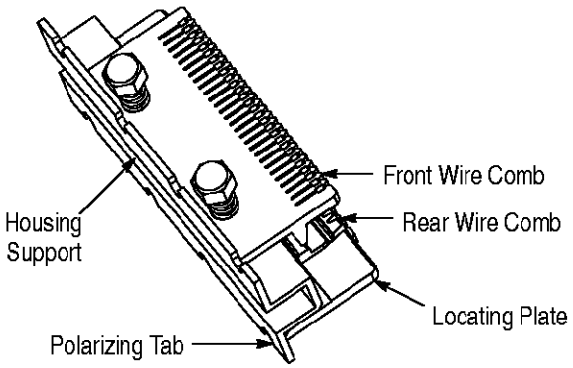
Mass Termination Assembly (MTA) .100 Connector–Holding Fixtures

Instruction Sheet
408–7994
11 MAY 00 Rev B



.100 MTA CONNECTOR	CONNECTOR–HOLDING FIXTURE		MTA APPLICATOR ASSEMBLY	MTA TOOLING ASSEMBLY
	Feed–Through	Closed End		
Without Polarization Tabs	59845–1	59844–1	59842–1▪	58039–1□ (408–6685)
	59845–3	—	58575–1 (408–4260)	
With or Without Polarization Tabs	58243–1	58242–1	59842–1▪	
Posted	58636–1	58635–1	58575–1 (408–4260)	—
For Testing (All Types)	58243–2	58242–2	59842–1▪	—
	58243–3	58242–3	58575–1 (408–4260)	

□ The tooling assembly must be used with Manual Arbor Frame Assembly 58024–1 (408–6923).

▪ This applicator assembly must be used with Pneudraulic Tool 59809–2. The applicator assembly and pneudraulic tool are no longer available for new applications, however the fixtures can be used with existing applications.

Figure 1

1. INTRODUCTION

AMP* Mass Termination Assembly (MTA) .100 Connector–Holding Fixtures listed in Figure 1 are designed to hold .100 MTA connectors and discrete wires in position for termination. The fixture is used with the MTA applicator assembly or tooling assembly (also listed in Figure 1). The fixtures are designed for feed–through (wires are not cut) or closed end (wires are cut). The connectors are available with up to 28 contact positions on 2.54–mm [.100–in.] centerline spacing. Read these instructions and referenced material thoroughly before using the fixture.

NOTE *Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.*

For information on operating the applicator or tooling assembly, refer to the instruction sheet (indicated in parenthesis in Figure 1) packaged with the tooling.

Reasons for reissue of this instruction sheet are provided in Section 7, REVISION SUMMARY.

2. DESCRIPTION

Each fixture consists of a one–piece locating plate, housing support, front wire comb, and rear wire comb. The polarizing tab is used to properly orient the applicator or tooling assembly with the fixture.

3. SETUP

Select the connector according to the color code that matches the wire size as follows:

WIRE SIZE (AWG)	CONNECTOR COLOR CODE
28	Green
26	Blue
24	Natural
22	Red

©2000 Tyco Electronics Corporation, Harrisburg, PA.
All International Rights Reserved.
*Trademark

Then select the connector size according to the required number of contact positions. Refer to Figure 1 to make sure that the fixture is compatible with the connector and method of application.

Proceed as follows:

1. Prepare the cable according to 408–9515. If using the tooling assembly (58039–1), proceed to Section 4, otherwise continue with the following steps.

2. Determine the location for the fixture on the harness board. Make sure space is provided for lengths of wire between connectors. Refer to Figure 2.

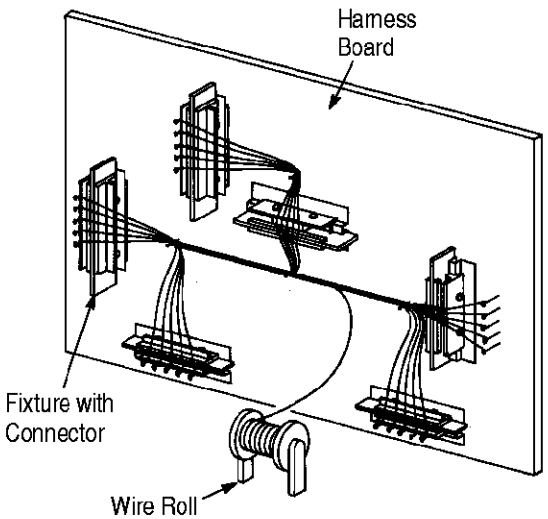


Figure 2

NOTE *The applicator assembly can be rotated 360°, however, to avoid unnecessary motion, the fixture should be positioned so that the least amount of rotation of the applicator assembly is required.*

3. Drill holes in the board for mounting the fixture. Refer to Figure 3 for recommended board layout. If using connector assembly for testing, cut a slot for the post retainer assembly.

4. Attach the fixture to the board using screws, washers, and nuts, or suitable commercially available hardware.

5. Place wire roll at a convenient location for lacing into the fixture.

4. TERMINATION PROCEDURE

Refer to Figure 4, and proceed as follows:

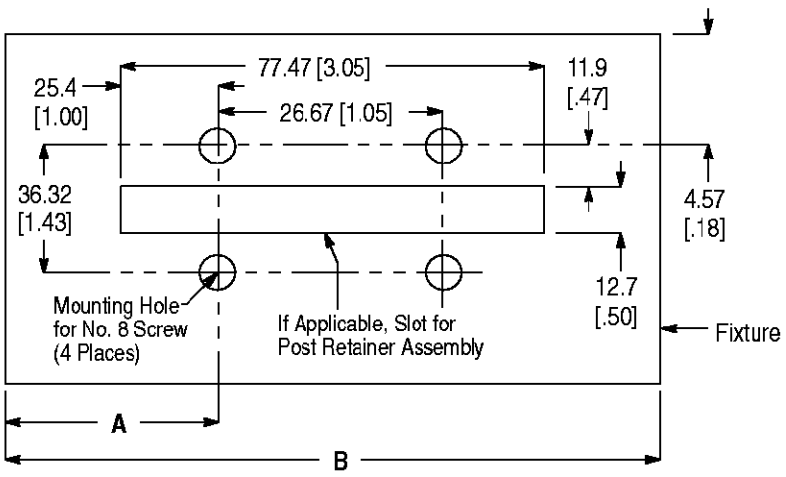
1. Spread the fixture wire combs apart, and insert the connector, mating end first, into the center of the receiving track. Make sure that the connector shoulder is behind the locating plate and the connector ribs are aligned with the slots in the wire comb.

CAUTION *The connector must be located in the center of the receiving track. Do NOT place more than two connectors end to end in the fixture.*

2. Lace a wire over the slot in the wire combs that aligns with the applicable connector contact. Make sure that the wire is straight, then press the wire into the slot until it bottoms in the wire combs. Repeat until all wires are positioned.

3. Terminate the connector according to 408–4260 (if using applicator assembly) or 408–6685 (if using tooling assembly).

Recommended Harness Board Layout



Note: Not to scale

FIXTURE	DIMENSION	
	A	B
58242–3, 58243–3, 59845–3	40.6 [1.60]	107.95 [4.25]
58242–1, 58242–2, 58243–1, 58243–2, 58635–1, 58636–1, 59844–1, 59845–1	31.8 [1.25]	90.17 [3.55]

Figure 3

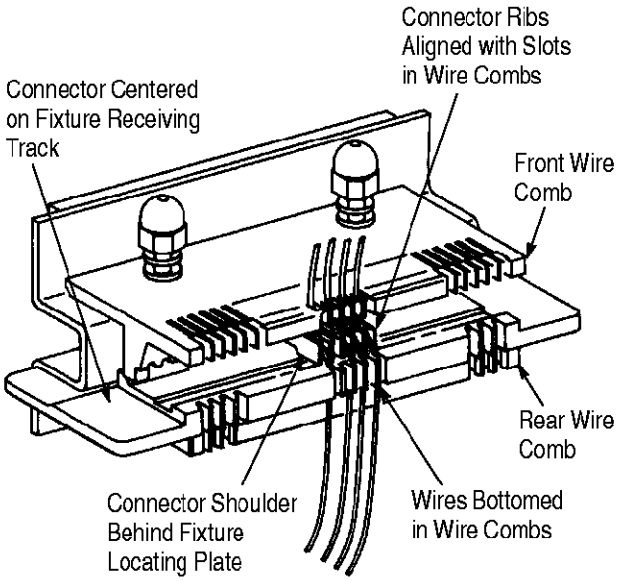


Figure 4

4. Spread the fixture wire combs apart, and lift the connector out of the fixture.

5. INSPECTING TERMINATED CONNECTOR

1. Visually inspect the connector to make sure that there is no damage to the housing or contacts.

NOTE *For detailed inspection requirements, refer to Application Specification 114–1019.*

2. If applicable, test the connector for continuity using the post retainer assembly.

NOTE *The post retainer assembly is only included with some fixtures. Post Retainer Assembly 310672–1 is available as an accessory for Fixtures 59844–1, 59845–1, and 59845–3 but cannot be used if the fixture is used with the tooling assembly (58039–1).*

6. REPLACEMENT AND REPAIR

Customer–replaceable parts are listed in Figure 5. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. Parts other than those listed should be replaced by Tyco to ensure quality and reliability. Order replacement parts through your representative, or call 1–800–526–5142, or send a facsimile of your purchase order to 717–986–7605, or write to:

CUSTOMER SERVICE (038–035)
TYCO ELECTRONICS CORPORATION
PO BOX 3608
HARRISBURG PA 17105–3608

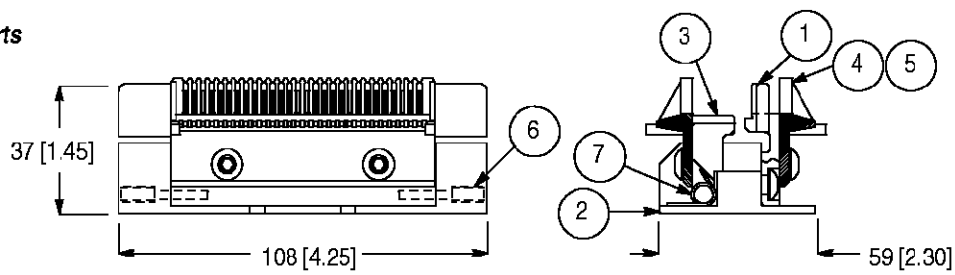
For customer repair service, please contact a representative at 1–800–526–5136.

7. REVISION SUMMARY

Revisions to this instruction sheet per EC 0990–0600–00 include:

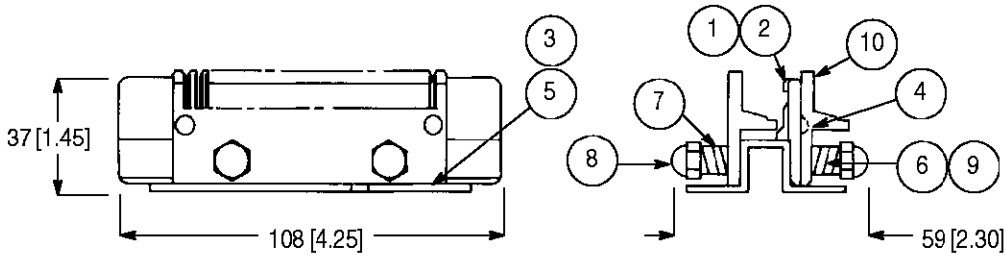
- Added Fixtures 58635–1 and 58636–1

Replacement Parts

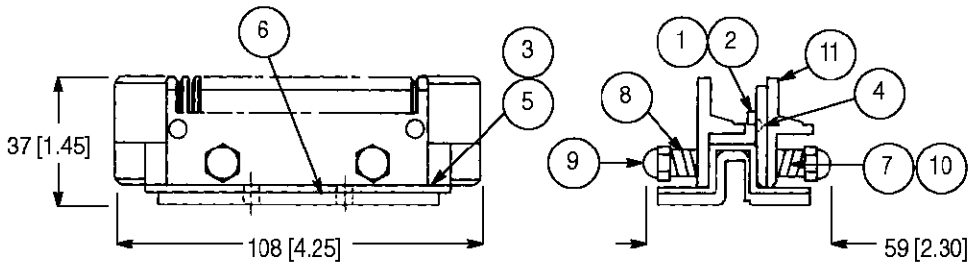


ITEM	PART NUMBER FOR FIXTURE		DESCRIPTION	QTY PER FIXTURE
	58635–1	58636–1		
1	662732–1	662733–1	BLADE, Locating	1
2	662734–1		BASE	1
3	662735–1		DOOR	1
4	310325–1		COMB	2
5	2–21002–5		SCREW, Button Head Cap, 10–32 × .25	6
6	662736–1		SCREW, Special	2
7	6–23471–9		SPRING, Torsion	2

Figure 5 (Cont'd)



ITEM	PART NUMBER FOR FIXTURE			DESCRIPTION	QTY PER FIXTURE
	59844–1	59845–1	59845–3		
1	310827–1	—	—	BLADE, Cutoff	1
2	—	310829–1	310829–1	BLADE, Locating Feed–Through	1
3	310669–1	310669–1	—	SUPPORT, Housing	1
4	21017–1	—	—	SCREW, Drive	2
5	—	—	318580–1	BASE	2
6	310667–1			SCREW, Special, .875 Lg	2
7	310667–2			SCREW, Special, .750 Lg	2
8	17613–1			NUT, Acorn	4
9	2–22281–0			SPRING	4
10	310325–1			COMB and LOCATOR	2



ITEM	PART NUMBER FOR FIXTURE						DESCRIPTION	QTY PER FIXTURE
	58242–1	58242–2	58242–3	58243–1	58243–2	58243–3		
1	313224–1	313224–1	313224–1	—	—	—	BLADE, Cutoff	1
2	—	—	—	313225–1	313225–1	313225–1	BLADE, Locating Feed–Through	1
3	310669–1	310669–1	—	310669–1	310669–1	—	SUPPORT, Housing	1
4	21017–1	21017–1	21017–1	—	—	—	SCREW, Drive	2
5	—	—	318580–1	—	—	318580–1	BASE	1
6	310672–2	310672–1	310672–1	310672–2	310672–1	310672–1	POST RETAINER ASSEMBLY	1
7	310667–1						SCREW, Special, .875 Lg	2
8	310667–2						SCREW, Special, .750 Lg	2
9	17613–1						NUT, Acorn	4
10	2–22281–0						SPRING	4
11	310325–1						COMB and LOCATOR	2

Figure 5 (End)

OCEAN CHIPS
Океан Электроники
Поставка электронных компонентов

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».

AVIC JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).

FORSTAR®

Телефон: 8 (812) 309-75-97 (многоканальный)
Факс: 8 (812) 320-03-32
Электронная почта: ocean@oceanchips.ru
Web: http://oceanchips.ru/
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А