# 3M<sup>™</sup> Locator Plate 3443-96

**Instructions** 



# Instructions for the assembly of the 3M<sup>™</sup> Plug Connectors 46XX

## 1.0 General:

3M manual and pneumatic assembly presses and accessory equipment are recommended for the termination of plug connectors. 3M assembly equipment is offered to reduce set-up time, to provide easier and faster assembly, and to reduce assembly error. The 3M<sup>™</sup> Locator Plate 3443-96 was designed to assemble all the 46XX Plug Connectors. The 3M<sup>™</sup> 3436-1N shut height gauge is shipped with the locator plate.

Contacts	Connector Part Number	Locator Plate Number	Platen Part Number	3436-1N Shut Height Setting 3640	3436-1N Shut Height Setting 3335	Strain Relief Part	Pull Tab
10	4610	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	3448-4610	3940-1
14	4614					3448-4614	3490-2
16	4616					3448-4616	1 1
20	4620					3448-4620	3490-2
24	4624		3442-9			3448-4624	3490-3
26	4626					3448-4626	1 1
30	4630	3443-96		14	14 1/2	3448-4630	3490-3
34	4634					3448-4634	3490-4
36	4636					3448-4636	1 1
40	4640					3448-4640	3490-4
50	4650					3448-4650	3490-5
60	4660					3448-4660	3490-6
64	4664					3448-4664	3490-6
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## 2.0 Procedures for Set Up

2.1 Various adjustments to the locator plate are required, depending on which plug connector or cable is being assembled. The 3M<sup>™</sup> Locator Plate 3443-96 is the recommended assembly aid. (Figure 1)

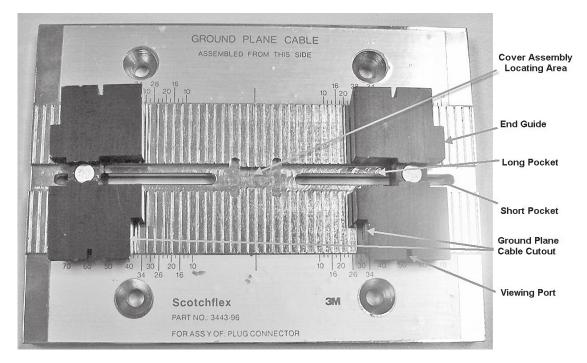


Figure 1

c.

d.

- To select an END GUIDE POSITION for the plug connectors WITH MOUNTING FLANGES, lift the end guide and rotate the end guides so that the long pockets, in the end guides face each other
- b. For the plug connectors WITHOUT MOUNTING FLANGES the short pockets should face each other.
- To select an END GUIDE POSITION for conductor count, place the end guide viewing port on the appropriate number guide on both sides of the end guides as well as on both end guides. Failure to position end guides properly will cause binding in the connector parts and cable.
- When assembling GROUND PLANE CABLE assembly is performed from the label side marked "Ground Plane Cable."

## 3.0 Procedures for Adjusting Shut Height

- 3.1 The shut height should be adjusted from the base before the locator plate is put into place. 3M<sup>™</sup> Presses 3316 and 3640 are adjusted with a knob at the top of the press. 3M<sup>™</sup> Press 3335 is adjusted with the collar on the press shaft, and 3M<sup>™</sup> Press 3830 are self-adjusting. 3436-1N is the shut height gauge to be used with 3443-96 locator plate.
- 3.2 The shut height adjustment is made from the base of the assembly press without the locator plate or platen in place.
- 3.3 Lower the handle of the press until the handle casting makes contact with the press casting. (Figure 2)
- 3.4 Place the shut height gauge across the press base. (Figure 2)

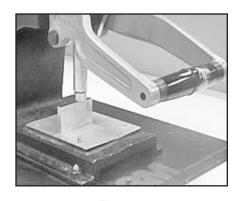


Figure 2

3.5 Rotate the shut height to lower or raise adjustment feature until the bottom of the shaft contacts the desired position on the shut height gauge. (Figure 3 and 4)

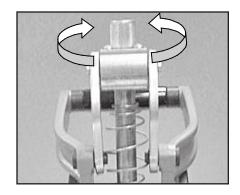


Figure 3 - Press 3640

3.6 Install the locator plate and the appropriate platen on the press. The platen should be positioned parallel with the connector body and cover.

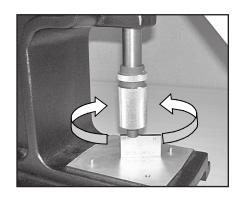


Figure 4 - Press 3335

# 4.0 Procedures for Connector/Cable Assembly

4.1 Grasp a plug cover strip between 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. Adhesive should be present on the cover. (Figure 5)

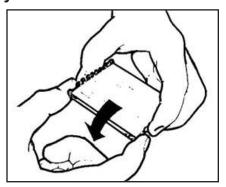


Figure 5

- 4.2 Firmly press ribbed side of cable into the alignment grooves on cover. The adhesive will help it to stay in place. Visually inspect to ensure that:
  - a. Cable is properly aligned to cover grooves.
  - b. Cable end is flush with the cover for end terminations or perpendicular to cover for midspan terminations. (Figure 6)

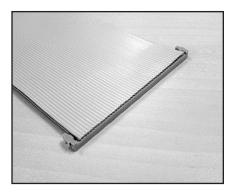


Figure 6

- 4.3 Place the cable/cover sub-assembly between the guides on the locator plate, cover side sown. (Figure 7).
- 4.4 Position and orient connector body, contacts down, over the cable/cover sub–assembly, aligning cover with the body slots. (Figure 7).

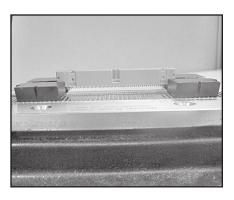


Figure 7

- 4.5 Lower the PRESS HANDLE firmly to complete the Cable/Connector Assembly. (Figure 8)
- 4.6 Raise the press handle and remove completed assembly. Visually inspect to ensure that :
  - a. Cover is fully seated and parallel with the body.
  - b. Cable is properly aligned with cover grooves.
  - c. Cover retaining devices on the body are flush with the cover end.



Figure 8

## 5.0 Procedures for Accessory Assembly

Optional accessories available for the 3M<sup>™</sup> Locator Plate 3443-96 include: Strain Relief, Pull Tab and Polarizing Key.

- 5.1 Strain Relief:
  - a. Bend cable back over the cover.
  - b. Engage one end of the strain relief onto the cover retaining device.
  - c. Snap the other end of the strain relief into posistion. (Figure 9)

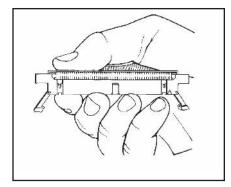


Figure 9

#### 5.2 Pull Tab

a. Slide the pull tab between the strain relief and the cable. Seal both ends together. (Figure 10)

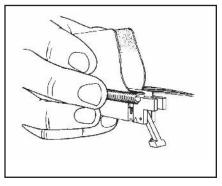


Figure 10

### 5.3 Polarizing Key

- a. Align the polarizing key with the plug connector slot. (Figure 11)
- b. Depress the tab slightly outward and push down until the hook is engaged. (Figure 12)
- c. Flex the tab front to back (do not twist) to break off. Discard tab.

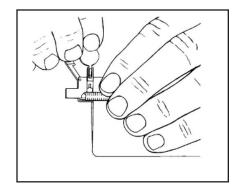


Figure 11

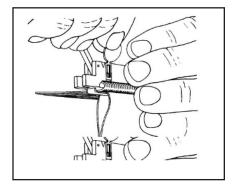


Figure 12

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