

### Hand Tools

AMP CERTI-CRIMP Hand Tools are our top-of-the-line crimping tools featuring the original ratcheted crimp control. All tools are designed to exacting specifications, and manufactured using high quality materials to provide long service life. Recommended for low production runs, repairs and prototype work, and applications requiring consistent, highly-reliable terminations. See Catalog 65780 for further information.

#### Typical CERTI-CRIMP Hand Tools with Integral (Non-Interchangeable) Dies



**Part Number 58537-1**  
(used with PRO-CRIMPER  
Tool Frame 354940-1)  
for 50 Ohm BNC Dual Crimp  
MIL Type Connectors



**Part Number 220015-1**  
for 50 Ohm N Connectors



**CERTI-CRIMP Hand Tool  
with Interchangeable Dies**



**Part Number 69710**

### Hand Tool Kit for SMA and Blindmate Connectors

**Part Number 59981-1**



| Item Description                                        | Part Numbers |                    |
|---------------------------------------------------------|--------------|--------------------|
|                                                         | AMP          | Military (M22520/) |
| Hand Tool                                               | 59980-1      | 36-01              |
| Plug Locator (without Center Contact)                   | 220220-2     | 36-06              |
| Plug Locator (with Center Contact)                      | 220221-2     | 36-04              |
| Jack Locator                                            | 220222-2     | 36-05              |
| Die Set for RG-402/U Cable (.141 [3.58] O.D.)           | 312253-1     | 36-03              |
| Die Set for RG-405/U Cable (.086 [2.18] O.D.)           | 312253-2     | 36-02              |
| Cutoff Fixture                                          | 311395-1     | 36-09              |
| Cable Dressing Fixture                                  | 311396-1     | 36-07              |
| Trimmer Tool                                            | 312317-1     | 36-08              |
| Cable Bend Fixture Assembly Includes following 6 items: | 220224-1     | 36-10              |
| Bend Segment, RG-402/U (.125 [3.18] Radius)             | 311386-1     | 36-11              |
| Bend Segment, RG-402/U (.250 [6.35] Radius)             | 311386-2     | 36-12              |
| Bend Segment, RG-405/U                                  | 311386-3     | 36-13              |
| Tool Holder                                             | 311392-1     | —                  |
| Limiting Pin                                            | 307581-1     | —                  |
| Conforming Block                                        | 312067-1     | —                  |
| Hex Wrench                                              | 21027-6      | —                  |
| Carrying Case                                           | 13126-1      | —                  |
| Insert, Case                                            | 13127-1      | —                  |

Application Tooling (Continued)

**Solder Assembly Kit  
Brass SMA Connectors**

AMP Kit Part Number

1055420-1

M/A-COM Kit Part Number

2098-5066-54

For installation of SMA  
connectors to .035 [0.89]  
and .141 [3.58] diameter  
semi-rigid cable



| Item Description          | AMP Part No. | M/A-COM Part No. (Ref. Only) |
|---------------------------|--------------|------------------------------|
| Center Contact Holder     | 1055454-1    | 2098-5221-10                 |
| Dielectric Insert Tool    | 1055448-1    | 2098-5215-02                 |
| Dielectric Insert Tool    | 1055447-1    | 2098-5214-02                 |
| Dielectric Recess Tool    | 1055450-1    | 2098-5217-54                 |
| Fixture Sub-Assembly      | 1055439-1    | 2098-5206-54                 |
| Inserts — .085 [2.16] (2) | 1055441-1    | 2098-5208-54                 |
| Inserts — .141 [3.58] (2) | 1055440-1    | 2098-5207-54                 |
| Locator Tool              | 1055442-1    | 2098-5209-02                 |
|                           | 1055443-1    | 2098-5210-02                 |
|                           | 1055446-1    | 2098-5213-02                 |
|                           | 1055451-1    | 2098-5218-02                 |
| Retainer Ring Pliers      | 1055449-1    | 2098-5216-54                 |
| Solder Gauge .010 [0.25]  | 91362-6      | 2098-5516-02                 |
| Solder Gauge .015 [0.38]  | 91362-1      | 2098-5212-02                 |
| Solder Gauge .018 [0.46]  | 91362-2      | 2098-5211-02                 |

**Universal Compression  
Crimp Tool**

AMP Kit Part Number

1055835-1

M/A-COM Kit Part Number

2598-5200-54

AMP Universal Compression Crimp Tool offers the ability to rapidly produce cable assemblies using solderless compression crimp connectors with semi-rigid cables. This universal assembly tool kit will attach SMA, OSP, N and TNC series connectors to .141 [3.58], .085 [2.16] and .250 [6.35] cable quickly and consistently with excellent mechanical and electrical results.

The tool kit permits single hand assembly. Anvils and cable supports can be quickly changed. Crimp lengths can be adjusted from .001 [.025] to 1.000 [25.4] in increments of .001 [.025]. Sharp radius bends in cables are easily accommodated. The kit contains:



| Description               | AMP Part No. | M/A-COM Part No. (Ref. Only) |
|---------------------------|--------------|------------------------------|
| Crimp Frame               | 1055831-1    | 2598-5196-54                 |
| Calibration Gauge         | 1055832-1    | 2598-5197-54                 |
| .141 [3.58] Cable Support | 1055833-1    | 2598-5198-54                 |
| .085 [2.16] Cable Support | 1055834-1    | 2598-5199-54                 |
| SMA Plug Anvil            | 1055836-1    | 2598-5201-54                 |
| SMA Jack Anvil            | 1055837-1    | 2598-5202-54                 |
| Type N Plug Anvil         | 1055838-1    | 2598-5203-54                 |
| Type N Jack Anvil         | 1055839-1    | 2598-5204-54                 |
| TNC Plug Anvil            | 1055840-1    | 2598-5205-54                 |
| TNC Jack Anvil            | 1055841-1    | 2598-5206-54                 |
| OSP Plug Anvil            | 1055842-1    | 2598-5207-54                 |
| OSP Jack Anvil            | 1055843-1    | 2598-5208-54                 |

All tools may be purchased separately.

**MIL-C-22520/10-01  
Equivalent Hex Crimp Kit**

**AMP Kit Part Number  
1055236-1**

**M/A-COM Kit Part Number  
2098-0105-54**

For military specified applications requiring quick and efficient cable to connector attachment. Five popular hex die sizes are available to crimp the outer cable conductor to connector housings.



Die Change Tool



Crimp Tool



Hex Die

**The kit contains:**

| Description       | AMP Part Number | M/A-COM Part Number (Ref. Only) |
|-------------------|-----------------|---------------------------------|
| Crimp Tool        | 1060713-1       | 9098-5105-54                    |
| Die Change Tool   | 1060716-1       | 5698-5014-54                    |
| Hex Die — A, B, C | 1060714-1       | 5698-5015-54                    |
| Hex Die — D, E    | 1060715-1       | 5698-5016-54                    |

All tools may be purchased separately.  
For the assembly of SMA connectors,  
Accessory Kit Part Number 1055421-1 is required.

**A basic instruction sheet, included with the kit, aids in proper die selection**

| AMP Hex Die Part Number | M/A-COM Hex Die Part Number (Ref. Only) | Die | Hex Size $\pm.003$ [0.08] | For Use With RG/U Cable               |
|-------------------------|-----------------------------------------|-----|---------------------------|---------------------------------------|
| 1060714-1               | 5698-5015-54                            | A   | .105<br>2.67              | 178B & 196A                           |
|                         |                                         | B   | .213<br>5.41              | 55B, 58C, 141A, 142B, 223, 303, & 400 |
|                         |                                         | C   | .128<br>3.25              | 174, 174B, 179, 187A, 188A, & 316     |
| 1060715-1               | 5698-5016-54                            | D   | .178<br>4.52              | 180B, 195A, & 122                     |
|                         |                                         | E   | .255<br>6.48              | 59, 62A, 71B, 210, & 302              |

**Additional Dies Available**

| AMP Hex Die Part Number | M/A-COM Hex Die Part Number (Ref. Only) | Hex Size $\pm.003$ [0.08] | For Use With RG/U Cable |
|-------------------------|-----------------------------------------|---------------------------|-------------------------|
| 1055270-1               | 2098-0323-54                            | .151<br>3.84              | RD316 Double Braid      |

**SMA Crimp Tool  
Accessory Kit**

**AMP Kit Part Number  
1055421-1**

**M/A-COM Kit Part Number  
2098-5067-54**

For installation of SMA connectors to flexible braided cable. Crimp type SMA connectors require Hex Crimp Kit Part Number 1055236-1.

**The kit contains:**

| Description              | AMP Part Number | M/A-COM Part Number (Ref. Only) |
|--------------------------|-----------------|---------------------------------|
| Center Contact Holder    | 1055454-1       | 2098-5221-10                    |
| Locator Tool             | 1055446-1       | 2098-5213-02                    |
| Locator Tool             | 1055451-1       | 2098-5218-02                    |
| Solder Gauge .015 [0.38] | 91362-1         | 2098-5212-02                    |

All tools may be purchased separately.



Locator Tool



Solder Gauge



Center Contact Holder

### Stripping Tools

The hand-operated AMP Coaxial Cable Stripper features interchangeable, color-coded blade cassettes and V-blocks to accommodate 2- or 3-step stripping for cable diameters ranging from 2.54 [.10] through 7.62 [.30]. You strip cable by simply clamping and rotating the tool around the cable. See Instruction Sheet IS 2766 for further information.



| For Use With<br>Connector Type      | Tool No. |
|-------------------------------------|----------|
| BNC Single Crimp                    | 603995-1 |
| BNC Commercial and<br>UHF Miniature | 603995-2 |
| UHF Standard                        | 603995-3 |
| BNC MIL Type Dual Crimp             | 603995-5 |
| BNC Commercial Dual Crimp           | 603995-6 |

### Manual Trim and Point Tool

Tyco Electronics offers a manual tool that performs both trimming and pointing operations. Tools are available for .141 [3.58] and .085 [2.16] diameter semi-rigid cable. These hand-operated tools are ideally suited for engineering, small production runs or field use. They feature tungsten carbide cutters for durability up to 30 times longer than the life of a high speed steel cutter. Replacement cutters are interchangeable and may be purchased separately.



### Replacement Cutters

**Trimmer: Part Number 1055813-1**

**Pointer: Part Number 1055814-1**

### Semi-Rigid Cable Tooling

The tools listed here are designed specifically to strip and terminate semi-rigid cable. These tools operate basically the same as the flexible cable tools, in that they produce uniform terminations time after time, without heat damage from soldering.

**Hand Tool for BNC and TNC  
Semi-Rigid Cable Connectors**



**Part Number 59980-1**  
**Frame only — does not include**  
**dies and locator**

| AMP Tool<br>Part Number | M/A-COM Tool<br>Part Number<br>(Ref. Only) | Cable                     | Trim Length               |
|-------------------------|--------------------------------------------|---------------------------|---------------------------|
| 1055811-1               | 2598-5116-54                               | RG-402/U<br>(.141 [3.58]) | <b>.085</b><br>2.16 Fixed |
| 1055815-1               | 2598-5120-54                               | RG-405/U<br>(.085 [2.16]) | <b>.070</b><br>1.78 Fixed |
| 1055823-1               | 2598-5137-54                               | RG-402/U<br>(.141 [3.58]) | Adjustable*               |
| 1055824-1               | 2598-5138-54                               | RG-405/U<br>(.085 [2.16]) | Adjustable*               |

\*Adjustable trim length from .050 [1.27] to .140 [3.56].

### Replacement Collets

| AMP<br>Part Number | M/A-COM Part Number<br>(Ref. Only) | Cable                     |
|--------------------|------------------------------------|---------------------------|
| 1055825-1          | 2598-5145-54                       | RG-402/U<br>(.141 [3.58]) |
| 1055827-1          | 2598-5167-54                       | RG-405/U<br>(.085 [2.16]) |

### Cable Benders for Semi-Rigid Cable



Cable Bender

| Description                                | AMP<br>Part Number | M/A-COM Part Number<br>(Ref. Only) | Bend Radius*         |
|--------------------------------------------|--------------------|------------------------------------|----------------------|
| Cable Bender for<br>RG-405/U (.085 [2.16]) | 1055479-1          | 2098-5287-54                       | 1/4 [6.4] 3/8 [9.8]  |
| Cable Bender for<br>RG-402/U (.141 [3.58]) | 1055478-1          | 2098-5286-54                       | 3/8 [9.8] 1/2 [12.7] |

\*Radius of the bend is measured from the centerline of the cable.

### Trimming Tools for Semi-Rigid Cable

For soldered semi-rigid cable connectors using the cable center conductor as its contact. These tools are optional for most installations but recommended for optimum connector performance.



Trim Tool

| Description                                             | AMP<br>Part Number | M/A-COM<br>Part Number<br>(Ref. Only) |
|---------------------------------------------------------|--------------------|---------------------------------------|
| Trim Tool for SMA Connectors<br>RG-402/U (.141 [3.58])  | 1055455-1          | 2098-5272-02                          |
| Trim Tool for SSMA Connectors<br>RG-405/U (.085 [2.16]) | 1055465-1          | 2098-5269-02                          |

Application Tooling (Continued)

**Cable Trimmers for Production**

Tyco Electronics cable trimmers are designed for production trimming of RG-402/U (.141 [3.58]) and RG-405/U (.085 [2.16]) coaxial cables in preparation for connector installation. The trimming operation produces an unusually clean, burr-free cut with minimum smear. The length and depth of cut are adjustable. Replacement hardware can be used with either tool.



**Cable Trimmers**

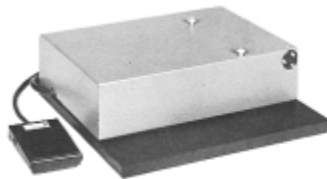
| Description            | AMP Part Number | M/A-COM Part Number (Ref. Only) |
|------------------------|-----------------|---------------------------------|
| RG-402/U (.141 [3.58]) | 1055526-1       | 2098-5676-54                    |
| RG-405/U (.085 [2.16]) | 1055530-1       | 2098-5686-54                    |

**Replacement Hardware**

| Description                  | AMP Part Number | M/A-COM Part Number (Ref. Only) |
|------------------------------|-----------------|---------------------------------|
| Saw Blade                    | 1055524-1       | 2098-5674-54                    |
| Trim Saw Block (.141 [3.58]) | 1055527-1       | 2098-5678-54                    |
| Trim Saw Block (.085 [2.16]) | 1055528-1       | 2098-5679-54                    |

**Cable Pointers for Production**

Tyco Electronics cable pointers are designed to point straight and bent cables and are adjustable for desired center conductor length. The cable pointers cut 90° point on copper as well as copper-clad center conductors.



**Cable Pointers**

| Description    | AMP Part Number | M/A-COM Part Number (Ref. Only) | Cable                  | AMP Replacement Cutter Part Number | M/A-COM Replacement Cutter Part Number (Ref. Only) |
|----------------|-----------------|---------------------------------|------------------------|------------------------------------|----------------------------------------------------|
| Single Pointer | 1055525-1       | 2098-5675-54                    | RG-402/U (.141 [3.58]) | 1055529-1                          | 2098-5681-54                                       |
| Single Pointer | 1080269-1       | 2098-5685-54                    | RG-405/U (.085 [2.16]) |                                    |                                                    |

**Interface Inspection Gauges**

Tyco Electronics offers Connector Interface Gauges. They have shock proof and fully jeweled dial indicators. The rugged construction of the dial mechanism minimizes the need for repair or replacement.

The gauge heads are manufactured from a corrosion resistant, hardening stainless steel which is heat treated for longer life. All critical surfaces are ground and lapped for precision fit and superior surface finish. The heads are securely fastened onto the dial indicator for no movement between the gauge head and the dial indicator

spindle allowing for precise measurements.

Like the gauge heads, the plungers are specially designed to provide strength and durability.



| Connector | Type | AMP Gauge Kit Part Number | M/A-COM Gauge Kit Part Number (Ref. Only) |
|-----------|------|---------------------------|-------------------------------------------|
| SMA       | Jack | 1055496-1                 | 2098-5455-54                              |
|           | Plug | 1055497-1                 | 2098-5456-54                              |



SMA Interface Example

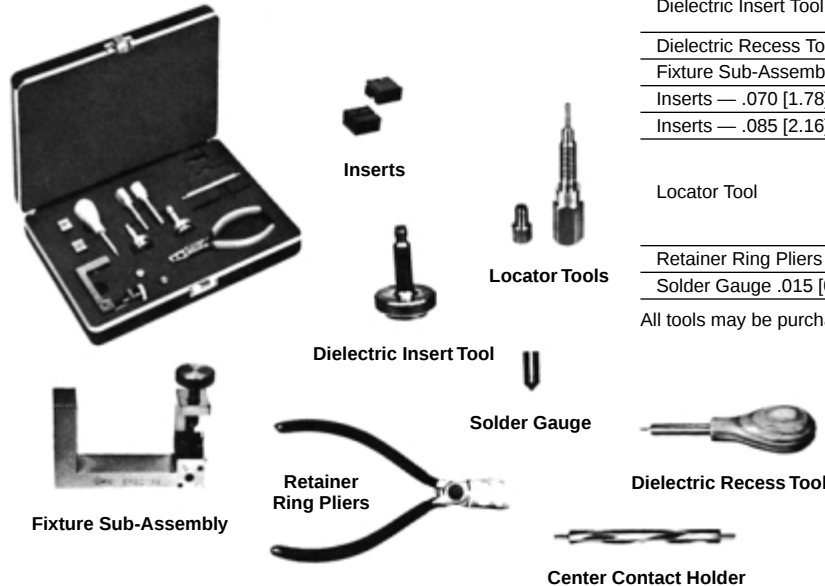
Application Tooling (Continued)

**SSMA Connectors**

AMP Kit Part Number  
**1055466-1**

M/A-COM Kit Part Number  
**2098-5270-54**

For installation of SSMA connectors to .070 [1.78] and .085 [2.16] diameter semi-rigid cable.



| Item Description          | AMP Part No. | M/A-COM Part No. (Ref. Only) |
|---------------------------|--------------|------------------------------|
| Center Contact Holder     | 1055463-1    | 2098-5237-10                 |
| Dielectric Insert Tool    | 1055458-1    | 2098-5233-02                 |
| Dielectric Recess Tool    | 1055459-1    | 2098-5234-02                 |
| Fixture Sub-Assembly      | 1055439-1    | 2098-5206-54                 |
| Inserts — .070 [1.78] (2) | 1055547-1    | 2098-5831-54                 |
| Inserts — .085 [2.16] (2) | 1055441-1    | 2098-5208-54                 |
| Locator Tool              | 1055461-1    | 2098-5236-02                 |
|                           | 1055464-1    | 2098-5238-02                 |
|                           | 1055456-1    | 2098-5231-02                 |
|                           | 1055457-1    | 2098-5232-02                 |
| Retainer Ring Pliers      | 1055449-1    | 2098-5216-54                 |
| Solder Gauge .015 [0.38]  | 91362-1      | 2098-5212-02                 |

All tools may be purchased separately.

**Econo-Crimp Assembly Kit**

AMP Kit Part Number  
**1055779-1**

M/A-COM Kit Part Number  
**2598-5005-54**

For quick and efficient cable to connector attachment. Five popular hex die sizes are available to crimp the outer cable conductor to connector housings.



| Item Description  | AMP Part No. | M/A-COM Part No. (Ref. Only) |
|-------------------|--------------|------------------------------|
| Crimp Tool        | 1055780-1    | 2598-5006-54                 |
| Hex Die — A, B, C | 1055781-1    | 2598-5007-54                 |
| Hex Die — D, E    | 1055782-1    | 2598-5008-54                 |

All tools may be purchased separately.

For the assembly of SMA connectors, Accessory Kit Part Number 2098-5067-54 is required. For SSMA connectors, Accessory Kit Part Number 2098-5272-54 is required.

| AMP Hex Die Part Number | M/A-COM Hex Die Part Number (Ref. Only) | Die | Hex Size ±.003 [0.08] | For Use With RG/U Cable               |
|-------------------------|-----------------------------------------|-----|-----------------------|---------------------------------------|
| 1055781-1               | 2598-5007-54                            | A   | .105<br>2.67          | 178B & 196A                           |
|                         |                                         | B   | .213<br>5.41          | 55B, 58C, 141A, 142B, 223, 303, & 400 |
|                         |                                         | C   | .128<br>3.25          | 174, 174B, 179, 187A, 188A, & 316     |
| 1055782-1               | 2598-5008-54                            | D   | .178<br>4.52          | 180B, 195A, & 122                     |
|                         |                                         | E   | .255<br>6.48          | 59, 62A, 71B, 210, & 302              |

**SSMA Crimp Tool Accessories**

AMP Kit Part Number **1055467-1**

M/A-COM Kit Model Number **T-550**

For installation of SSMA connectors to flexible braided cable. Crimp type SSMA connectors require Hex Crimp Kit Part Number 1055779-1.



| Description           | AMP Part Number | M/A-COM Part Number (Ref. Only) |
|-----------------------|-----------------|---------------------------------|
| Center Contact Holder | 1055463-1       | 2098-5237-10                    |
| Locator Tool          | 1055461-1       | 2098-5236-02                    |
|                       | 1055464-1       | 2098-5238-02                    |

All tools may be purchased separately.