658	M3.5	18.5	7.9	12.7	1.3	2.76
10-00659	M4	18.5	7.9	12.7	.9	3.17
10-00660	M5	18.5	7.9	12.7	.6	4.06
10-00661	M6	18.5	7.9	12.7	.0	4.87

Notes:

These tools may also be used in the Square Tip Tool Holder, H-170-1.

J-Frame Tooling

**FH, FHS, FHA,
CH, CHC, CHA**
Stud



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in
H-102-2	2-56	.73	.312	.500	.087
H-102-4	4-40	.73	.312	.500	.113
H-102-6	6-32	.73	.312	.500	.140
H-102-8	8-32	.73	.312	.500	.166
H-102-10	10-32	.73	.312	.500	.193

Metric

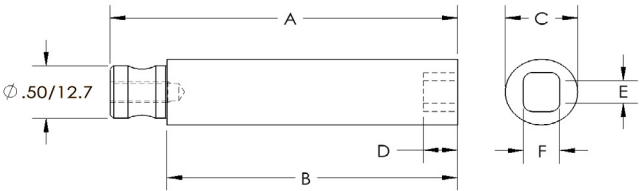
Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm
H-102-M3	M2.5,M3	18.5	7.9	12.7	3.07
H-102-M3.5	M3.5	18.5	7.9	12.7	3.55
H-102-M4	M4	18.5	7.9	12.7	4.06
H-102-M5	M5	18.5	7.9	12.7	5.05

Notes:

These tools may also be used in the Square Tip Tool Holder, H-170-1.

Miscellaneous Tooling

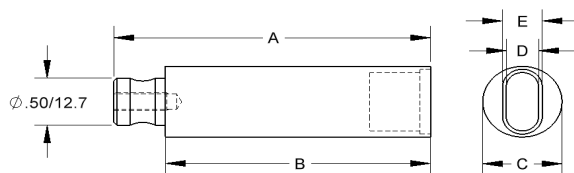
TDS Cable
Tie Mount



Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dim. D in / mm	Dim. E in /mm	Dim. F in /mm
14-01827-S	TD-40-4	1.50/38.1	1.00/25.4	.500/12.7	.160/4.1	.151/3.8	.251/6.4
14-01828-S	TD-60-6	1.50/38.1	1.00/24.4	.625/15.9	.190/4.8	.214/5.4	.313/7.9
14-01829-S	TD-175-12	1.75/44.5	1.25/31.8	1.00/25.4	.295/7.5	.401/10.2	.501/12.7
14-01827-L	TD-40-4	3.00/76.2	2.50/63.5	.500/12.7	.160/4.1	.151/3.8	.251/6.4
14-01828-L	TD-60-6	3.00/76.2	2.50/63.5	.625/15.9	.190/4.8	.214/5.4	.313/7.9
14-01829-L	TD-175-12	3.00/76.2	2.50/63.5	1.00/25.4	.295/7.5	.401/10.2	.501/12.7

Miscellaneous Tooling

Right Angle Fastener



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dim. D in	Dim. E in
H-180-440-S	4-40	1.50	1.00	.625	.257	.313
H-180-632-S	6-32	1.50	1.00	.750	.307	.376
H-180-832-S	8-32	1.75	1.25	1.00	.357	.407
H-180-440-L	4-40	3.00	2.50	.625	.257	.313
H-180-632-L	6-32	3.00	2.50	.750	.307	.376
H-180-832-L	8-32	3.00	2.50	1.00	.357	.407

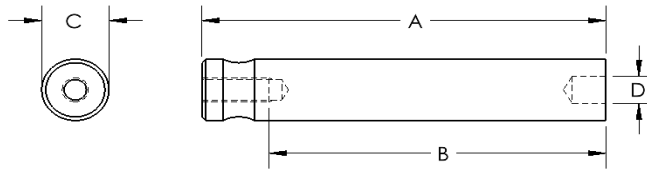
Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dim. D mm	Dim. E mm
H-180-M3-S	M3	38.1	25.4	19.1	6.53	8.02
H-180-M4-S	M4	38.1	25.4	25.4	9.07	10.03
H-180-M3-S	M3	76.2	63.5	19.1	6.53	8.02
H-180-M4-S	M4	76.2	63.5	25.4	9.07	10.03

Miscellaneous Tooling

**U, UL, FE, FEX,
FEO, FEOX**

**Miniature
Nut**



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in
H-133-OS	0-80	1.5	1.0	.500	.081
H-133-1S	1-64	1.5	1.0	.500	.095
H-133-2S	2-56	1.5	1.0	.500	.109
H-133-4S	4-40	1.5	1.0	.500	.150
H-133-6S	6-32	1.5	1.0	.500	.180
H-133-8S	8-32	1.5	1.0	.500	.220
H-133-10S	10-32	1.5	1.0	.500	.250
H-133-04S	1/4-20	1.5	1.0	.500	.323
H-133-OL	0-80	3.0	2.5	.500	.081
H-133-1L	1-64	3.0	2.5	.500	.095
H-133-2L	2-56	3.0	2.5	.500	.109
H-133-4L	4-40	3.0	2.5	.500	.150
H-133-6L	6-32	3.0	2.5	.500	.180
H-133-8L	8-32	3.0	2.5	.500	.220
H-133-10L	10-32	3.0	2.5	.500	.250
H-133-04L	1/4-20	3.0	2.5	.500	.323

Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm
H-133-4S	M3	38.1	25.4	12.7	4.08
H-133-8S	M4	38.1	25.4	12.7	5.35
H-133-10S	M5	38.1	25.4	12.7	6.60
H-133-M6S	M6	38.1	25.4	12.7	7.84
H-133-4L	M3	76.2	63.5	12.7	4.08
H-133-8L	M4	76.2	63.5	12.7	5.35
H-133-10L	M5	76.2	63.5	12.7	6.60
H-133-M6L	M6	76.2	63.5	12.7	7.84

Miscellaneous Tooling

AS, AC, LAS, LAC,
AC, LAC, A4, LA4

**Floating
Nut**

Technical drawing of a floating nut. The side view shows a cylindrical body with a central hole of diameter $\phi .50$. Dimension A is the total length, B is the length of the main body, and C is the diameter of the main body. The end view shows two diameters, D1 and D2, representing the outer and inner diameters of the nut's base.

Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D1 in	Dia. D2 in
H-131-4S	4-40	1.5	1.0	.500	.360	.292
H-131-6S	6-32	1.5	1.0	.500	.390	.337
H-131-8S	8-32	1.5	1.0	.500	.440	.367
H-131-10S	10-32	1.5	1.0	.625	.470	.407
H-131-04S	1/4-20	1.5	1.0	.750	.600	.512
H-131-4L	4-40	3.0	2.5	.500	.360	.292
H-131-6L	6-32	3.0	2.5	.500	.390	.337
H-131-8L	8-32	3.0	2.5	.500	.440	.367
H-131-10L	10-32	3.0	2.5	.625	.470	.407
H-131-04L	1/4-20	3.0	2.5	.750	.600	.512

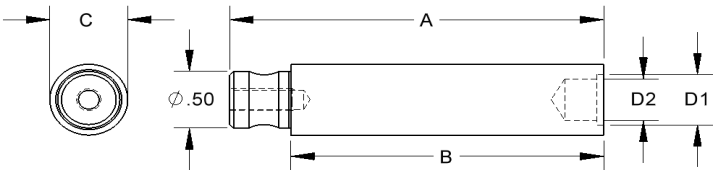
Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D1 mm	Dia. D2 mm
H-131-4S	M3	38.1	25.4	12.7	9.14	7.42
H-131-8S	M4	38.1	25.4	12.7	11.18	9.32
H-131-10S	M5	38.1	25.4	15.87	11.94	10.34
H-131-04S	M6	38.1	25.4	19.05	15.24	13.00
H-131-4L	M3	76.2	63.5	12.7	9.14	7.42
H-131-8L	M4	76.2	63.5	12.7	11.18	9.32
H-131-10L	M5	76.2	63.5	15.87	11.94	10.34
H-131-04L	M6	76.2	63.5	19.05	15.24	13.00

Miscellaneous Tooling

SKC-F, SK4-F, TSKCF-F,
SKS-R, TSKS-R, HSKS-R

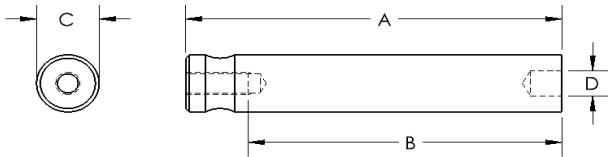
KEYHOLE®
Fasteners



Part #	Fastener Size	Dim. A in/mm	Dim. B in/mm	Dim. C in/mm	Dim. D in/mm
H-157-184S	1.5 & 2.5	1.5/38.1	1.0/25.4	.500/12.7	.184/4.67
H-157-222S	3.2	1.5/38.1	1.0/25.4	.500/12.7	.222/5.64
H-157-262S	4.0	1.5/38.1	1.0/25.4	.500/12.7	.262/6.65
H-157-184L	1.5 & 2.5	3.0/76.1	2.5/63.5	.500/12.7	.184/4.67
H-157-222L	3.2	3.0/76.1	2.5/63.5	.500/12.7	.222/5.64
H-157-262L	4.0	3.0/76.1	2.5/63.5	.500/12.7	.262/6.65

Miscellaneous Tooling

LK, LKA, LKS
Self-Locking Nut



Inch

Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in
H-130-2S	2-56	1.5	1.0	.500	.170
H-130-3S	3-48	1.5	1.0	.500	.180
H-130-4S	4-40	1.5	1.0	.500	.190
H-130-6S	6-32	1.5	1.0	.500	.225
H-130-8S	8-32	1.5	1.0	.500	.255
H-130-10S	10-32	1.5	1.0	.500	.290
H-130-2L	2-56	3.0	2.5	.500	.170
H-130-3L	3-48	3.0	2.5	.500	.180
H-130-4L	4-40	3.0	2.5	.500	.190
H-130-6L	6-32	3.0	2.5	.500	.225
H-130-8L	8-32	3.0	2.5	.500	.255
H-130-10L	10-32	3.0	2.5	.500	.290

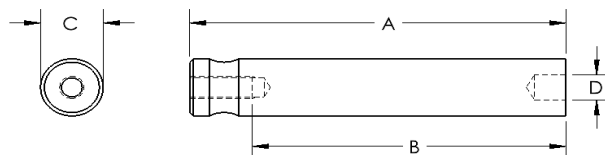
Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm
H-130-4S	M3	38.1	25.4	12.7	4.95
H-130-8S	M4	38.1	25.4	12.7	6.32
H-130-10S	M5	38.1	25.4	12.7	7.51
H-130-4L	M3	76.2	63.5	12.7	4.95
H-130-8L	M4	76.2	63.5	12.7	6.32
H-130-10L	M5	76.2	63.5	12.7	7.51

Miscellaneous Tooling

PL, PLC

Hex Self-Lock Nut



Inch

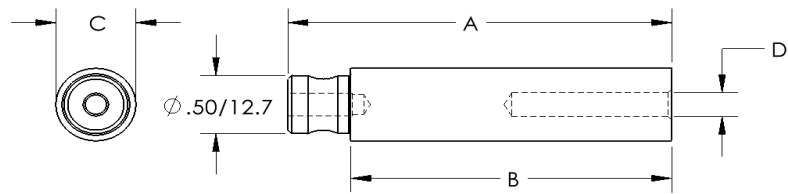
Part #	Fastener Size	Dim. A in	Dim. B in	Dia. C in	Dia. D in
H-134-4S	4-40	1.5	1.0	.500	.221
H-134-6S	6-32	1.5	1.0	.500	.251
H-134-8S	8-32	1.5	1.0	.500	.283
H-134-10S	10-32	1.5	1.0	.500	.297
H-134-4L	4-40	3.0	2.5	.500	.221
H-134-6L	6-32	3.0	2.5	.500	.251
H-134-8L	8-32	3.0	2.5	.500	.283
H-134-10L	10-32	3.0	2.5	.500	.297

Metric

Part #	Fastener Size	Dim. A mm	Dim. B mm	Dia. C mm	Dia. D mm
H-134-4S	M3	38.1	25.4	12.7	5.61
H-134-8S	M4	38.1	25.4	12.7	7.18
H-134-10S	M5	38.1	25.4	12.7	7.54
H-134-4L	M3	76.2	63.5	12.7	5.61
H-134-8L	M4	76.2	63.5	12.7	7.18
H-134-10L	M5	76.2	63.5	12.7	7.54

Panel Fasteners

Southco No. 47, Press in Type



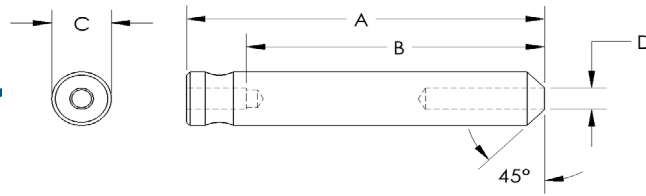
Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm
H-115-6S	6-32	1.5/38.1	1.0/25.4	.50/12.7	.146/3.70
H-115-8S	8-32	1.5/38.1	1.0/25.4	.50/12.7	.169/4.29
H-115-10S	10-32	1.5/38.1	1.0/25.4	.63/15.9	.205/5.20
H-115-04S	1/4-20	1.5/38.1	1.0/25.4	.63/15.9	.257/6.52
H-115-6L	6-32	3.0/76.2	2.5/63.5	.50/12.7	.146/3.70
H-115-8L	8-32	3.0/76.2	2.5/63.5	.50/12.7	.169/4.29
H-115-10L	10-32	3.0/76.2	2.5/63.5	.63/15.9	.205/5.20
H-115-04L	1/4-20	3.0/76.2	2.5/63.5	.63/15.9	.257/6.52

Panel Fasteners

PF11MF, PF12MF

Panel Fastener Flare in Type

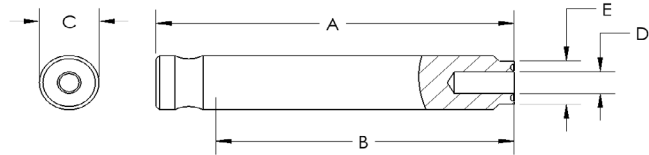


Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm
H-117-4S	4-40 & M3	1.5/38.1	1.0/25.4	.50/12.7	.126/3.20
H-117-6S	6-32	1.5/38.1	1.0/25.4	.50/12.7	.146/3.70
H-117-8/10S	8-32 & M4	1.5/38.1	1.0/25.4	.50/12.7	.202/5.13
H-117-8/10S	10-32 & M5	1.5/38.1	1.0/25.4	.50/12.7	.202/5.13
H-117-04S	1/4-20 & M6	1.5/38.1	1.0/25.4	.50/12.7	.263/6.68
H-117-4L	4-40 & M3	3.0/76.2	2.5/63.5	.50/12.7	.126/3.20
H-117-6L	6-32	3.0/76.2	2.5/63.5	.50/12.7	.146/3.70
H-117-8/10L	8-32 & M4	3.0/76.2	2.5/63.5	.50/12.7	.202/5.13
H-117-8/10L	10-32 & M5	3.0/76.2	2.5/63.5	.50/12.7	.202/5.13
H-117-04L	1/4-20 & M6	3.0/76.2	2.5/63.5	.50/12.7	.263/6.68

PF11MW, PF12MW

Panel Fastener, Floating Type, Flare



Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dim. C in / mm	Dia. D in / mm	Dia. E in / mm
H-119-4L	4-40 & M3	3.00/76.2	2.50/63.5	.500/12.7	.120/3.05	.250/6.35
H-119-6L	6-32	3.00/76.2	2.50/63.5	.500/12.7	.140/3.56	.300/7.62
H-119-8/10L	8-32, 10-32 & M4, M5	3.00/76.2	2.50/63.5	.500/12.7	.201/5.11	.400/10.2
H-119-04L	1/4-20 & M6	3.00/76.2	2.50/63.5	.500/12.7	.252/6.40	.500/12.7

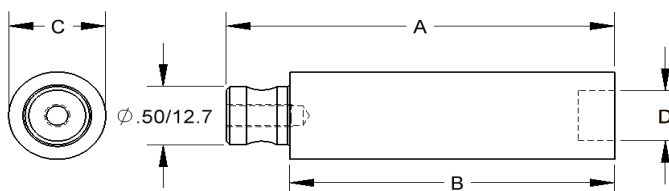
Notes:

These punches are used with H-116 anvils.

Panel Fasteners

PF11, PF12, PF15, PEM C.A.P.S.

Panel Fastener Capped



Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm
H-116-4S	4-40 & M3	1.5/38.1	1.0/25.4	.75/19.1	.430/10.92
H-116-6S	6-32	1.5/38.1	1.0/25.4	.75/19.1	.469/11.91
H-116-8S	8-32 & M4	1.5/38.1	1.0/25.4	.75/19.1	.527/13.38
H-116-10S	10-32 & M5	1.5/38.1	1.0/25.4	.75/19.1	.527/13.38
H-116-04S	1/4-20 & M6	1.5/38.1	1.0/25.4	.75/19.1	.592/15.03
H-116-4L	4-40 & M3	3.0/76.2	2.5/63.5	.75/19.1	.430/10.92
H-116-6L	6-32	3.0/76.2	2.5/63.5	.75/19.1	.469/11.91
H-116-8L	8-32 & M4	3.0/76.2	2.5/63.5	.75/19.1	.527/13.38
H-116-10L	10-32 & M5	3.0/76.2	2.5/63.5	.75/19.1	.527/13.38
H-116-04L	1/4-20 & M6	3.0/76.2	2.5/63.5	.75/19.1	.592/15.03

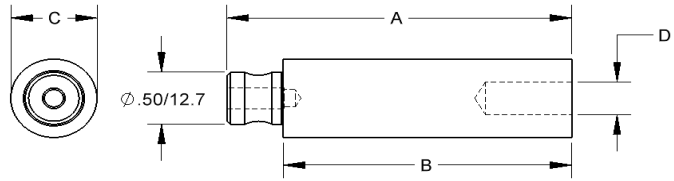
Notes:

May be used with H-115, H-117, H-119, H-132 punches

Panel Fasteners

**PF11, PF12, PF15, PEM C.A.P.S.
PFS2, PFC2, PF30, PF31, PF32**

Panel Fastener Punch



Inch / Metric

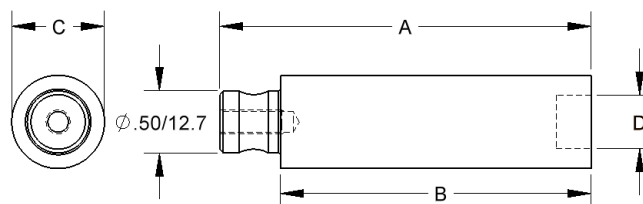
Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm
H-132-4S	4-40 & M3	1.5/38.1	1.0/ 25.4	.625/ 15.88	.170/4.31
H-132-6S	6-32	1.5	1.0	.625	.187
H-132-8S	8-32 & M4	1.5/38.1	1.0/ 25.4	.687/ 17.45	.217/5.51
H-132-10S	10-32 & M5	1.5/38.1	1.0/ 25.4	.687/ 17.45	.249/6.32
H-132-04S	1/4-20 & M6	1.5/38.1	1.0/ 25.4	.750/ 19.04	.317/8.05
H-132-4L	4-40 & M3	3.0/76.2	2.5/63.5	.625/15.88	.170/4.31
H-132-6L	6-32	3.0	2.5	.625	.187
H-132-8L	8-32 & M4	3.0/76.2	2.5/63.5	.687/15.88	.217/5.51
H-132-10L	10-32 & M5	3.0/76.2	2.5/63.5	.687/15.88	.249/6.32
H-132-04L	1/4-20 & M6	3.0/76.2	2.5/63.5	.750/15.88	.317/8.05

Notes:

This tooling may be used with H-116, H-144, H-146 anvils.

Panel Fasteners

PFC2/PFS2/PFC2P/PFK Panel Fastener Anvil



Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm
H-144-4S	4-40 & M3	1.5/38.1	1.0/25.4	.750/19.04	.32/8.12
H-144-6S	6-32	1.5	1.0	.750	.35
H-144-8S	8-32 & M4	1.5/38.1	1.0/25.4	.750/19.04	.39/9.90
H-144-10S	10-32 & M5	1.5/38.1	1.0/25.4	.750/19.04	.42/10.66
H-144-04S	1/4-20 & M6	1.5/38.1	1.0/25.4	.750/19.04	.48/12.19
H-144-4L	4-40 & M3	3.0/76.2	2.5/63.5	.750/19.04	.32/8.12
H-144-6L	6-32	3.0	2.5	.750	.35
H-144-8L	8-32 & M4	3.0/76.2	2.5/63.5	.750/19.04	.39/9.90
H-144-10L	10-32 & M5	3.0/76.2	2.5/63.5	.750/19.04	.42/10.66
H-144-04L	1/4-20 & M6	3.0/76.2	2.5/63.5	.750/19.04	.48/12.19

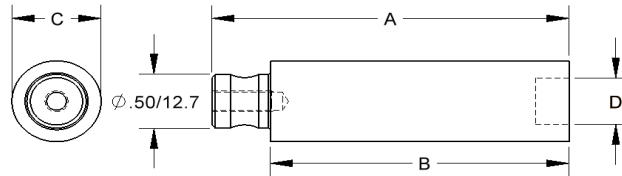
Notes:

This tooling may be used with H-132 punches.

Panel Fasteners

PF30, PF31, PF32

**Panel Fastener,
Low Profile**



Inch / Metric

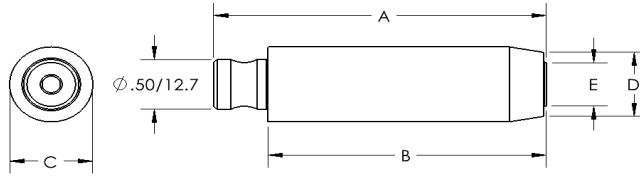
Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm
H-146-4S	4-40 & M3	3.00/76.2	2.50/63.5	.750/19.1	.421/10.7
H-146-6S	6-32	3.00/76.2	2.50/63.5	.750/19.1	.453/11.5
H-146-8S	8-32 & M4	3.00/76.2	2.50/63.5	.750/19.1	.484/12.3
H-146-10S	10-32 & M5	3.00/76.2	2.50/63.5	.750/19.1	.546/13.9
H-146-04S	1/4-20 & M6	3.00/76.2	2.50/63.5	1.00/25.4	.640/16.3
H-146-4L	4-40 & M3	1.50/38.1	1.00/25.4	.750/19.1	.421/10.7
H-146-6L	6-32	1.50/38.1	1.00/25.4	.750/19.1	.453/11.5
H-146-8L	8-32 & M4	1.50/38.1	1.00/25.4	.750/19.1	.484/12.3
H-146-10L	10-32 & M5	1.50/38.1	1.00/25.4	.750/19.1	.546/13.9
H-146-04L	1/4-20 & M6	1.50/38.1	1.00/25.4	1.00/25.4	.640/16.3

Notes:

This tooling is used with H-132 punches.

Hank Rivet Bush Tooling

Hexagonal Hank Bush



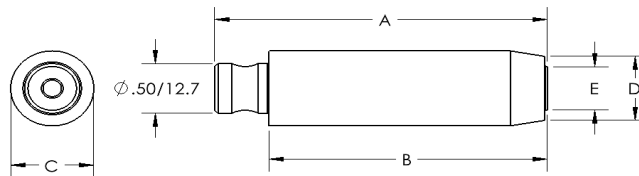
Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm	Dia. E in / mm
10-00696	M2.5/M3	3.0/76.2	2.5/63.5	.50/12.7	.356/9.0	.195/5.0
10-00697	M3.5/M4	3.0/76.2	2.5/63.5	.50/12.7	.356/9.0	.240/6.1
10-00698	M5	3.0/76.2	2.5/63.5	.50/12.7	.427/10.8	.283/7.2
10-00699	M6	3.0/76.2	2.5/63.5	.50/12.7	.50/12.7	.340/8.6
10-00700	M8	3.0/76.2	2.5/63.5	.75/19.0	.640/16.3	.461/11.7

Notes:

The Pin Style Nut Tooling is recommended for use with these tools.

Round & Tank Hank Bush



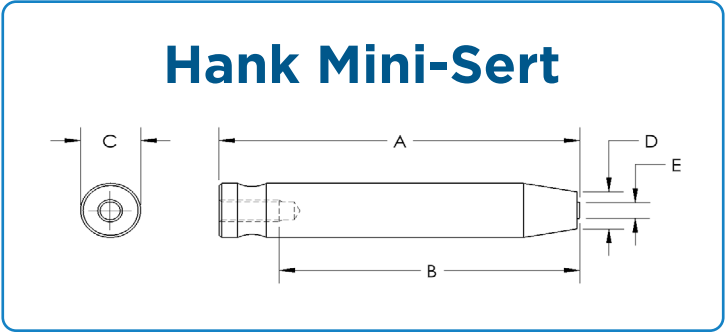
Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm	Dia. E in / mm
10-00691	M2.5/M3	3.0/76.2	2.5/63.5	.50/12.7	.311/7.9	.173/4.4
10-00692	M3.5/M4	3.0/76.2	2.5/63.5	.50/12.7	.375/9.5	.216/5.5
10-00693	M5	3.0/76.2	2.5/63.5	.50/12.7	.437/11.1	.262/6.7
10-00694	M6	3.0/76.2	2.5/63.5	.50/12.7	.500/12.7	.324/8.2
10-00695	M8	3.0/76.2	2.5/63.5	0.750/19.04	0.641/16.3	.435/11.0

Notes:

The Pin Style Nut Tooling is recommended for use with these tools.

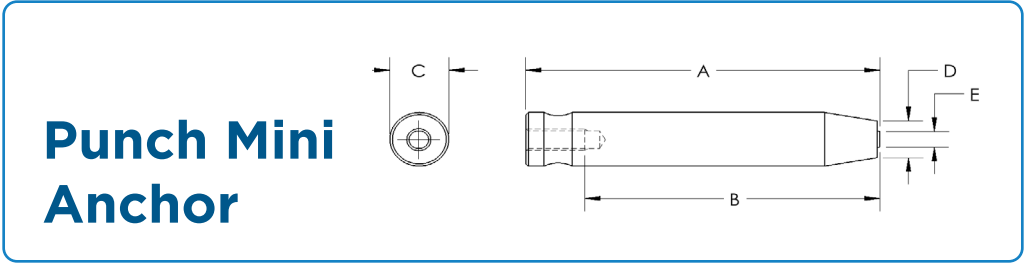
Hank Rivet Bush Tooling



Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm	Dia. E in / mm
10-00701	M2.5/M3	3.0/76.2	2.5/63.5	.50/12.7	.217/5.5	.145/3.68
10-00702	M3.5/M4	3.0/76.2	2.5/63.5	.50/12.7	.276/7.0	.193/4.90
10-00703	M5	3.0/76.2	2.5/63.5	.50/12.7	.335/8.5	.231/5.87
10-00704	M6	3.0/76.2	2.5/63.5	.50/12.7	.394/10.0	.297/7.09
10-00705	M8	3.0/76.2	2.5/63.5	.50/15.7	.472/12.0	.350/8.89

Kerbkonus Tooling

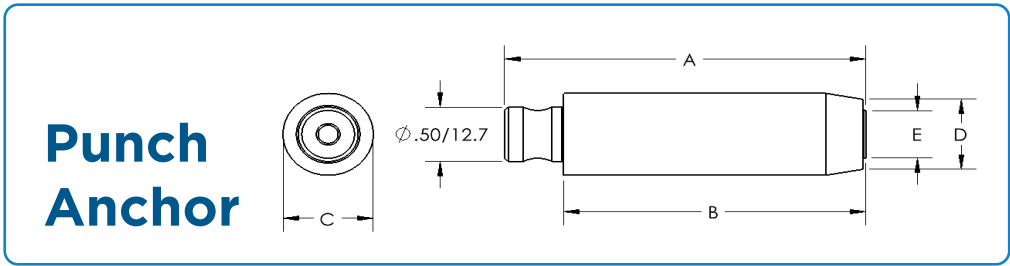


Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in / mm	Dia. D in / mm	Dia. E in / mm
10-00685	M2	3.0/76.2	2.5/63.5	.50/12.7	.189/4.8	0.094
10-00686	M2.5/M3	3.0/76.2	2.5/63.5	.50/12.7	.216/5.5	0.122
10-00687	M3.5/M4	3.0/76.2	2.5/63.5	.50/12.7	.279/7.5	0.169
10-00688	M5	3.0/76.2	2.5/63.5	.50/12.7	.342/8.7	0.209
10-00689	M6	3.0/76.2	2.5/63.5	.50/12.7	.310/7.9	0.257
10-00690	M8	3.0/76.2	2.5/63.5	.50/12.7	.500/12.7	0.335

Notes:
The Pin Style Nut Tooling is recommended for use with these tools.

Kerbkonus Tooling



Inch / Metric

Part #	Fastener Size	Dim. A in / mm	Dim. B in / mm	Dia. C in /mm	Dia. D in /mm	Dia. E in /mm
10-00679	M2/M2.5/M3	3.0/76.2	2.5/63.5	.50/12.7	.297/7.5	0.164
10-00681	M3.5/M4	3.0/76.2	2.5/63.5	.50/12.7	.342/8.7	0.202
10-00682	M5	3.0/76.2	2.5/63.5	.50/12.7	.405/10.3	0.261
10-00683	M6	3.0/76.2	2.5/63.5	.50/12.7	.468/11.9	0.306
10-00684	M8	3.0/76.2	2.5/63.5	.61/15.5	.610/15.5	0.427

Notes:
The Pin Style Nut Tooling is recommended for use with these tools.

Standard Manual Tooling Package

STP
(35 Pieces)

Part #	Description
H-170-1	Square Tip Tool Holder
H-167-1	J-Frame Attachment
H-100-0	Flat Anvil
10-00650	2-56 J-Frame Pin Style Tool
10-00651	4-40 J-Frame Pin Style Tool
10-00652	6-32 J-Frame Pin Style Tool
10-00653	8-32 J-Frame Pin Style Nut Tool
10-00654	10-32 J-Frame Pin Style Nut Tool
10-00655	04-32 J-Frame Pin Style Nut Tool
H-102-2	2-56 J-Frame Stud Tool
H-102-4	4-40 J-Frame Stud Tool
H-102-6	6-32 J-Frame Stud Tool
H-102-8	8-32 J-Frame Stud Tool
H-102-10	10-32 J-Frame Stud Tool
H-108-0019S	1/2" Flat Anvil, 1-1/2" long
H-108-0019L	1/2" Flat Anvil, 3" long
H-108-0020S	1" Flat Anvil, 1-1/2" long
H-108-0020L	1" Flat Anvil, 3" long
10-00278	2-56 Pin Style Nut Tool, 3" long
10-00279	4-40 Pin Style Nut Tool, 3" long
10-00280	6-32 Pin Style Nut Tool, 3" long
10-00281	8-32 Pin Style Nut Tool, 3" long
10-00282	10-32 Pin Style Nut Tool, 3" long
10-00283	4-20 Pin Style Nut Tool, 3" long
10-00284	5/16-18 Pin Style Nut Tool, 3" long
H-103-2L	2-56 Stud Tool, 3" long
H-103-4L	4-40 Stud Tool, 3" long
H-103-6L	6-32 Stud Tool, 3" long
H-103-8L	8-32 Stud Tool, 3" long
H-103-10L	10-32 Stud Tool, 3" long
H-103-04L	04-20 Stud Tool, 3" long
H-103-05L	5/16-18 Stud Tool, 3" long
H-109-4/M3L	4-40 Standoff Tool, 3" long
H-109-6/M3.5L	6-32 Standoff Tool, 3" long
H-109-8-10/M5L	8-32 and 10-32 Standoff Tool, 3" long

Notes:

This package is available with pocket style nut tools as **STP-PS**

Standard Manual Tooling Package

MSTP
(33 Pieces)

Part #	Description
H-170-1	Square Tip Tool Holder
H-167-1	J-Frame Attachment
H-100-0	Flat Anvil
10-00656	M2.5 J-Frame Pin Style Tool
10-00657	M3 J-Frame Pin Style Tool
10-00658	M3.5 J-Frame Pin Style Tool
10-00659	M4 J-Frame Pin Style Nut Tool
10-00660	M5 J-Frame Pin Style Nut Tool
10-00661	M6 J-Frame Pin Style Nut Tool
H-102-M3	M3 J-Frame Stud Tool
H-102-M3.5	M3.5 J-Frame Stud Tool
H-102-M4	M4 J-Frame Stud Tool
H-102-M5	M5 J-Frame Stud Tool
H-108-0019S	12.7mm Flat Anvil, 38mm long
H-108-0019L	12.7mm Flat Anvil, 76mm long
H-108-0020S	25.4mm Flat Anvil, 38mm long
H-108-0020L	25.4mm Flat Anvil, 76mm long
10-00292	M2.5 Pin Style Nut Tool, 76mm long
10-00293	M3 Pin Style Nut Tool, 76mm long
10-00294	M3.5 Pin Style Nut Tool, 76mm long
10-00295	M4 Pin Style Nut Tool, 76mm long
10-00296	M5 Pin Style Nut Tool, 76mm long
10-00297	M6 Pin Style Nut Tool, 76mm long
10-00298	M8 Pin Style Nut Tool, 76mm long
H-103-M3L	M3 Stud Tool, 76mm long
H-103-M3.5L	M3.5 Stud Tool, 76mm long
H-103-M4L	M4 Stud Tool, 76mm long
H-103-M5L	M5 Stud Tool, 76mm long
H-103-M6L	M6 Stud Tool, 76mm long
H-103-M8L	M8 Stud Tool, 76mm long
H-109-4/M3L	M3 Standoff Tool, 76mm long
H-109-6/M3.5L	M3.5 Standoff Tool, 76mm long
H-109-8-10/M5L	M4/M5 Standoff Tool, 76mm long

Notes:

This package is available with pocket style nut tools as **MSTP-PS**

Standard Manual Tooling Package

STP-516
(16 Pieces)

Part #	Description
H-108-0019S	1/2" Flat Anvil, 1-1/2" Long
H-108-0019L	1/2" Flat Anvil, 3" Long
H-108-0020S	1" Flat Anvil, 1-1/2" Long
H-108-0020L	1" Flat Anvil, 3" Long
10-00279	4-40 Pin Style Nut Tool, 3" Long
10-00280	6-32 Pin Style Nut Tool, 3" Long
10-00281	8-32 Pin Style Nut Tool, 3" Long
10-00282	10-32 Pin Style Nut Tool, 3" Long
10-00283	04-20 Pin Style Nut Tool, 3" Long
H-103-4L	4-40 Stud Tool, 3" Long
H-103-6L	6-32 Stud Tool, 3" Long
H-103-8L	8-32 Stud Tool, 3" Long
H-103-10L	10-32 Stud Tool, 3" Long
H-109-4/M3L	4-40 Standoff Tool, 3" Long
H-109-6/M3.5L	6-32 Standoff Tool, 3" Long
H-109-8-10/M5L	8-32 and 10-32 Standoff Tool, 3" Long

STP-J-516
(11 Pieces)

Part #	Description
H-167-1	J-Frame Attachment
H-100-0	Flat Anvil
10-00651	4-40 J-Frame Pin Style Nut Tool
10-00652	6-32 J-Frame Pin Style Nut Tool
10-00653	8-32 J-Frame Pin Style Nut Tool
10-00654	10-32 J-Frame Pin Style Nut Tool
10-00655	04-20 J-Frame Pin Style Nut Tool
H-102-4	4-40 J Frame Stud Tool
H-102-6	6-32 J Frame Stud Tool
H-102-8	8-32 J Frame Stud Tool
H-102-10	10-32 J Frame Stud Tool

Standard Manual Tooling Package

MSTP-516 **(16 Pieces)**

Part #	Description
H-108-0019S	12.7mm Flat Anvil, 38mm Long
H-108-0019L	12.7mm Flat Anvil, 76mm Long
H-108-0020S	25.4mm Flat Anvil, 38 Long
H-108-0020L	25.4mm Flat Anvil, 76mm Long
10-00293	M3 Pin Style Nut Tool, 76mm Long
10-00294	M3.5 Pin Style Nut Tool, 76mm Long
10-00295	M4 Pin Style Nut Tool, 76mm Long
10-00296	M5 Pin Style Nut Tool, 76mm Long
10-00297	M6 Pin Style Nut Tool, 76mm Long
H-103-M3L	M3 Stud Tool, 76mm Long
H-103-M3.5L	M3.5 Stud Tool, 76mm Long
H-103-M4L	M4 Stud Tool, 76mm Long
H-103-M5L	M5 Stud Tool, 76mm Long
H-109-4/M3L	M3 Standoff Tool, 76mm Long
H-109-6/M3.5L	M3.5 Standoff Tool, 76mm Long
H-109-8-10/M5L	M4/M5 Standoff Tool, 76mm Long

MSTP-J-516 **(11 Pieces)**

Part #	Description
H-167-1	J-Frame Attachment
H-100-0	Flat Anvil
10-00657	M3 J-Frame Pin Style Nut Tool
10-00658	M3.5 J-Frame Pin Style Nut Tool
10-00659	M4 J-Frame Pin Style Nut Tool
10-00660	M5 J-Frame Pin Style Nut Tool
10-00661	M6 J-Frame Pin Style Nut Tool
H-102-M3	M3 J Frame Stud Tool
H-102-M3.5	M3.5 J Frame Stud Tool
H-102-M4	M4 J Frame Stud Tool
H-102-M5	M5 J Frame Stud Tool

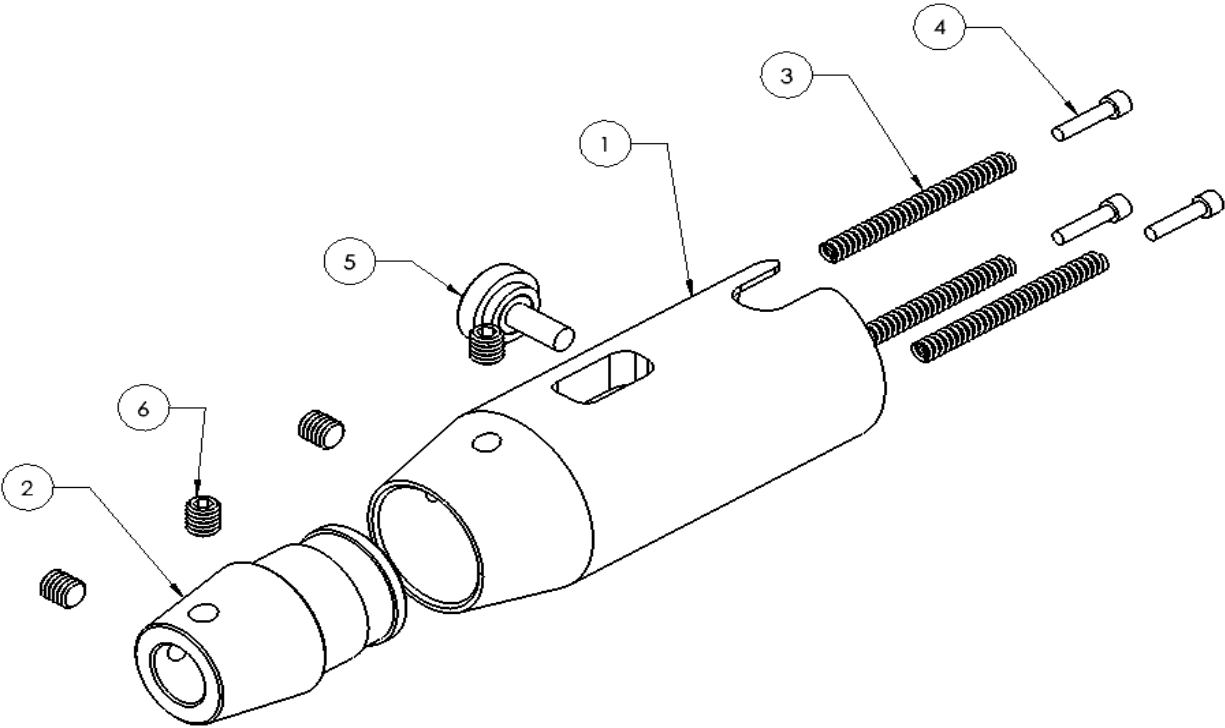
Tool Holders

Standard Upper Tool Holder 15-40036

Item	Part #	Description	Qty.
1	15-03439	Upper Tool Holder Body	1
2	11-00236	Standard Tool Adapter	1
3	15-03206	Continuity Spring	3
4	11-00016	Continuity Guide Pin	3
5	11-00239	Thumb Screw, M5	1
6	11-00242	SHSS M6 X 6	4

Notes:

This tool holder is compatible with all 824 machines except 824OneTouch machines.



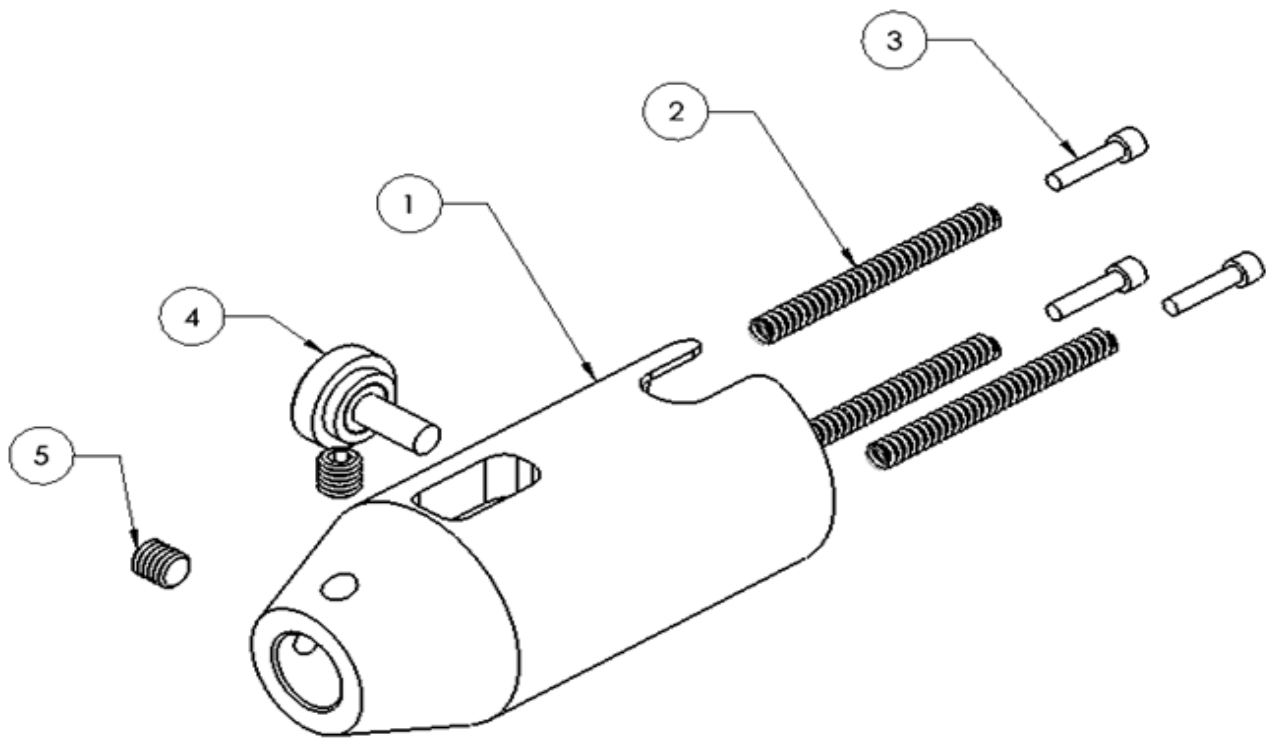
Tool Holders

Standard Upper Tool Holder 15-40185

Item	Part #	Description	Qty.
1	15-03664	Upper Tool Holder Body	1
2	15-03206	Continuity Spring	3
3	11-00016	Continuity Guide Pin	3
4	11-00239	Thumb Screw, M5	1
5	11-00242	SHSS M6 X 6	2

Notes:

This tool holder is compatible with 618 machines.



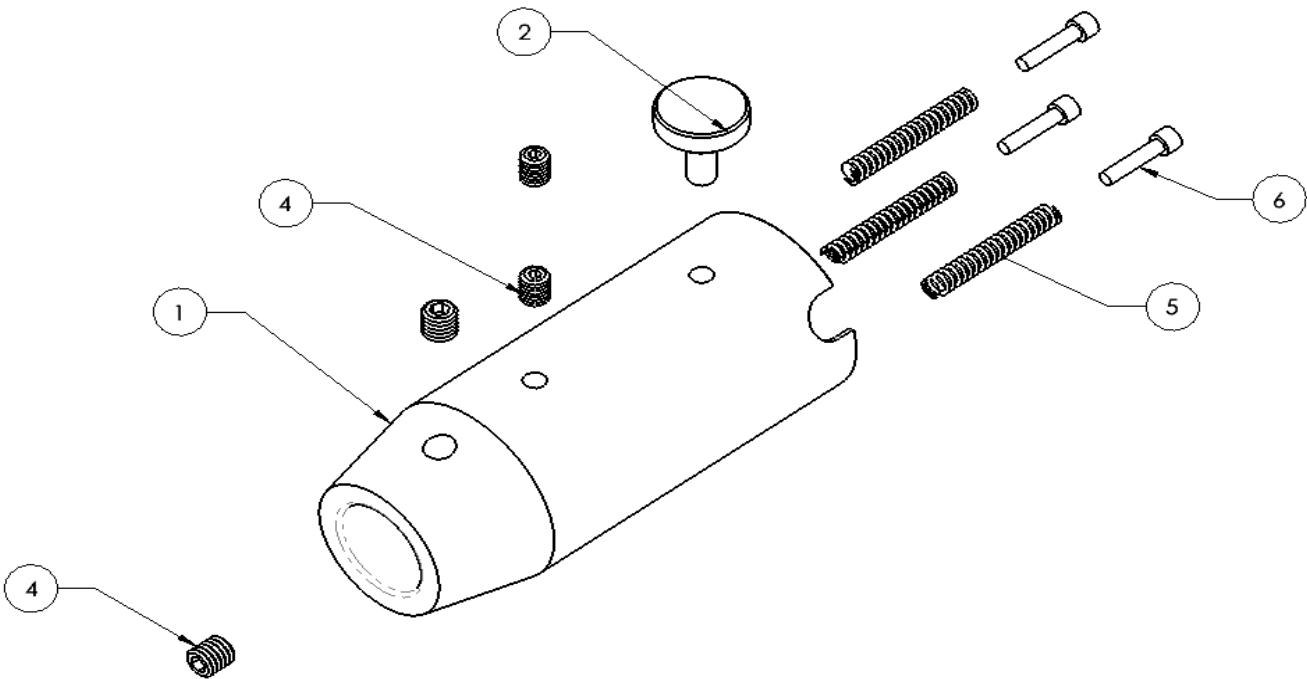
Tool Holders

H-3501-5 BTM Upper Tool Holder

Item	Part #	Description	Qty.
1	H-149-1	Upper Tool Holder Body	1
2	11-00239	Thumb Screw, M5	1
3	11-00238	SHSS, M5 X 6	2
4	11-00242	SHSS, M6 X 6	2
5	11-00114	Continuity Spring	3
6	11-00016	Continuity Guide Pin	3

Notes:

This Upper Tool Holder is compatible only with older generation machines manufactured before 2012.



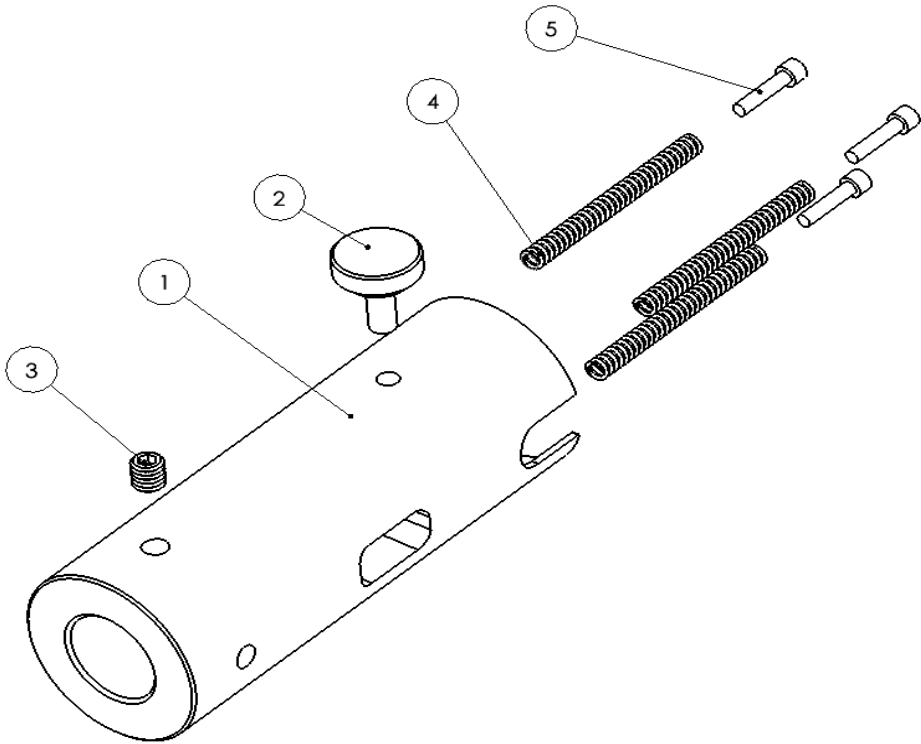
Tool Holders

15-40044 BTM Upper Tool Holder

Item	Part #	Description	Qty.
1	15-03500	Upper Tool Holder Body	1
2	11-00239	Thumb Screw, M5	1
3	11-00242	SHSS, M6 X 6	1
4	15-03206	Continuity Spring	3
5	11-00016	Continuity Guide Pin	3

Notes:

This tool holder compatible with machines manufactured in 2012 and later.



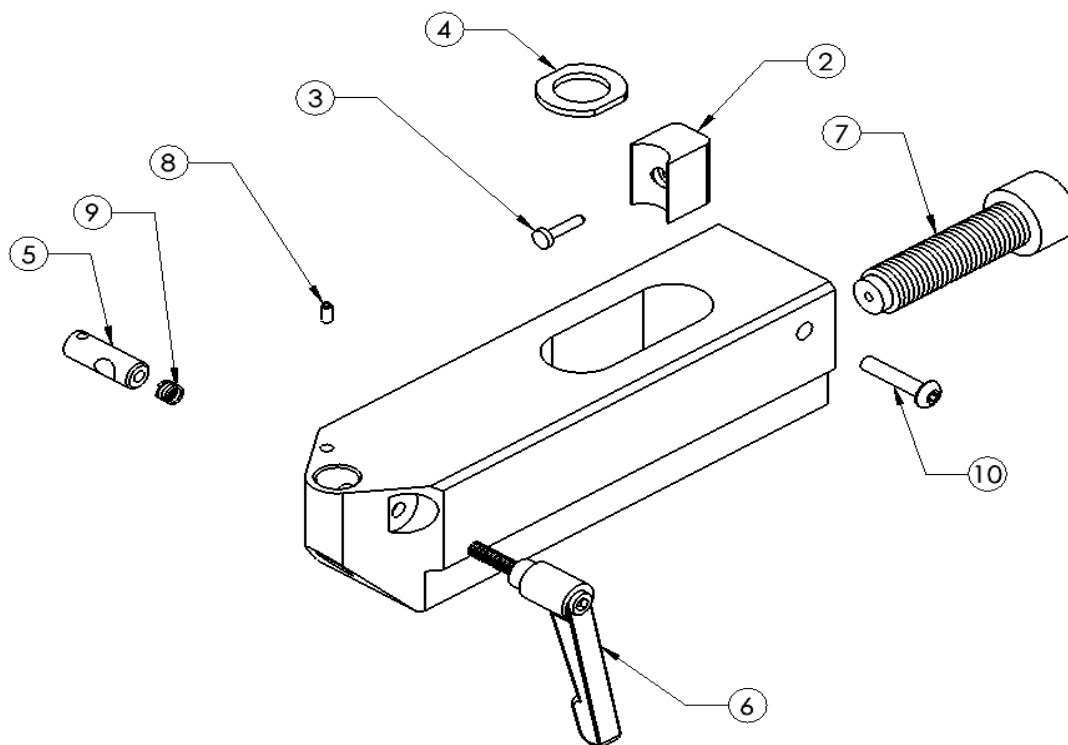
Tool Holders

H-166-8 Quick Change Lower Tool Holder

Item	Part #	Description	Qty.
1	H-166-9	Lower Tool Holder Body	1
2	H-169-4	Shoe	1
3	H-169-5	Pin	1
4	H-169-6	Lower tool Washer	1
5	11-00041	Locking Cylinder	1
6	11-00042	Locking Lever	1
7	11-00191	SHCS M16 X 2 Modified	1
8	11-00199	Spring Roll Pin, 1/8 X 1/4	1
9	11-00212	Lock Cylinder Spring	1
10	H-3731	BHCS M5 x 25	1

Notes:

This tool holder may be used on all machines except 824OneTouch machines.



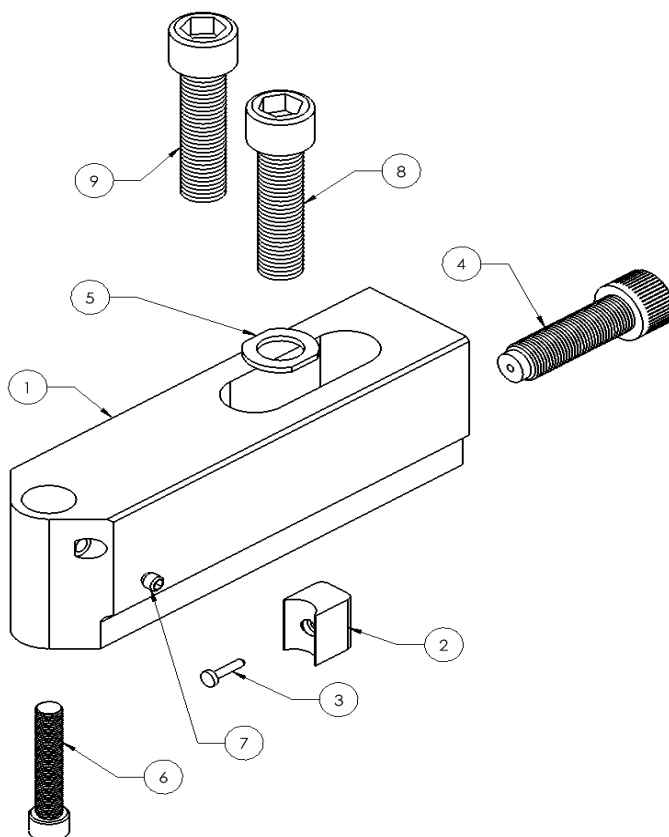
Tool Holders

H-147-2 BTM Lower Tool holder

Item	Part #	Description	Qty.
1	H-147-1	Lower Tool Holder Body	1
2	H-169-4	Shoe	1
3	H-169-5	Pin	1
4	11-00191	M16 SHCS Modified	1
5	H-169-6	Lower Tool Washer	1
6	H-3859	3/8-24 X 2 SHCS	1
7	H-3773	1/4-28 X 1/4 SHSS	1
8	H-3890	5/8-18 X 2-3/4 SHCS	1
9	11-00190	M16 X 2.0 X 65 SHCS	1

Notes:

This tool holder may be used on all machines except 824OneTouch machines.



Tool Holders

H-170-1 Square Tip Lower Tool Holder

Item	Part #	Description	Qty.
1	H-170	Sq. Nose Lwr Tool Holder Assy	1
2	11-00191	M16 SHCS Modified	1
3	H-169-4	Shoe	1
4	H-169-5	Pin	1
5	H-3625	8-32 X 1/8 SHSS	1
6	H-3761	10-32 5/8 BHCS	1
7	H-169-6	Lower Tool Washer	1

Notes:

1. This tool holder may be used on all machines except 824OneTouch machines.
2. The J-Frame Stud Tooling (H-102), Pocket Style Nut Tooling (H-100) and the Pin Style Nut Tooling (10-006xxx) may be used in this tool holder.

