3M™ Assembly Equipment

3M™ Presses and Accessories

All 3M™ Assembly Presses are designed to provide proper assembly on 3M™ Cable and Connectors. These presses, along with a locator plate, achieve accurate cable placement in the connector. All models are portable or can be bench mounted. 3M assembly presses include a 3M™ Platen 3443-9.

Standard Assembly Press 3640

To enhance the stabilization of the 3M™ Standard Assembly Press 3640, use 3M™ Base Plate 3771.

Pneumatic Press 3830

The 3M™ Pneumatic Press 3830 features a self-adjusting shut height setting, a built-in two-hand actuation system, harness retention clamps, minimal set-up procedures and will function on 100 P.S.I. Reliable performance provides improved operator efficiency and quality terminations on your connector systems.
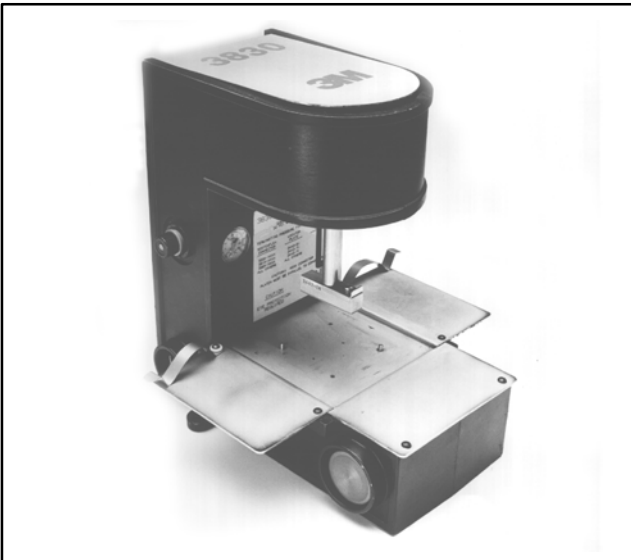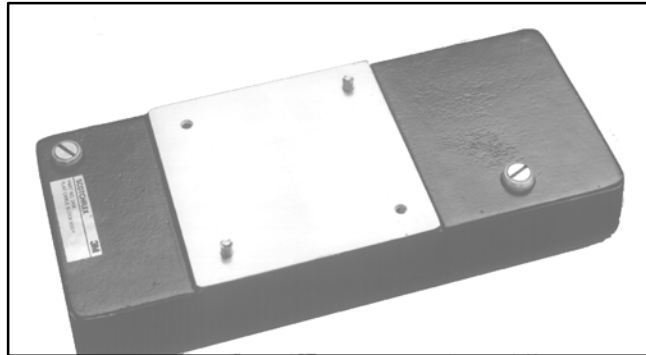

Universal Press 3316

3M™ Universal Press 3316 is the primary assembly press used for discrete wiring mass term cable connectors. When the 3316 press is used with the 3M™ Locator Plate Base 3458 it can be used with any 3M™ Locator Plate 3443-XX to assemble 3M™ Connectors.
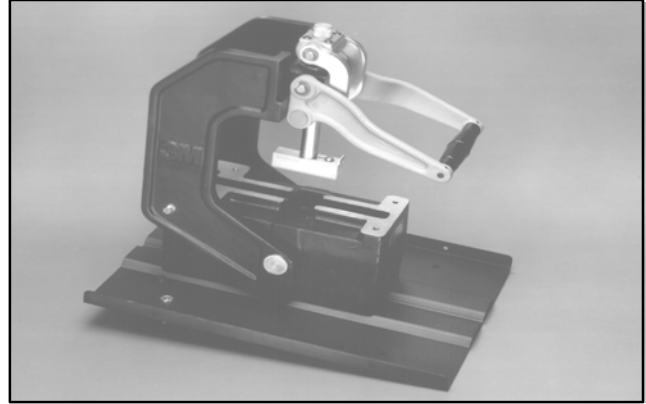
3M™ Locator Plate Riser Block 3458

This is the interface between the 3M™ Universal Press 3316 and flat ribbon cable tooling.

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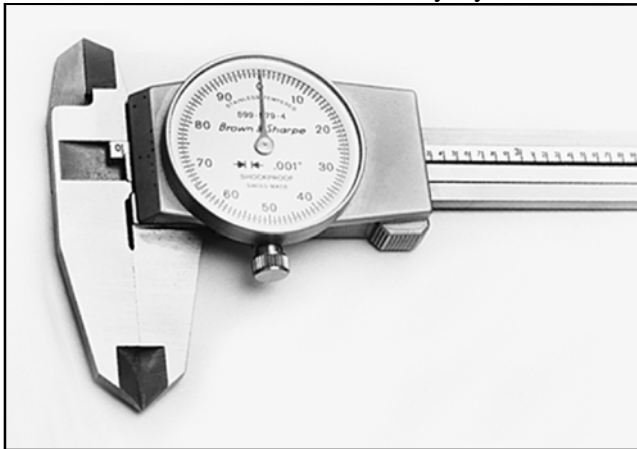
3M™ Assembly Equipment

3M™ Pneumatic Activator 3850

Increases productivity and reduces operator fatigue —
allows both hands of operator to be free. Accepts both
3M™ Assembly Heads 3624-41 and 3624-42.

3M™ Caliper 3865

Use the caliper to measure proper wire insertion depth
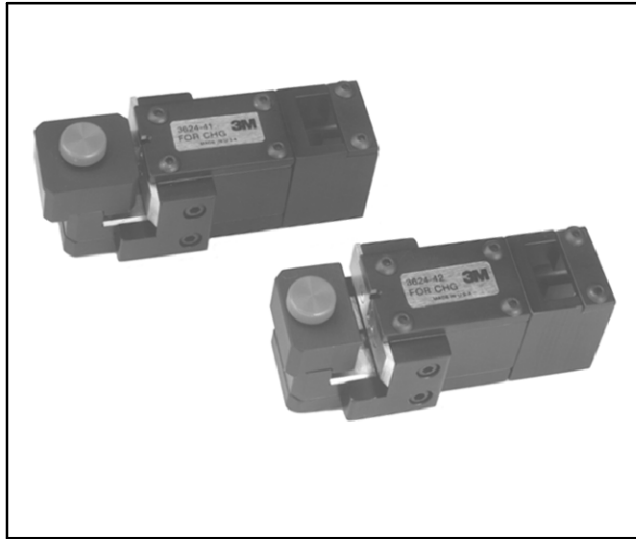for all three 3M™ CHG Connector body styles.

3M™ Assembly Equipment

3M™ CHG Connector Tools

3M™ CHG Assembly Heads

These assembly heads are used to terminate discrete wire. 3M™ CHG Assembly Head 3624-41 is used for one and two row stackable 3M™ CHG Connectors. 3M™ CHG Assembly Head 3624-42 is used for two row polarized CHG connectors. These assembly heads are interchangeable when used with the 3M™ Pistol Grip 3586-12 or the 3M™ Pneumatic Activator 3850.

3M™ CHGA Applicator 3739

This applicator is used to mass terminate 3M™ CHG Sockets to notched .100″ flat cable. Use it with 3M™ Assembly Press 3640.

3M™ CHG Electric Terminator 1100A

The CHG electric terminator is a semi-automatic machine for terminating and cutting two discrete wires per cycle. It accepts all three 3M™ CHG Connector body styles.
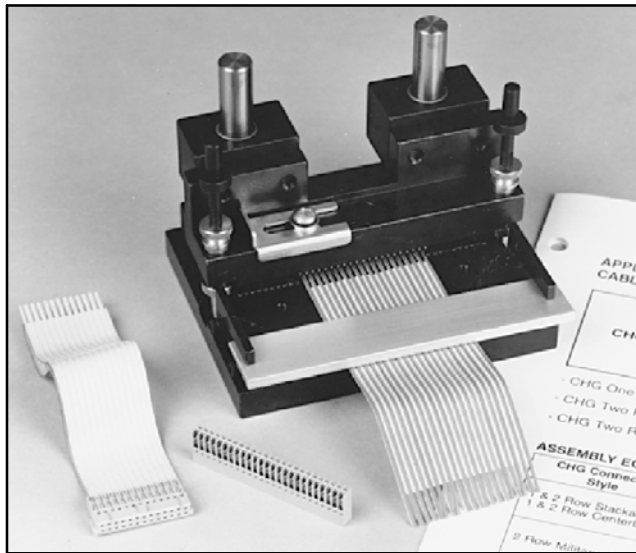

3M™ Pistol Grip 3586-12

Use with prototype and low volume discrete wire CHG terminations. Accommodates both 3M™ Assembly Heads 3624-41 and 3624-42 for all three 3M™ CHG Connector body styles.

3M™ Assembly Equipment
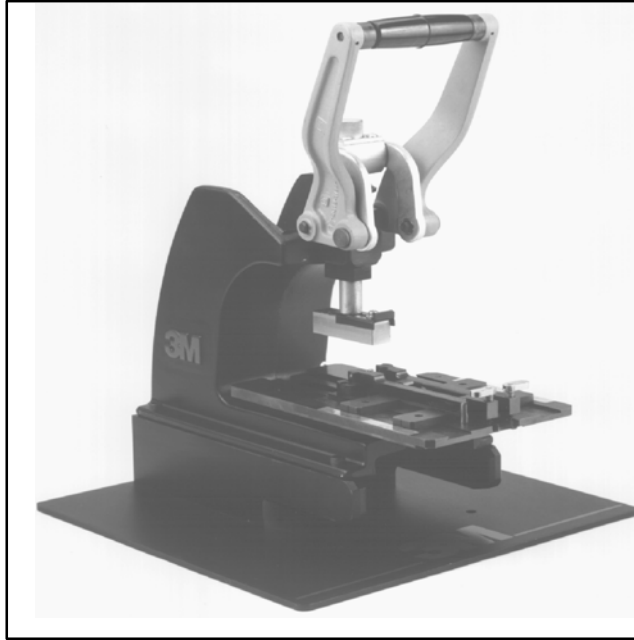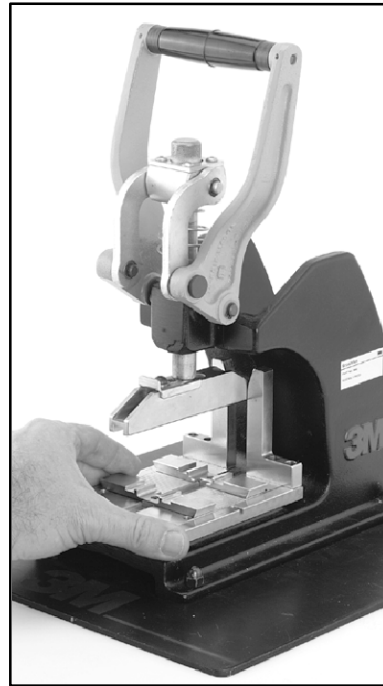
3M™ MDR Panelmount Assembly Press 10951

Use for assembling 3M™ Panelmount Receptacles **102XX-0210**. It accepts .050″ center flat cable, .025″ center laminated flat cable or laminated discrete wire. Use 3M™ Cable Cutter 10952 and 3M™ Replacement Blades 10970-2 with this press.

Tools for 3M™ MDR Wiremount Plug 101XX-8000EE Assembly

3M™ Locator Plate 10980-3
3M™ Platen 10981-5
3M™ Shut Height Gauge Block 10982-4
3M™ Set-up Block 10983-50 (50 position)
3M™ Assembly Press 3640

3M™ MDR Hand Press 3829

Use for assembling 3M™ Wiremount Plug Connectors 101XX-6000, sizes 14 through 68. 3M™ Cutting Blade 3828 is the replacement blade for this product.

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3M™ MDR Assembly Press 10960-2000

Use for assembling 3M™ Wiremount Plugs 101XX-6000. Accepts round discrete, .025″ and .050″ pitch flat cables. It terminates connectors with 14 to 100 contact quantities.
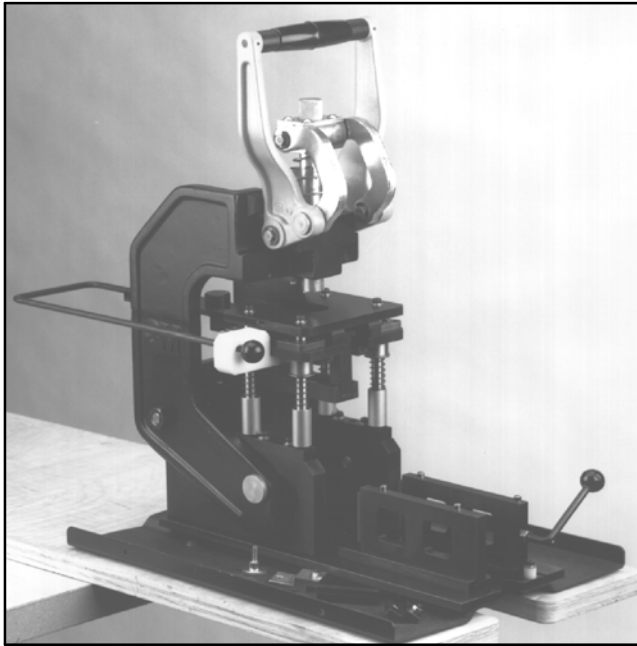

Additional tools required when using the 10960-2000 press: (order separately, see photos below)

   3M™ Lacing Fixture Unit 10962-2000 for use with the
   3M™ Lacing Fixture Stand 10963-2000, the
   3M™ Wire Clamp 10964-1 (14-50 position), the
| 3M™ Wire Clamp 10962-2 (68-100 position), the
   3M™ Cutting Unit 10961 and the
   3M™ Replacement Blades 10970-9 for 10961
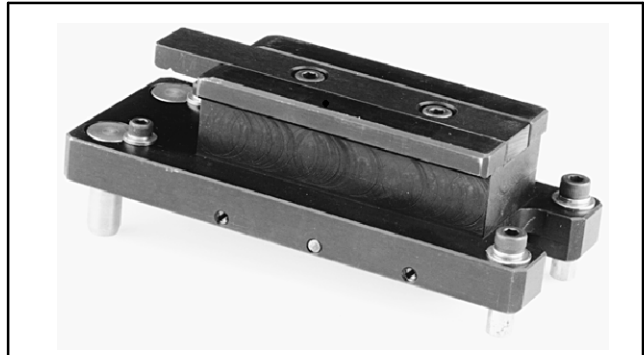   Cutting Unit.

Lacing Fixture Unit 10962-2000
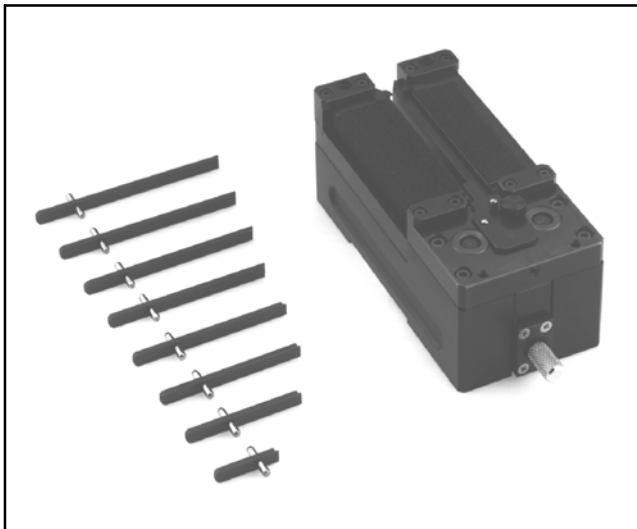
Wire Clamps 10964-1 (left) and 10964-2 (right)
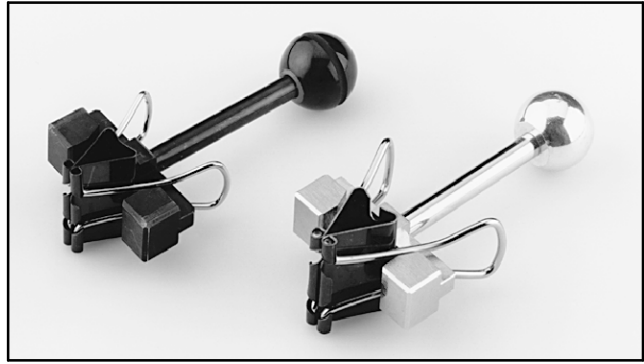
Cutting Unit 10961

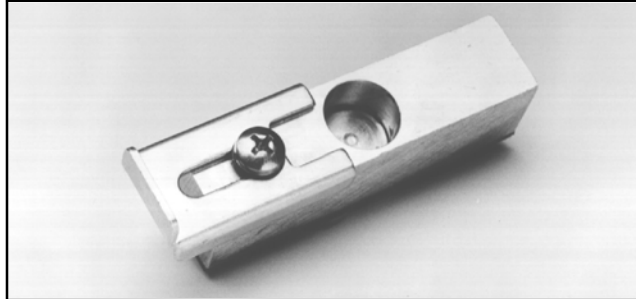

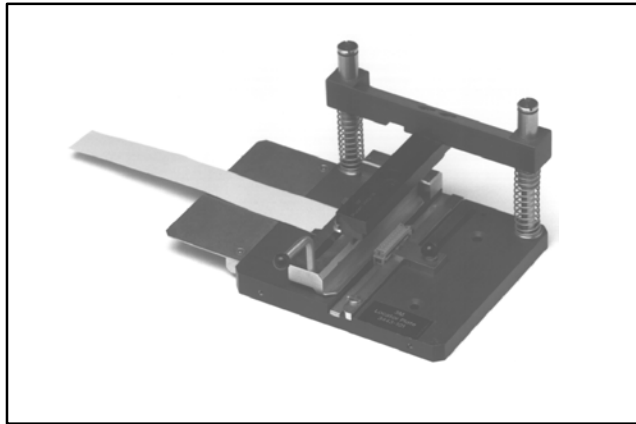**Lacing Fixture Stand 10963-2000**

3M™ Assembly Equipment

3M™ Platens and Locator Plates
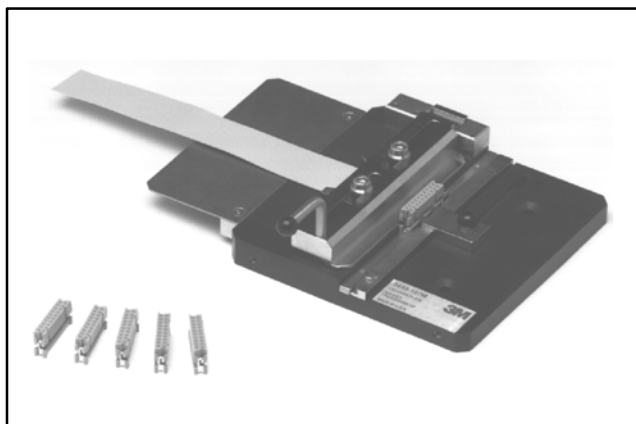
3M™ Platen 3442-9

3M™ Platens assure proper closure of connector bodies and covers during assembly to cables.
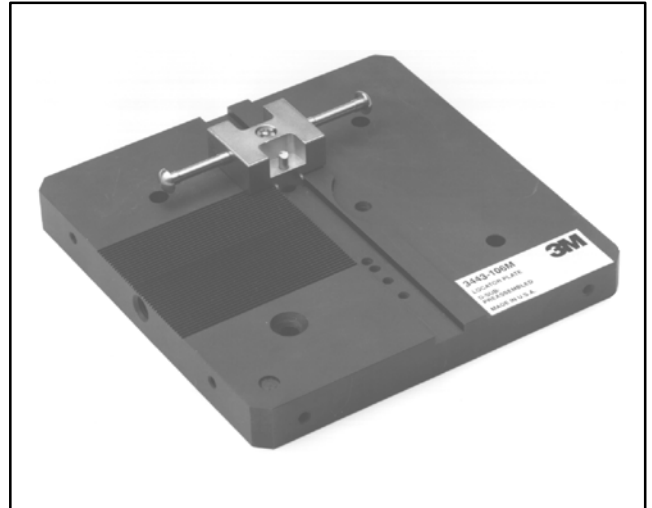

3M™ PCB Locator Plate 2 Row 3443-101M

3M™ .100″ × .100″ Socket Locator Plate 3443-107N

3M™ D Subminiature Locator Plate 3443-106N

Use for end-to-end and mid-span assembly of 9, 15, 23 and 37 position miniture D Subs. For D Sub with floating bushing or threaded insert, order end block 3664-A. *(Guide wings and cable stop are not included with the locator plate.)*

3M™ Staging Platform 3767-0005

The staging platform provides easy transfer of connectors to assembly nest area. Use it with 3M Assembly Presses 3640 and 3335 and 3M Locator Plates 3443-107N, -106 and -101M.
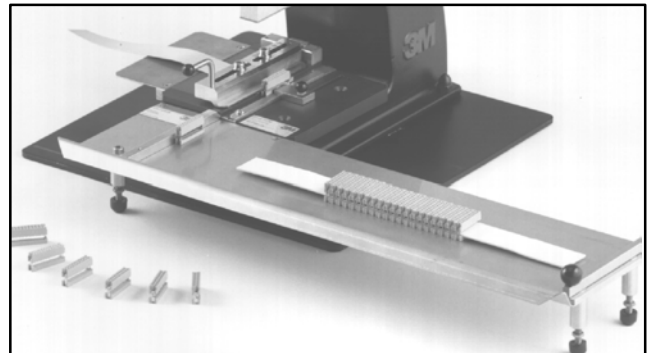
Note: When using this platform with the pneumatic press 3830, longer legs will have to be ordered. Contact Technical Service for ordering information.

3M™ Terminator 3870

This terminator is a semi-automatic machine that assembles flat cable and sockets, two-row PCB and D-Sub Connectors.

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3M™ Assembly Equipment

SHUT HEIGHT CHART

This chart is a guide to setup 3M™ Assembly Presses and Locator Plates for the termination of 3M™ Connectors and Cable.

3M Connector	Locator Plates 3443-XX	Platens 3442-XX	Options	Shut Height setting for assembly presses*	
				3640, 3316	3335
Socket Connectors:					
Series 3000 (2 piece) (.100 × .100 and .100 × .200)	-94	-9		12	12 1/2
Series 89 (891XX) (preassembled)	-107N	-9	3767-0005	17	17 1/2
3407-0000	-2	-9		11	11 1/2
3424	-6	-9		12	12 1/2
3441-0000	-20	-9		13	13 1/2
3327-0000	-31	-9		11	11 1/2
5620/5624	-88	-9		17 1/2	18
2 mm 1522XX	-118	-9		15	15 1/2
DIN 62B and 62C	-117	-9		12	12 1/2
501XX	-110	-9		17	17 1/2
ATA 891XX	-126	-126	3767-0005	12	12
Mini 82XXX	-113	-45	(use 3442-46 w/3335)	17	18
SCSI III	-125	Included		12	12
PCB Connectors:					
3474, 3434, 3402, 3426	-15	-9		7	7 1/2
3422, 3418	-16	-9		7	7 1/2
3378	-19	-9		9	9 1/2
3468	-33	-9		8	8 1/2
3470	-34	-9		8	8 1/2
PCB after soldering	-8	-9		11	11 1/2
39XX- 2 row	-101M	Included	3767-0005	17	17 1/2
D Sub Connectors:					
**83XX-09, 15, 25, 37	-106N	-9	3767-0005	21	21 1/2
**8209/8215	-106N	-39N	3767-0005	21	21 1/2
**8225/8237	-106N	-41N	3767-0005	21	21 1/2
8250/8350	-112	-44		15	15 1/2
DIP Connectors:					
3460	-10	-6		7	7 1/2
3406	-12	-14		16 1/2	17
3416	-13	-16		16 1/2	17
3498	-43	-9		16 1/2	17
3508	-47	-8		7	7 1/2
Card-Edge Connectors:					
3XXX Series	-63	-30		18 1/2	19
Delta Ribbon Connectors:					
35XX, 33XX Series	-58	-9		21	21 1/2
Plug Connectors:					
46XX Series	-96	-9		-14	14 1/2
Din Plug	-91	-9		-17	17 1/2

*3M™ Pneumatic Assembly Press 3830 shut height setting is self-adjusting.
**D-Sub options for 3M™ Preassembled Connectors 3664-09, -15, -25, & -37 cable guides and 3664-B cable stop (see instruction sheet).

3M™ Assembly Equipment

3M™ Universal Terminating System

The universal terminating system is used to mass-terminate both discrete wire and flat cable to insulation displacement connectors. The system involves a ''building block'' concept of add-on components to assemble a specific harness.

Components Required for Round

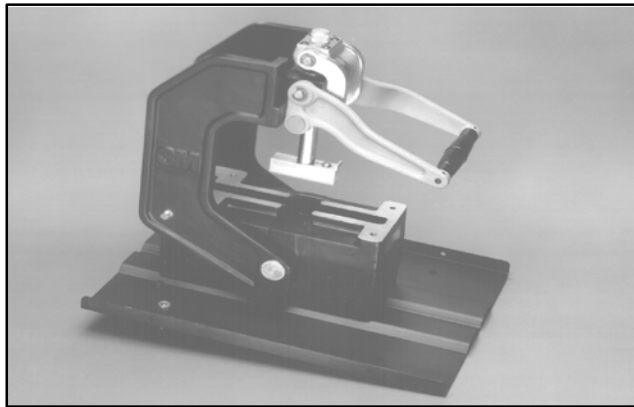**Jacketed Discrete Cable and Wire**

  3M™ Universal Press 3316
  3M™ Discrete Wire Block 3445
  3M™ Pair Splitter Blade Assembly 3459-2
  3M™ Assembly Nest 3481-XX

Universal Press 3316
This press presents the foundation for discrete wiring as well as flat ribbon cable harness assembly.
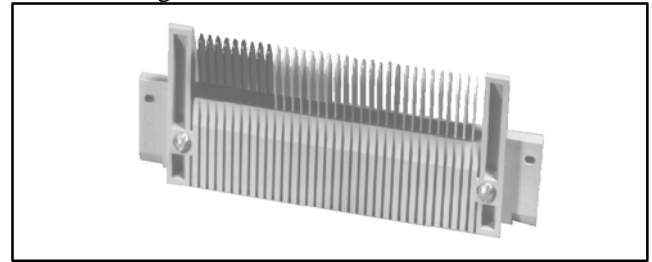

Discrete Wire Block 3445
Used with discrete round-jacketed cable assemblies; accepts assembly nests and pair splitters; provides clamps for securing jacketed round cable; shipped with shut height gauge.
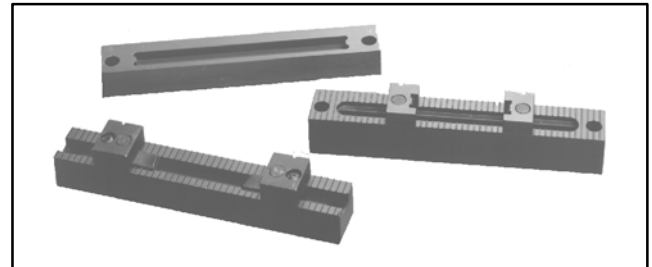

Pair Splitter 3459-2
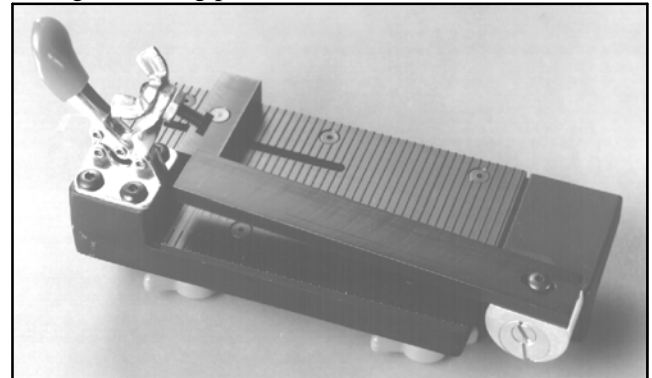Aid in routing discrete wires.

Assembly Nest 3481-XX
Designed for proper seating of specific connector families.

3M™ Flat Cable Retainer 3547
Used to secure all discrete wire flat/cable assemblies during the wiring process.

Part Number	Used for Assembly of:
3481-3	D Ribbon — 3442-9 platen required
3481-4	D-Sub Socket — 3442-9 platen required
3481-6	.100″ × .100″ Socket — 3442-9 platen required
3481-7	.100″ × .200″ Socket — 3442-9 platen required
3481-9	.100″ Card-Edge — 3442-30 platen required
3481-11	DIP 14 & 16 Position DIP — 3442-14 or -16 platen required
3481-12	D Sub Plug & Socket — 3442-9 platen required
3481-13	D Sub Plug — 3442-9 platen required

3M™ Assembly Equipment

3M™ Cable Processing Tools

3M™ Cable Shear 3320

Use the cable shear to cut measured lengths of 3M™ Flat Cable products. The cable shear is used with 3M™ Assembly Press 3640 or 3335. One 15″ long 3M™ Extension Table 3320-1 and one 3M™ Cable Stop 3320-2 are included.

Additional 3320-1 extension tables and 3320-2 cable stops may be purchased. Other replacement parts available are:

3M™ Cutting Blade 3449-6
3M™ Cutting Base 3457-2

3M™ Cable Notcher 3557

This cable notcher is used to prepare all 3M™ Ground Plane Cables. This cable notcher is portable or can be bench-mounted for ease of operation.

A simple two-step operation notches the edge of all ground plane cable conductor widths. After cable alignment, two movements of the trimming lever produce precise notching for end termination and mid-span applications. The tool design also allows the cable to be clamped to the tool platform, providing a straight-edge for scoring and stripping the ground plane cover with a **3M™ Scoring Tool 3430-7000.**
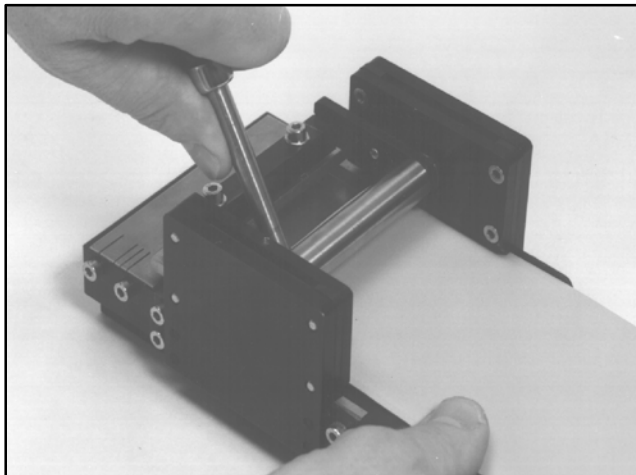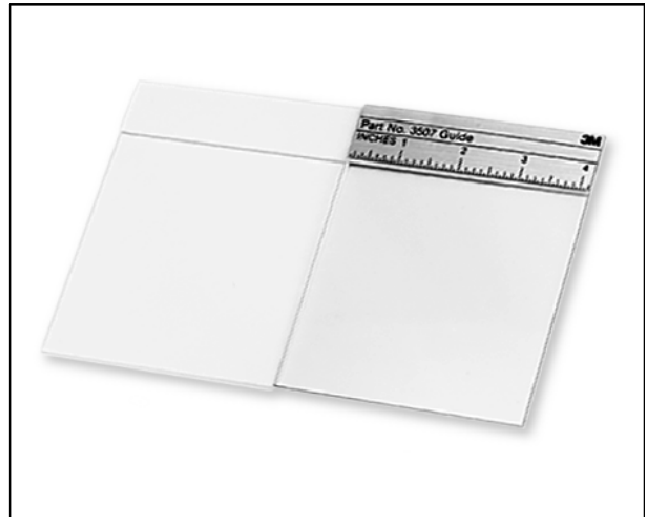

3M™ Hand Tool 3430-7000

This hand tool is used to cut through cable jacketing without damage to shield or cable.

3M™ Cutting Guide 3507

The cutting guide is used with the hand tool above to ensure accuracy when cutting through cable jacket.

3M™ Assembly Equipment

3M™ Hand Tools and Accessories

3M™ Hand Tool Kit 3698-08

The kit is designed to assemble the .100″ × .100″ up to and including the 50 position socket connector. The 8 mm stroke, pistol grip, can only be used with the 3000 series connector.

3M™ Discrete Wire Hand Tools

This tool simplifies insertion of any discrete wire into all "U" contacts, other than D Sub Connectors.

Use the 3M™ Discrete Wire Hand Tool 3430-1000 with all 3M™ Connectors. Use the 3M™ Discrete Wire Hand Tool 3430-2000 only with D Sub connectors.

3M™ Base Plate 3771

The 3771 base plate is used for stabilizing support with the 3M™ Assembly Press 3640.
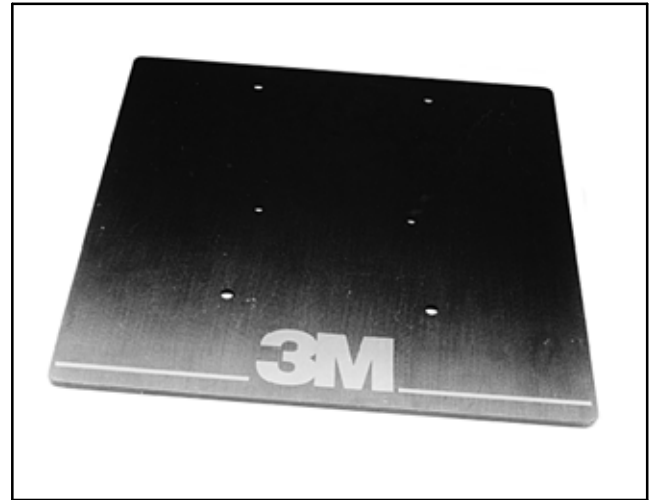
3M™ Delta Hand Tool Kit 3710

This hand tool kit is for 9, 15, 25 and 37 position 3M™ D Sub Connectors, 12 mm stroke.

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3M™ Assembly Equipment

Plug Knockout Tools

3M offers two plug knock out tools for use with 3M™ .100″ Thru Board Socket 929 Series. Plug knockout tools are for the removal of integral solder mask plugs for all levels of production. Both are designed for use as a hand tool. Each tool can easily be adapted for use with standard 3M™ Presses.

3M™ Knockout Tool 929013

For use with the 3M™ Assembly Press 3640 for prototype and low volume production. 3M™ Molded Head 929025-0X-XX must be ordered separately. It has staggered pins and is available in one- or two-row versions.
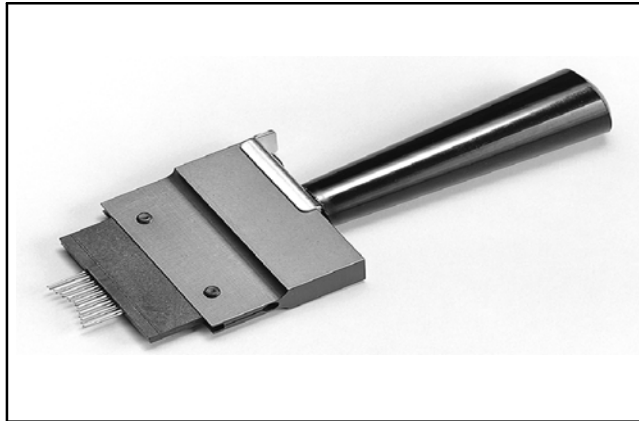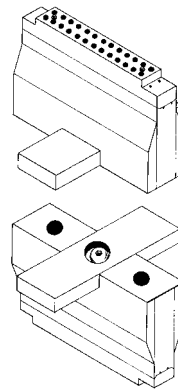

3M™ Knockout Tool 929012

Use with the 3M™ Long Neck Press 929050 for medium and high volume production. 3M™ Replacement Pins 929018 are available in quantities of 200.
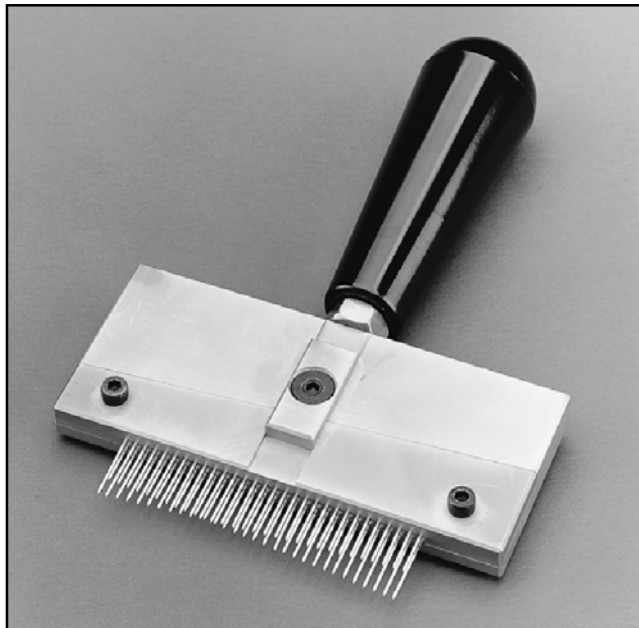
3M™ Insertion Platen 3442-00XX

Insertion platens were designed to aid in pressing compliant pin connectors onto printed circuit boards. There is one insertion platen for each connector position.

Insertion Platen	Connector Position
3442-0048	10
3442-0049	14
3442-0050	16
3442-0051	20
3442-0052	24
3442-0053	26
3442-0054	30
3442-0055	34
3442-0056	40
3442-0057	50
3442-0058	60
3442-0059	64

3M™ Header Roll Pin Inserter 3430-4000

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