# 3M<sup>™</sup> Locator Plate 3443-94

# Instructions for the assembly of 3M<sup>™</sup> Socket Connectors, .100" x .100" and .100" x .200"

#### 1.0 General

3M<sup>™</sup> Manual and Pneumatic Assembly Presses and accessory assembly equipment are recommended for the termination of 3M socket connectors. 3M assembly equipment is offered to reduce set-up time, to provide easy and fast assembly, and to reduce assembly error. All listed socket connectors use the 3M<sup>™</sup> Locator Plate 3443-94 and the 3M<sup>™</sup> Platen 3342-9. Shut height settings for the 3M<sup>™</sup> Presses 3316 and 3640 use 12, for the 3M<sup>™</sup> Press 3335 use 12 ½, the 3M<sup>™</sup> Press 3830 is self-adjusting.

.100" x .200" Backplane System

Contact Quantity	3M Part number
20	3575
26	3501
34	3310
40	3318
50	3307

.100" x .100" Grid System

Contact Quantity	3M Part Number
6	3863
8	3868
10	3473
14	3385
16	3452
20	3421
24	3626
26	3399
30	3419
34	3414
36	9436
40	3417
44	9444
50	3425
60	3334

The 3M Locator Plate 3443-94 was designed to assemble 3M socket connectors and replaces plates 3443-54, 3443-60, and 3443-73.



### 2.0 Set-up procedures for sockets, cables and guides

#### Adjustments to plate

Various adjustments are required to the locator plate, depending on which socket connector or cable is being assembled. 3M<sup>™</sup> Locator Plate 3443-94 is the recommended assembly aid. (See Figure 1)

The Locator Plate 3443-94 can be used to assemble:

- .100" x .100" and .100" x .200" socket connectors with and without the center bump feature.
- Socket connectors with standard flat cable and with ground plane cable.

#### End guide set-up

To adjust the position of the end guide for the connector length position, lift the end guide up and move it to the left or right.

The viewing port on each end guide must align with the appropriate connector conductor size. The connector conductor size is specified by the numbers on the respective labels.

To adjust the end guide position for the .100"  $\times$  .100" or .100"  $\times$  .200" connector, lift and rotate the end guide 180° so that the viewing port points to the respective .100"  $\times$  .100" or .100"  $\times$  .200" label guide.

#### Standard flat cable

To assemble **standard flat cable**, the cable width is guided between:

- The narrow end guide area.
- The side of the end guide with the viewing port feature.

#### Ground plane cable

To assemble ground plane cable, the cable width is guided between:

- The wide end guide area.
- The side of the end guide that does not have the viewing port feature.

#### Center bump feature

The center bump connector does not require any special set-up procedure.

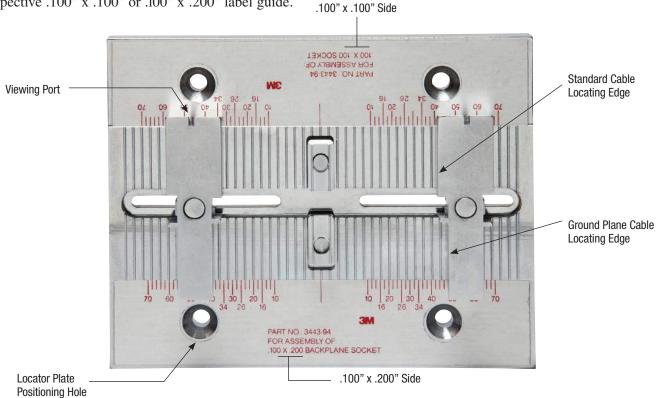


Figure 1

## 3.0 Shut height adjustment procedures

The shut height setting is referenced in the .100" x .200" Backplane System Chart and .100" x .100" Grid System Chart on page 1. Shut height settings are guidelines for proper termination depth.

The shut height should be adjusted from the base before the  $3M^{TM}$  Locator Plate is put into place. The  $3M^{TM}$  Presses 3316 and 3640 are adjusted with a knob at the top of the press. The  $3M^{TM}$  Press 3335 is adjusted with the collar on the press shaft, and the  $3M^{TM}$  Press 3830 is self-adjusting.

- 3.1 Place the shut height gauge 3436-1D across the base of the assembly press. Lower the handle of the press until the handle casting makes contact with the press casting. (See Figure 2)
- 3.2 Determine the type of assembly press you are using:
  - With the Press 3335, lock the shut height adjustment collar toward the base of the press shaft. (See Figure 3a)
  - With the Presses 3316 and 3640 Presses, turn the shut height adjustment knob until the bottom of the press shaft contacts the desired position on the shut height gauge. (See Figure 3b)

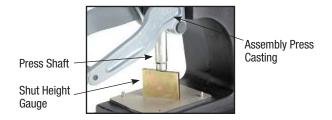


Figure 2

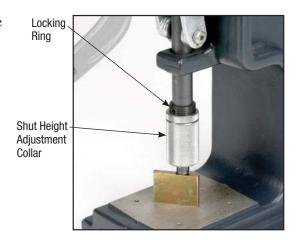


Figure 3a

3.3 Install the locator plate and appropriate platen on the press. The platen should be positioned so that it is parallel with the connector body and cover.



Figure 3b

# 4.0 Connector/cable assembly procedures

- 4.1 Grasp a socket cover strip between the thumb and forefinger of both hands, with the liner facing you. Rotate the outermost cover down against the adjacent cover on the strip, breaking it from the liner. Pull laterally away from the strip, leaving a clean adhesive edge on the removed cover. (See Figure 4)
- 4.2 Firmly press ribbed side of cable into alignment grooves on cover. The adhesive will help it stay in place. (See Figure 5)
- 4.3 Visually inspect to insure that:
  - Cable is properly aligned to cover grooves.
  - Cable end is flush with cover for end terminations, or perpendicular to cover for midspan terminations.
- 4.4 Place the cable/cover sub-assembly between the guides on the 3M<sup>™</sup> Locator Plate, cover side down. (See Figure 6)
- 4.5 Orient and position connector body contacts down over the cable/cover sub-assembly, engaging cover retainer devices with body slots. (See Figure 7)
- 4.6 Lower the assembly press handle fully to complete the connection.
- 4.7 Raise press handle and remove completed assembly. Visually inspect to insure that:
  - Cover is fully seated and parallel with the body.
  - Cable is properly aligned with the cover grooves.
  - Cover retaining devices are completely engaged with the body.



Figure 4

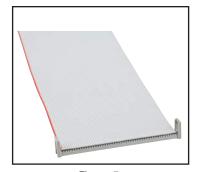


Figure 5



Figure 6



Figure 7

#### **Customer and Technical Service**

Within the U.S.:

Customer Service: 800-225-5373 Technical Support: 512-984-6703

#### Outside of the U.S.:

For customer service and technical support, please contact your local 3M Electronic Solutions Division representative.

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