

Application Tooling

AMP-O-LECTRIC Model "G" Termination Machines



A totally new design of our most popular machine for bench-top operation. It features a quiet and highly-reliable direct motor drive, electronic controls for ease of setup and operation, and improved guarding and lighting for operator convenience and safety. All versions also include either manual or automatic precision adjustment for crimp height. For use with miniature style applicators only.

Specifications

Weight — Approximately 240 lb [110 kg]

Height — 20 [508] without reel

Width — 18.7-25.3 [475-643] depending on type of applicator used

Depth — 21.5-28.1 [546-713] depending on type of applicator used

Electrical — 120 or 220 VAC, 50 or 60 Hz

Air — 90-110 psi [6.21-7.59 bar] when required for use with air-feed applicators

For complete information, request Catalog 65828.

AMP-3K/40 and AMP-5K/40 Terminating Machines



The AMP-3K/40 and AMP-5K/40 terminators are designed for customers that require the increased output and quality of a semiautomatic machine at a competitive price. By incorporating the most commonly requested features as standard and offering a long list of optional equipment, these terminators offer flexibility to meet the specific needs of various applications at the lowest possible cost.

- 3,000 lb [1361 kg] max. crimp force (AMP-3K/40)
- 5,000 lb [2268 kg] max. crimp force (AMP-5K/40)

- Tool-less removal of applicators and guards
- Jog capability
- Quiet, fast operation — 80/76 dBA and cycle time less than 0.400 seconds
- Accepts heavy duty mini style applicators
- Wide range of optional equipment such as tool-less precision crimp height adjust, batch counter, CQM capability and work light
- Order Catalog 1654856 for specs and part numbers

Specifications

Height — 20 [510] (without reel support)

Weight — Approx. 150 lb [68 kg]

Capacity

AMP-3K/40 — 3,000 lb [1361 kg] max. crimp force; AMP-5K/40 — 5,000 lb [2268 kg] max. crimp force

Noise — 76 dBA maximum at 3,000 lb [1361 kg] full capacity; 80 dBA maximum at 5,000 lb [2268 kg] full capacity

Electrical — 100-240 VAC, 50/60 Hz (6A) • Average <1 A at 120 VAC when used as a bench-top unit at 2 000 cycles per hour operating rate

Air — 90-100 psi [6.21-6.90 bar], 6 scfm [0.00282 m³/s] (when required for use with air-feed applicators)

Note: Optional Air Feed Valve Assembly required.

Application Tooling (Continued)

Optional Stripping Module for the AMP-3K/40, AMP-5K/40 and AMP-O-LECTRIC Model G



The combination of the stripping module with the AMP-O-LECTRIC model G terminator or the AMP 3-K/40, AMP 5-K/40 provides an economical, proficient method of stripping wire and crimping terminals on the same machine. Wires are stripped moments before crimping,

meaning there is virtually no chance of damaging wire conductors during handling or storage. Once the wire is fed into the start sensor the stripping module does the rest, improving placement accuracy.

For more information, request Catalog 1309085.

Crimp Quality Monitor (CQM)



Product Features

- Real-time monitoring of every crimp
- Effective for monitoring the wire barrel crimp of open barrel, uninsulated contacts and terminals
- Calculation and display of actual crimp height, force and position graphs
- Touch screen graphical user interface
- Network access with web interface

- Automatic adjustment of crimp height on enabled terminators
- Multiple language support

Crimp height is the accepted method for the most accurate and precise, non-destructive testing of crimp quality. The Crimp Quality Monitor is a convenient, automatic, easy-to-use tool for measuring crimp height as part of a comprehensive quality management program.

On-screen programmability allows flexible determination of crimp parameters and quality ranges. These monitors are compatible with several machines, including the AMP-O-LECTRIC model G terminating machine and the 3K/40 and 5K/40 terminators.

The TE CQM units utilize a technology which is constantly measuring both ram position and force throughout the crimp cycle. As many as 3,000 data points are gathered at a 5kHz sampling rate and analyzed on every crimp in real time. The CQM then compares the measured force/displacement curve to the base line to ensure that the forces and distances are within specification, thereby indicating a good crimp. Other systems make a force vs. time measurement.

For more information, request Catalog 82275.

AMP-TAPETRONIC Machine, Part Number 69875



The AMP-TAPETRONIC machine is an AMP-O-LECTRIC model "K" terminating machine with a permanently-mounted applicator that accepts interchangeable die sets to apply a variety of tape-mounted terminals and splices. Many of the die sets can also be used in AMP-O-LECTRIC terminating machines with a tape applicator.

For more information, contact TE.

Note: All part numbers are RoHS compliant.

Application Tooling (Continued)

**Gamma 333 PC
Lead-Making Machine,
Three Stations**



With its capacity to accommodate an additional processing station on side 1, the Gamma 333 PC can perform a number of new processes. It can produce two-ended crimp leads, process double crimp connections with three different terminals or apply seals on one end of the wire. Tinning and ink jet marking are two further options. Process monitoring is integrated into the system, ensuring perfect trimming and stripping of the wires.

Specifications

- Length** — 125 [3137]
 - Width** — 54.2 [1377]
 - Height** — 70.5 [1790]
 - Length Range** — 2.36 in-32.8 ft [60-10,000] (optional 30mm)
 - Cross-Section Range** — AWG 26-AWG 10 [0.125mm²-5mm²]
 - Noise Level** — <76dB (without crimping modules)
 - Electrical** — 3x208 - 480V, 50-60Hz; 6kVA
 - Compressed Air** — 5-6 bar
 - Air Consumption** — 6.5m³/h
 - Weight** — 1850 lbs [840 kg] with two crimping modules
- For more information, request Catalog 1307901.

**AMPOMATOR System III
Leadmaker**



Specifications

- Length Range** — 60mm - 650m [2.36-2133"] Optional from 35mm [1.38"]
 - Length Accuracy** — ± 1mm [0.04"] or < 0.2% depending on wire length
 - Stripping Lengths** — 0.1-15mm [0.004-0.591"]
 - Wire Sizes** — 24-10 AWG [0.20 -6mm²]
 - Wire Draw-In Speed** — 10 m/s max.
 - Electrical Power** — 3 phase, 208-480 V / 50-60 Hz
 - Weight** — 1080 kg [2,381 lb]
 - Dimensions** — 3988 x 1702 x 2006 mm [157 x 67 x 79"] L x W x H
 - Air Pressure** — 5-6 bar [73-87 PSI]
 - Air Volume** — 9 m³/hr [5.3ft³/min]
 - Noise** — < 75 db without crimping modules
- For more information, request Catalog 1654956-5.

- Flexible and efficient terminating system
- Single and double wire applications
- User friendly & proven subsystems and accessories
- Meets the demanding requirements of the automotive and appliance industries
- Available with the new AMP-O-LECTRIC ST III terminator
- Accepts various accessories
- SLE crimp quality monitoring
- Choose either Komax or PAWOMAT seal application module

Application Tooling (Continued)

P300 and P350 Automatic Insertion Machines



Automatic insertion machines for the application of reeled pins, tabs and receptacles. Available with up to 3 insertion heads to apply different products. The PCB is positioned by an XY table powered by stepper-motors (optional servo drives for higher insertion rates). Available in stand-alone or inline (SMEMA) configuration for fully automatic operation. Optional equipment includes insertion force monitoring, vision system, board thickness measurement and adjustable lower anvil.

Specifications

- Width** — 57.5 [1,460]
- Depth** — 64.5 [1,640]
- Height** — 60 [1,520]
- Weight** — Depending on configuration
- Electrical** — 110 V, 60 Hz
- Air** — 87 psi [6 bar]
- Insertable Area** — 24 x 16 [600 x 400]

For more information, contact TE.

AccuSserter 2 Pin Insertion Machine



Product Features

- Board capacity of 305 x 450 mm [12 x 18"]
- X/Y-Table with stepper motors
- Database driven software for simple programming and automatic setup
- "Quick change" tooling packs allow easy and fast setup
- Wide range of tooling packs for TE and non TE products available
- Easy-to-use operator interface

Designed and manufactured with a focus on mid-volume level production, the AccuSserter 2 machine provides a broad range of features at a very competitive price. It uses a pneumatic power unit together with product

specific "quick change" tooling packs. The insertion heads can be equipped with a rotary insertion finger that can apply products at different angles without decreasing the insertion rate. The tooling packs can be exchanged within 30 minutes to meet your full range of application requirements.

The lower support tool is equipped with an electrical continuity or pin penetration check to assure that each product was correctly inserted into the PCB and remained there in real time. There is no additional quality check required and all QC data can be stored via the system PC for 100% future traceability.

Note: The AccuSserter 2 machine is not CE approved.

Application Tooling (Continued)

BT3500 Battery Hydraulic Hand Tool, Part Number 2031400-x



Product Facts

- Highly Portable
- Lightweight
- Ergonomic
- Compatible with SDE dies and CERTI-CRIMP II heads
- New “quick take-up” feature
- Approximately 250 crimps per charge
- Generates up to 3500 lbs of crimp force.

The BT3500 battery-hydraulic hand tool kit is designed to provide the ultimate in flexibility, modularity, and powered efficiency in a lightweight, ergonomic, powerful crimp unit powered by a superior lithium ion battery.

The BT3500's flexibility begins with the many user options for the power unit. It can be used with two shoulder strap options (including a 4-point harness or a single shoulder strap) or a belt option, or by using the shoulder strap on the BT case, or used as a portable bench top termination device positioned in the tool case. These six combinations allow you to tailor portable, powered crimping to your manufacturing needs.

For more information, request Catalog 1773381-5.

Options



4-point Harness
(for use with padded belt)



Shoulder Strap



Belt



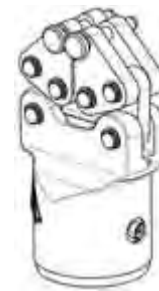
Shoulder Strap with Case

Double Action Hand Tool (DAHT)

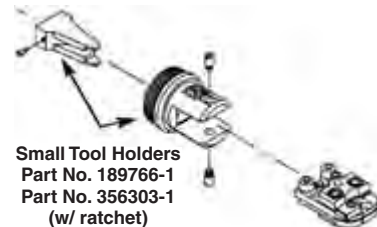


- Dies travel in arc-like path
- Locator on tools for FASTON, MATE-N-LOK, PIDG and PLASTI-GRIP terminals
- Insulation adjustment on tools for FASTON, MATE-N-LOK, PIDG and PLASTI-GRIP terminals
- Approximate weight 1.2 lb [0.54 kg]

Double Action Hand Tool Adapter, Part Number 2119483-1 (For use with BT3500 Battery Tool)



626 Pneumatic



Small Tool Holders
Part No. 189766-1
Part No. 356303-1
(w/ ratchet)

2614 Series (CE)

Note: All part numbers are RoHS compliant.

Application Tooling (Continued)

SDE Hand Tool Frames



PRO-CRIMPER III,
Part Number 354940-1
(Frame Only)

C-Head Assembly for Closed Barrel Terminals (Shoulder Dies),
Part Number 2031450-1 (for use with BT3500 Battery Tool)



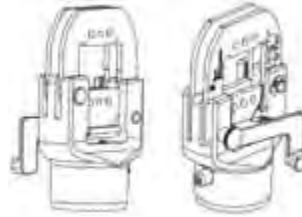
SDE C-Head,
Part Number 2031450-1

626 Pneumatic



6-26 SDE Kit
Part Number 1213855-1

Closed Head Assembly for Open Barrel Terminals (Pin & Shoulder Dies),
Part Number 2031460-1 (for use with BT3500 Battery Tool)



SDE Closed Head,
Part Number 2031460-1

SDE Electric Terminator



Part Number
1490076-2

Platform Die Hand Tool,
Part Number 58078-3
Frame Only



- Same frame configuration as TETRA-CRIMP hand tool
- Dies are interchangeable
- Adjustable terminal locator
- Approximate weight 1.4 lb [0.64 kg]
- For use with Ultra-Fast and Ultra-Fast Plus product (Die set required to terminate contacts)

626 Pneumatic



Large Tool Holders
Part No. 189767-1
Part No. 356302-1
(w/ ratchet)

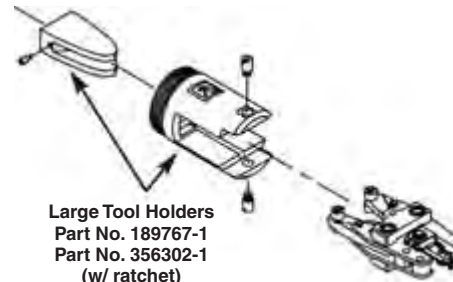
Platform Die Set Adapter
Part No. 679992-1

TETRA-CRIMP Hand Tool,
Part Number 59824-1



- Dies travel in arc-like path
- Multiple color-coded crimping cavities
- Terminal locator and wire stop
- Ratchet control release
- Approximate weight 1.4 lb [0.64 kg]
- For use with closed barrel FASTON product

626 Pneumatic



Large Tool Holders
Part No. 189767-1
Part No. 356302-1
(w/ ratchet)

TETRA-CRIMP Die Set Adapter
Part No. 679305-1

Note: All part numbers are RoHS compliant.

Application Tooling (Continued)

**Universal Handle,
Part Numbers
465629-1 (Short) and
465629-2 (Long)**



This tool with interchangeable tips is used to mate standard and tab-lok flag FASTON receptacles to tabs. It features an adjustable strap. The short tip holder is 1.87 [47.5], the long is 5.87 [149]. For further information, request Instruction Sheet 408-7141.

Model 626 Pneumatic Tool



This modular system consists of a hand- or foot-actuated power unit plus interchangeable tool holders, crimp head assemblies, and die sets, when applicable. It is light weight, and features an optional positive-cycle control that helps eliminate partial crimps. The tool can be easily held or bench mounted.

Specifications

- Weight** — 2.3-3.3 lb [1.0-1.5 kg]
- Length** — 11.6-12.9 [295-327]
- Outside Diameter** — 1.83 [46.5]
- Grip Span** — 2.19 [55.6] over button or handle
- Air** — 90-100 psi [6.21-6.89 bar], 11.4 in³ [0.00018 m³] displacement
- Cycle Time** — 0.7-0.8 sec (16-14 AWG [1.3-2 mm²] PIDG Terminals)

For further information, request Catalog 124208.

Note: All part numbers are RoHS compliant.

Technical Documents

Various technical documents are available for your use:

Production Specifications describe technical performance, characteristics and verification tests. They are intended for the Design, Component and Quality Engineer.

108-1285	Ultra-Pod Fully Insulated FASTON Receptacles
108-1706	250/205 Srs FASTON PCB Receptacles
108-2000	.250 Hermetic
108-2002	.187 Modular FASTIN-FASTON
108-2017	Ultra-Fast FASTON Tabs
108-2043	Ultra-Fast FASTON Receptacles
108-2044	Ultra-Fast Plus FASTON Receptacles
108-2086	187 Srs AMPLIVAR FASTON Flag Receptacles
108-2183	RAST 5 Headers
108-2215	Ultra-Pod Fully Insulated .187 Flag FASTON Receptacles
108-3017	Positive Lock Mark I
108-5126	.187 Positive Lock Mark II
108-5127	.250 Positive Lock Mark II

Application Specifications describe requirements for using the product in its intended application and/or crimping information. They are intended for the Packaging Design Engineer and the Machine Setup Person

114-1002	Pre-Insulated Diamond Grip (PIDG) FASTON Receptacle Contacts
114-2025	FASTIN-FASTON Receptacle and Tab Contacts, 250 Series
114-2028	Flag Receptacle Contacts, .110 Series
114-2032	Reversible Flag, 250 Series
114-2036	FASTON Receptacle Contacts, All Series (110, 187, 205, 250 and 312)
114-2065	FASTIN-FASTON Receptacle Contacts, All Series (110, 187, 205, 250 and 312)
114-2070	AMPLIVAR FASTON Tab Contact
114-2074	Positive Lock Receptacle Connectors — Series 187 MK II and MK III Series 250 MK II, MK III, and RAST 5
114-2078	FASTON Tab-Lok Contacts, 187, 205 and 250 Series
114-2079	F-Crimp Flag Receptacle
114-2082	Piggyback Flag Tab, All Series
114-2097	High-temperature FASTON Tab
114-2115	FASTON 110, 187, 205, 250, and 312 Series Tab Contacts for Printed Circuit (PC) Board Applications
114-2123	Ultra-Fast, Ultra Fast Flag and Ultra-Fast Plus FASTON Terminals
114-2124	Ultra-Pod FASTON Fully Insulated Receptacles and Tabs
114-2126	Center Strip Flag FASTON
114-2144	AMPLIVAR Receptacles, All Series
114-2146	AMPLIVAR F-F Tabs
114-2152	187 Srs AMPLIVAR FASTON Flag Receptacles
114-2153	Positive Lock Mark I Receptacle Connectors, .250 Series
114-2155	187 Srs FASTON C-Crimp Receptacles
114-2156	250/205 Srs FASTON PCB Receptacles
114-35000	Wire Preparation and Crimp Inspection Guide

Instruction Sheets provide instruction for assembling or applying the product. They are intended for the Manufacturing Assembler or Operator.

Instruction Material covering operation, setup, maintenance, repair, etc. is included with each machine, tool or die set. If this material is required prior to receiving your tooling, call the TE Customer Service Hotline 800-722-1111 for the applicable document.