

## Installing Kits

### Recommended Tools

The Shure-Stake® mechanism on mechanical ratchet tools and power tools prevents the dies from releasing the terminal until the proper compression has been completed. With this method, an operator achieves a reliable crimp every time. Thomas & Betts tooling techniques correctly match tools, wire size, and terminal to produce optimum mechanical and electrical performance.



**Plier type if installations are fewer than 20 per day**



### Plier-Type Tools

Used for installation of various Sta-Kon® terminal series

**Ratchet type if installations are more than 20 per day**



**Power type if installations are more than 200 per day**



Cat. No.	Description	Pkg. Qty.
WT110M	A, B, C non-insulated terminals and splices and A, B non-insulated terminals with insulation grip	1
WT111M	A, B, C, PT non-insulated terminals and splices; includes cutters	
WT112M	A, B, C non-insulated and RA, RB, RC insulated nylon and vinyl terminals and splices; includes cutters	
WT161M	A, B, C, PT non-insulated terminals and splices; includes plier grip and cutters	
WT2000	A, B, C, AB, PT, RA, RB, RC insulated and non-insulated terminals and splices; includes wire cutters, bolt cutters and wire stripper	

## Application Tools

### The proper installation procedure for the quality-assured connection!

The proper installation of terminals, splices and connectors is very important to the efficient performance of an electrical system. The properly installed connector will enable good conductivity through the termination. Certain basic requirements must be met to make a good termination.

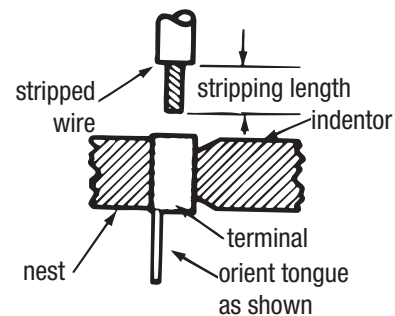
- Strip the insulation carefully to avoid nicking or cutting conductor strands
- Strip the insulation to the proper length so the conductors can be inserted fully into the connector barrel; the wire/cable should be visible in the inspection hole of the lug

A poor termination results in a high-resistance connection.

A poor connector installation may cause damage or failure of an entire system.

### Installation Procedure

- Strip the insulation carefully to avoid nicking or cutting conductor strands.
- Strip the insulation to the proper length so the conductors can be inserted fully into the connector barrel; the wire/cable should be visible in the inspection hole of the lug.
- Train the wires to eliminate fanning of strands.
- Open handles fully.
- Insert terminal in proper die nest and locate it as shown on the right. When crimping a butt splice, position in proper die nest with window facing indenter.
- Close handles slightly to secure terminal. Do not deform terminal.
- Insert properly stripped wire into terminal.
- Complete crimp by closing handles.



Shure-Stake® tools are matched to terminals



ERG4001

Safety Warning: Keep fingers and hands away from mechanism during crimp function.

## Application Tools

### Redesigned family of termination tools sets a new standard for manual crimping tools!

#### The most comfortable crimp available from a manual compression tool!

Sta-Kon® Comfort Crimp™ Compression Tools previously set the standard for manual crimp tools. Now, Thomas & Betts engineers have made a great line of tools even better with the newly redesigned Sta-Kon® Comfort Crimp™ Compression Tools. We kept all the performance features that made the tools industry leaders such as the Shure-Stake® mechanism and interchangeable dies with colour-coded die nests, and focused on creating the best possible user experience in terms of comfort and reduction of strain.

Ergonomic handles position the user's hands correctly to minimize the risk of strain, and soft, over-molded grips cushion fingers and palm for user comfort. A new Crimp-Assist™ foot stabilizes the tool when the user needs to place it on a work surface for leverage to crimp larger connectors. Best of all, the redesigned Comfort Crimp™ tools require 25% less handle force to complete the crimp cycle than the previous generation — and up to 75% less handle force than competing tools!

Requiring the lowest handle force of any tool in its class, the new Comfort Crimp™ family provides maximum comfort to installers, without sacrificing the durability or performance associated with Thomas & Betts tools.



- Perfect for OEM, MRO and field use
- UL Listed for use with Sta-Kon® connectors
- Shure-Stake® mechanism ensures a complete crimp cycle before release for a proper crimp every time
- Colour-coded die nests for easy matching with Sta-Kon® insulated terminals
- Creates integrity dots for quick verification of proper crimp
- Advanced manufacturing methods for improved durability and tool life
- Lanyard hole in handle for easy tethering to workstation
- Calibration service available through T&B Tool Services



Cat. No.	For use with STA-KON® Series	Pkg. Qty.
ERG4001	RA, RB, RC nylon & vinyl terminals, splices & disconnects	1
ERG4002	A, B, C non-insulated terminals, splices, disconnects	
ERG4004	A, B and C flag terminals	
ERG4005	B, C, D, E non-insulated terminals, splices, (D & E tubular only)	
ERG4006	RA, RB disconnects and RZ terminals	
ERG4007	RD & RE insulated terminals (tubular only)	
ERG4008	Non-insulated terminals #8–1/0 AWG (tubular only)	

Note: Contact Tool Services for gauging

## Application Tools

### WT1377 Ratchet Hand Tool

Correct compression every time — the Shure-Stake® mechanism principle prevents opening of the handles until full staking action is completed. Installs self-insulated and non-insulated Sta-Kon® terminal series in the #26–#10 AWG wire range.



Cat. No.	For use with STA-KON® Series	Pkg. Qty.
WT1377	NW ring terminals	1

### WT2130A Ratchet Hand Tool



Cat. No.	For use with STA-KON® Series	Pkg. Qty.
WT2130A	RC, RBC and RD insulated terminals, RC6, RP7 wire joints	1

### ERG4006 Hand Tool



Cat. No.	For use with STA-KON® Series	Pkg. Qty.
ERG4006	RZ terminals/splices RA, RB insulated disconnects	1

### WT3185 Ratchet Hand Tool



Cat. No.	For use with STA-KON® Series	Pkg. Qty.
WT3185	For #8 AWG to 250 kcmil non-insulated Sta-Kon® Terminals	1

Note: For gauging information, contact Tool Services

### ERG4255 Ratchet Hand Tool



Cat. No.	For use with STA-KON® Series	Pkg. Qty.
ERG4255	RA, RB, RC heat-shrinkable nylon-insulated terminals, butt splices, and disconnects	1

### WT129 Flag Terminal Type Hand Tool



Cat. No.	For use with STA-KON® Series	Pkg. Qty.
WT129	D, E, F & G non-insulated flag terminals	1

## Application Tools

### Sta-Kon® ERG1-WS Wire Stripping/Cutting Tool TBM6 & TBM6S Toggle-Type Hand Tools

Integral wire cutter lets user cut and strip with the same tool!

- Interchangeable cassettes enable the user to strip a wide range of insulations without having to change tools
- Tool automatically strips wire to preset length



"V" Blade Cassette

Cat. No.	Description	Pkg. Qty.
<b>ERG1-WS</b>	Ergonomic Wire Stripping Tool	1
<b>VBC-1</b>	Replacement "V" Blade Cassette	

ERG1-WS Wire Stripping/Cutting Tool is shipped with one Straight Blade Cassette (SBC-1). "V" Blade Cassettes sold separately.

### WT115A Toggle-Type Hand Tool



Cat. No.	Description	Pkg. Qty.
<b>WT115A</b>	D, E, F & G non-insulated terminals	1



TBM6

### Installing Dies for Non-Insulated Code and Aircraft Sta-Kon® Terminals

Cat. No.	Nest Stationary Die	Indentor Movable Die	Term. Size
<b>11803</b>			D, E (Tubular)
<b>11805</b>			E (Braze), F (Tubular)
<b>11806</b>	<b>11802</b>		F (Braze), G
<b>11807</b>			H
<b>11808</b>			J
<b>11809</b>			K
<b>11810</b>			L
<b>11811</b>			M

### Installing Dies for Nylon-Insulated Sta-Kon® Terminals TBM6 & TBM6S Tools

Die Set Cat. No.	Term. Size
<b>11821</b>	RD (Tubular)
<b>11822</b>	RD (Braze Seam) RE (Tubular)
<b>11823</b>	RF
<b>11824</b>	RG
<b>11825</b>	RH
<b>11826</b>	RJ
<b>11827</b>	RK
<b>11828</b>	RL
<b>11829</b>	RM

Cat. No.	Description	Pkg. Qty.
<b>TBM6</b>	D through M, RD through RM	1
<b>TBM6S</b>	D through M, RD through RM with Shure-Stake®	

Dies not included.

Note: These Tools can also be used to crimp Blackburn® Lugs and Splices.

## Application Tools

### Shure-Stake® Auto-Feed Tool Safe, fast, high-volume crimping machine!

- Shure-Stake® mechanism
- Fully guarded foot pedal
- Clear plastic safety guard over die area
- Dies colour-coded to terminals
- #26–#10 AWG wire range
- Installs insulated and non-insulated terminals and disconnects



#### Installing Dies for 12050

Die Cat. No.	Sta-kon® Terminal Type	AWG Wire Size	Pkg. Qty.
12051	RA — Nylon	22–18	1
12054*	RA — Vinyl		
12061	RA — Disconnect	16–14	
12052	RB — Nylon		
12055*	RB — Vinyl	12–10	
12062	RB — Disconnect		
12056	RC — Nylon and Vinyl Insulated	22–18	
12057	A — Non-Insulated		
12058	B — Non-Insulated	16–14	
12059	C — Non-Insulated		
12060	C — Disconnect, Non-Insul.	12–10	

\* Can also be used on nylon

Cat. No.	Description	Pkg. Qty.
12050	Compact, pneumatically operated unit for crimping tape-mounted Sta-Kon® terminals; equipped with a Shure-Stake® mechanism, which ensures a full compression each time	1

Space Requirement: 30 in. W x 20 in. H x 20 in. D  
Weight: 55 lb.  
Air Pressure: 90–125 psi input air supply

## Application Tools

### BAT22-6NV2 Battery-Powered Crimping Tool

The Sta-Kon® BAT22-6NV2 is motorized and automatic for effortless, single-lever crimping.

This is an excellent tool for various vertical markets including panel builders, system integrators, data centers, utilities and various other OEMs and MROs.

The lightweight, ergonomic design minimizes the risk of repetitive motion injuries that can occur with traditional hand crimping tools.

- 150,000 cycle lifespan
- Extremely light and efficient
- Crimps both Sta-Kon® and Dragon Tooth™ terminals
- Comes complete with extra battery, charger and carrying case
- Powerful lithium-ion battery with charge-level indicator
- Single-lever motorized operation for easy manual preclamping, automatic crimping and auto-retract functions
- Motor-stall protection in case of faulty operation
- LED work light illuminates work areas



#### Included Accessories

- Sturdy, plastic carrying case for portability
- Two 10.8 V lithium-ion batteries and battery charger
- Sturdy tray for convenient storage of crimp dies



Cat. No.	Description	Pkg. Qty.
<b>BAT22-6NV2</b>	Battery-powered crimping tool with two 10.8 V lithium-ion batteries	1
<b>Die sets*</b>		
<b>DIE2001</b>	Sta-Kon® insulated 22-10 AWG terminals	
<b>DIE2002</b>	Sta-Kon® non-insulated 22-10 AWG terminals	
<b>DIE2005</b>	Sta-Kon® non-insulated 16-14, 12-10, 8-6 AWG tubular terminals	
<b>DIE2007</b>	Sta-Kon® insulated 8-6 AWG tubular terminals	
<b>DIE2009</b>	Sta-Kon® wire joints RB, RC, RP series 22-10	
<b>DIE2500</b>	Spec-Kon™ insulated 22-10 AWG terminals	
<b>DIE1806**</b>	Dragon Tooth™ terminals 22F, L, R-6 series	

\*Dies sold separately.

\*\* DIE1806 is not CSA certified or UL Listed.

### PAIR22-6 Air Crimp Tool

Heavy-duty portable tool

- 1.25 tons output force at 100 psi
- Crimps #22–#6 AWG terminals
- Installs Sta-Kon® terminals as well as ferrules and Dragon Tooth™ connectors
- Interchangeable dies
- Open yoke enables easy access to insert and remove terminals for crimping



Cat. No.	Description	Pkg. Qty.
<b>PAIR22-6</b>	Open yoke, hand actuated	1
<b>Crimp Dies*</b>		
<b>DIE2001</b>	Insulated #22–#10 AWG Sta-Kon® Terminals	1
<b>DIE2002</b>	Non-Insulated #22–#10 AWG Sta-Kon® Terminals	
<b>DIE2005</b>	Non-Insulated #16–#10/#8–#6 Sta-Kon® Terminals (Tubulaire Only)	
<b>DIE2007</b>	Insulated #8–#6 AWG Sta-Kon® Terminals (Tubulaire Only)	

\* Dies sold separately.

Note: The dies for the BAIR22-6, PAIR22-6 and BAT22-6 are interchangeable.

Note: Battery-powered Tools BPI4230OCR, BPLT6BSCR and BPLT62BSCR can also be used to crimp non-insulated Sta-Kon® terminals.

## Application Tools



### BAIR22-6 Bench-Mounted Air Tool

Crimps #22–#6 AWG terminals!

- 1.8 tons output force at 100 psi
- Bench-mounted heavy-duty air tool
- Short cycle time
- Shure-Stake® mechanism
- Foot actuated
- Accepts T&B standard hand tool dies
- Installs Sta-Kon® and Spec-Kon™ terminals as well as ferrules and Dragon Tooth™ connectors

Cat. No.	Description	Pkg. Qty.
<b>BAIR22-6</b>	Heavy-duty, high-speed production tool installs a wide range of Sta-Kon® terminals, from #26–#6 gauge; uses the DIE2000 Series dies for both non-insulated and insulated terminals; supplied complete with foot pedal, air hose/air lubricator	1
<b>Crimp Dies*</b>		
<b>DIE2001</b>	Insulated #22–#10 AWG Sta-Kon® Terminals	1
<b>DIE2002</b>	Non-Insulated #22–#10 AWG Sta-Kon® Terminals	
<b>DIE2005</b>	Non-Insulated #16–#10/#8–#6 Sta-Kon® Terminals (Tubular Only)	
<b>DIE2007</b>	Insulated #8–#6 AWG Sta-Kon® Terminals (Tubular Only)	

\* Dies sold separately.

Note: The dies for the BAIR22-6, PAIR22-6 and BAT22-6 are interchangeable.

Note: Battery-powered Tools BPI42300CR, BPLT6BSR and BPLT62BSR can also be used to crimp non-insulated Sta-Kon® terminals.

### Air-Operated Bench-Mounted Tool

Crimps #8 AWG–250 kcmil!

#### Convenience and Economy

The tool accepts a full range of interchangeable dies, the same as used in the TBM6 or TBM6S tools. To install the dies, simply pull the spring-loaded pin and remove the indentor die. Then, flex the retaining spring and remove the die nest.

#### Shure-Stake® Mechanism Means Quality Connections

The Shure-Stake® mechanism senses inlet air pressure, and if insufficient, is designed to prevent the tool from cycling. Thus you avoid “undercrimping.” An 85–90-psi air pressure source is required.

#### Safety Features Increase Productivity, Reduce Downtime

Safety features include a guard over the die area, an air shutdown switch activated by a slight push with the finger and a foot pedal that’s enclosed to prevent accidental tool operation. In addition, the tool may be bench-mounted for stability and control. For convenience when crimping large size terminals on heavy wire, the head assembly may overhang the workbench.



Cat. No.	Description	Pkg. Qty.
<b>25000</b>	This compact heavy-duty air tool installs nylon insulated Sta-Kon® terminals on wire sizes from #8 AWG to 250 kcmil; non-insulated styles are also installed just as quickly and dependably; heavy-duty air tool installs non-insulated and insulated Sta-Kon® terminals from #8 AWG to 250 kcmil	1

Note: This tool uses the same dies as the TBM6 and TBM6S hand tools on page B45.



## Application Tools

### 12-Ton Hydraulic Head

Installs insulated and non-insulated Sta-Kon® Terminals!



### 12-Ton Crimping Tool (Military Spec. MS25441-1)

Military listed and 12 tons of crimping power!



Cat. No.	Description	Pkg. Qty.
13400	12-ton crimping tool supplied with adapter TBM12D-AR is used for installing both insulated and non-insulated Sta-Kon® terminals #8 AWG to 250 kcmil (dies ordered separately)	1

Cat. No.	Description	Pkg. Qty.
13642M	Hydraulic-operated 12-ton tool installs #8 AWG through 250 kcmil Sta-Kon® terminals (dies ordered separately)	1

### Hex Dies for Non-Insulated Sta-Kon® Terminals to Fit 13642M and 13400

Cat. No.	For Tubular Term		Sta-Kon® Size	Wire Size	Hex Die Code
		For Brazed Seam			
11732	—	—	D	8	21
—	—	11733	D	8	24
11733	—	—	E	6	24
—	—	11734	E	6	29
11734	—	—	F	4	29
—	—	11735	F	4	33
11736	—	—	G	2-1	37
11737	—	—	H	1/0	42
11738	—	—	J	2/0	45
11739	—	—	K	3/0	50
11740	—	—	L	4/0	54
11771	—	—	M	250 kcmil	62

### Indent Style Dies for Sta-Kon® Brazed Seam Non-Insulated Terminals to Fit 13642M and 13400

Nest Cat. No.	Indent. Cat. No.	Sta-Kon® Size	Wire Size	Pkg. Qty.
13643	13650	D	8	1
13644		E	6	
13645		F	4	

### Indent Style Dies for Sta-Kon® Tubular Non-Insulated Terminals to Fit 13642M and 13400

Nest Cat. No.	Indent. Cat. No.	Sta-Kon® Size	Wire Size	Pkg. Qty.
13654	13650	G	2-1	1
13655		H	1/0	
13656		J	2/0	
13657		K	3/0	
13658		L	4/0	
13659		M	250 kcmil	

### Installing Dies for Insulated Sta-Kon® Terminals to Fit 13642M (Military Listed)

Die Cat. No.	Sta-Kon® Size	Wire Size	Pkg. Qty.
21707M	RD	8	1
21708M	RE	6	
21709M	RF	4	
21710M	RG	2-1	
21711M	RH	1/0	
21712M	RJ	2/0	
21713M	RK	3/0	
21714M	RL	4/0	
21715M	RM	250 kcmil	

### Hex Dies for Non-Insulated Sta-Kon® Terminals to Fit 13642M (Military Listed)

Die Cat. No.	Sta-Kon® Size	Wire Size	Pkg. Qty.
11781M	D	8	1
11782M	E	6AN	
11783M	F	4AN	
11784M	G	2AN	
11785M	H	1AN	
11786M	J	1/0AN	
11787M	K	2/0AN	
11788M	L	3/0AN	
11789M	M	4/0AN	

### Indent Style Dies for Flag Type Sta-Kon® Terminals — Use with 13642M and 13400

Nest Cat. No.	Indent. Cat. No.	Sta-Kon® Size	Wire Size	Pkg. Qty.
21733	21731	D	8	1
21734		E	6	
21735		F	4	
21736	21732	G	2	
21737		H	1	
21738		J	1/0	
21739**		K	2/0	
21740**		L	3/0	
21741**		M	4/0	

\*\* Cat. Nos. 21739, 21740 and 21741 dies must be left in 13642M head with 21732 indenter when gauging

## Application Tools



### 13600 Electric Hydraulic Pump

- Designed for use with single-acting cylinders and tools rated for 10,000-psi operation
- Supplied with metal carrying case
- 13620 hand switch and 13619 hydraulic hose, both sold separately, required for operation

#### Specifications

- Motor: 1/2 hp, 115V 50–60 Hz, 10 amps
- Pumping Capacity:
  - 170 cu. in./min. at 100 psi
  - 32 cu. in./min. at 1,000 psi
  - 25 cu. in./min. at 5,000 psi
  - 18 cu. in./min. at 10,000 psi
- Reservoir Volume: 104 cu. in. (0.45 gal.)
- Basic Pump Dimension: 6 in. x 8 in. x 16 in.
- Weight: 25 lb.

Cat. No.	Description	Pkg. Qty.
13600	Electric Hydraulic Pump — hand or foot switch and nonmetallic hose (sold separately) required for operation	1

### 13610A Electric Hydraulic Pump with Shure-Stake® Control

- Shure-Stake® control mechanism requires 9,800-psi pump pressure before recycling to prevent under-crimping
- Designed for use with single-acting cylinders and tools rated for 10,000-psi operation
- Supplied with metal carrying case

#### Specifications

- Motor Rating: 1/2 hp, 115V, 50–60 Hz, 12.5 amps
- Pumping Capacity:
  - 170 cu. in./min. at 100 psi
  - 32 cu. in./min. at 1,000 psi
  - 25 cu. in./min. at 5,000 psi
  - 18 cu. in./min. at 10,000 psi
- Reservoir Volume: 104 cu. in. (0.45 gal.)
- Basic Pump Dimension: 8-1/2 in. x 10-1/2 in. x 16 in.
- Weight: 35 lb.



Cat. No.	Description	Pkg. Qty.
13610A	Electric Hydraulic Pump with Shure-Stake® control — hand or foot switch and nonmetallic hose (sold separately) required for operation	1

## Application Tools

### 13810 Heavy-Duty Electric Hydraulic Pump with Shure-Stake® Control

- Designed for perfect crimps every time in heavy-duty OEM applications
- Heavy-duty OEM two-stage pump with high flow rate
- Shure-Stake® control mechanism requires 9,800-psi pump pressure before recycling to prevent under-crimping
- Requires hand or foot control (sold separately)

#### Specifications

- Motor Rating: 1-1/2 hp, 115V, 60 Hz, 23 amps
- Pumping Capacity:  
235 cu.in./min. at 200 psi  
6 cu.in./min. at 8,000 psi
- Reservoir Volume: 462 cu.in./2 gal.
- Dimensions (L x W x H): 10-3/4 in. x 15 in. x 20-3/4 in.
- Weight: 60 lb.



Cat. No.	Description	Pkg. Qty.
13810	Heavy-duty electric hydraulic pump with Shure-Stake® control — hand or foot switch and nonmetallic hose (sold separately) required for operation	1

### Accessories for the pumps on these pages

Cat. No.	Description	Pkg. Qty.
You may also need... for 13600		
13620	Hand Switch	1
13589A	Foot Switch	
13619	10-ft. Nonmetallic Hose	
13618	20-ft. Nonmetallic Hose	
13600S	"Sled" type stand for 13600 pump	
You may also need... for 13610A & 13810		
13611	Hand Switch	1
13612	Foot Switch	
13619	10-ft. Nonmetallic Hose	