# FIBER OPTIC DS-2 EXTENSION (FOX-2) UNIT PARTS LIST AND ORDERING INFORMATION

#### 1. GENERAL

- 1.01 This section is a cover sheet for the Telco Systems Fiber Optics Corporation Fiber Optic DS-2 Extension (FOX-2) Unit Parts List and Ordering Information. This section is reproduced with permission of Telco Systems Fiber Optics Corporation and is the equivalent of Telco practice 829-100-003, Issue 2.
- 1.02 Whenever this section is reissued the reason(s) for reissue will be listed in this paragraph.
- 1.03 This section presents a parts list for the Fiber Optic DS-2 Extension (FOX-2)
  Unit.
- 1.04 If corrections are required in the attached document, use Form-3973 as described in Section 000-010-015.
- 1.05 If equipment design and/or manufacturing problems should occur, refer to Section SW 010-522-906 for procedures on filing an Engineering complaint.

#### ORDERING PROCEDURE

2.01 For information concerning equipment and parts availability contact Telco Systems, Order Administration Department, in Norwood, Massachusetts, at:

1-800-44-SALES 1-617-551-0300

2.02 To order additional copies of this practice, use TELC 365-407-847SW as the section number.

#### PROPRIETARY

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#### 3. REPAIR/RETURN

3.01 For defective modules and assemblies contact the Repair and Return Department at the following number:

8:00 a.m. - 5:00 p.m. (617) 551-0300 - Ext. 2778

Attachment: Telco Systems Fiber Optics Corporation Fiber Optic DS-2 Extension (FOX-2) Unit Parts List and Ordering Information

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## FIBER OPTIC DS-2 EXTENSION (FOX-2) UNIT PARTS LIST AND ORDERING INFORMATION

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#### 1. SCOPE

- 1.01 This section presents a parts list for the FOX-2. In addition this section provides general parts ordering information.
- 1.02 This section was reissued to add new information.

#### 2. PARTS LIST

2.01 TABLE A provides a list of all assemblies and their part numbers. Figure 1 shows card complement of the FOX-2. This cage parts list contains all assemblies needed for the FOX-2, part of a FOX-2 to 828 installation, or a FOX-2 to FOX-2 installation.

#### 3. ORDERING INFORMATION

3.01 For information concerning the FOX-2 and parts availability contact the Telco Systems Order Administration Department in Norwood MA at (617-551-0300).

#### A. Ordering Procedure

- 3.02 A valid Purchase Order Number must be provided at the time the order is placed, to expedite the shipment of parts.
- 3.03 Alternatively, a Telco System
  Telephone order form (see
  Figure 2) accompanied by a valid
  Purchase Order Number can be sent to
  the Order Administration Department.

#### B. New Installation

- 3.04 TABLE B defines the assemblies needed to prepare the 828 for interface to FOX-2.
- C. Special Test Equipment
- 3.05 TABLE C and D, list special equipment needed to install or maintain the FOX-2.

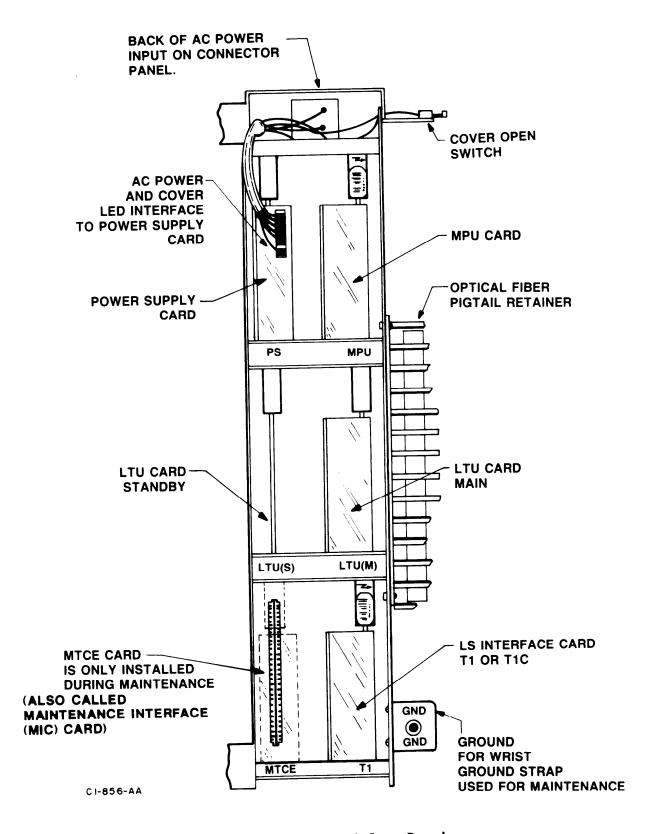


Figure 1. FOX-2 Card Cage Drawing

TABLE A. Fiber Optic DS-2 Extension Unit (FOX-2)
Assembly and Parts Number List

Part Number	Description
	BASIC FOX-2 UNIT
	Unit comes equipped with a wall mountable mounting plate. The case of the FOX-2 hooks onto, and is bolted to this plate.
	The Basic Unit Contains the following:
ACX032G1 AWX118G1 CCA150G1	Unequipped FOX-2 BOX AC Power Cord (10 Foot) FOX-2 Power Supply CARD (AC to DC Power Unit 117 Vac)
CCA002G5 CCA148G1	Control MPU Card for FOX-2 Applications MAIN Light Terminating Unit (LTU) Card
	Low Speed Interface Card (Choose one of the following)
CCA050G1 CCA124G1	LS Interface Tl card LS Interface Tl card
CCA006G1	LS Interface T1C card
	FOX-2 Protection for DS-2 Optical interface:
CCA149G1	STBY Light Terminating Unit (LTU) Card
1.  -	

TABLE A. Fiber Optic DS-2 Extension Unit (FOX-2)
Assembly and Part Number List (Cont.)

Part Number	Description
	ACCESSORIES
	Optical Interface
	If optical fibers are not planned to directly connect to the LTU cards, one of the following fiber optic connector plates could be used to interface optical fibers to pigtails. ( Choose one )
AXX057G1	Fiber Optic Connector Plate ( 4 Biconical sleeves ) OR
AXX057G2	Fiber Optic Connector Plate ( 4 FC sleeves )
	Based on Fiber Optic Connector Plate chosen, the following compatible type of fiber optic assembly is required. Quantity depends on the unit being in a protected or unprotected installation. None of these cable assemblies are required if no connector plates are used.
AWX110-19G9	Fiber optic pigtail cable assembly Biconical/FC
AWX112-1	Fiber optic pigtail cable assembly FC/FC
	Unprotected systems use 2 cables Protected systems use 4 cables Two Pigtails are needed for each LTU card used.

TABLE A. Fiber Optic DS-2 Extension Unit (FOX-2)
Assembly and Parts Number List (Cont.)

Part Number Description	
	T1 or T1C INTERFACE
AWX130G*	Tl or TlC cable contains 3 twisted pairs within a single shield. There is a 15 pin connector on one end and open ended wire at the other end, for connection to a wire wrap block.
	Tl interface requires one to four cables TlC interface requires one or two cables
AWX132G*	Local alarm interface cable with 9 pin connector.
	This connector interfaces Local, MAJOR, MINOR, and BAY alarms contact closures.
AXX066G2	Optional Breakout Box (wire wrap field) can be used in conjunction with the AWX132 cable for interface of local MAJOR, MINOR, and BAY alarms.

 $<sup>\</sup>star$  denotes length in feet.

TABLE B. Fiber Optic DS-2 Extension Unit (FOX-2) Installation with 828 Multiplexer Requirements

Part Number	Description
	FOX-2 with 828 APPLICATION
CCA148G1 CCA149G1	MAIN Light Terminating Unit (LTU) Card STBY Light Terminating Unit (LTU) Card
	Note: When the FOX-2 is configured with an 828 Multiplexer unit, LTU cards will be installed in the 828 unit. This is the same LTU card used in the FOX-2, and fits in a low speed slot of the 828. The 828M or 828F receiving the LTU cards must also be equipped with an CCA002G20 MPU card.
	Unprotected system uses MAIN LTU card only, installed in right hand connector of the LS slot.
	Protected system uses both STBY and MAIN LTU cards, with the standby card in the left connector of the slot.
	828M/F
	The 828M must be equipped with a Power Supply (PSX006-2) to use LTU cards.
AXX058G1	Fiber Optic trough kit. (Installed at the 828 and 828F cage assemblies when LTU cards are used with cage P.N ACX002).
	AUAUUZ).

TABLE B. Fiber Optic DS-2 Extension Unit (FOX-2)
Installation with 828 Multiplexer Requirements (Cont.)

Part Number	Description
	828A/828AF
	These units are 23 inches wide and equipped with fiber trough of limited capacity.
	In an 828AF, three LS slots may be equipped with protected LTU cards (up to 6 LTU cards), with no air baffle needed. (The 828A and 828AF manuals may have other requirements for air baffles. The addition of LTU cards is the main consideration.)
	In an 828AF, two LS slots may be equipped with protected LTU cards (up to 4 LTU cards), with no air baffle being needed.
	Additional LTU cards, up to 12 (6 main, 6 standby), will require an air baffle unit for addition fiber trough space, as well as heat removal.
ACX033G1	23 inch Air Baffle/Fiber Tray Assembly. This unit contains a fiber trough for additional LTU fiber cable space. This unit is required with 828A units using over three slots equipped with protected LTUs and 828AF units using over two slots equipped with protected LTU units.
	(See Installation Section for other requirement on 828 units).

TABLE C. Recommended Test Equipment

EQU	JIPMENT	APPLICATION	PART NUMBER
	otical Power eter	Optical Power Measurement Photodyne 22XLA with 575 head for longwave 1310 nm.	
	otical, variable tenuator	Optical loopback tests NEC OD-8511DSB single mode longwave 1310 nm or equivalent with NEC to Biconical adapter	
3. (1) Di	igital VOM	Fluke 8020B or equivalent.	
Er Tr	S-1 and DS-1C cror Rate cansmit and eccive units	To perform module and system Tests Tautron S5104 or equivalent	
•	(C Maintenance nterface Card)	To permit replacement of Tl Interface and MPU card replacement.	CCA009G1
	OR		
•	(C Maintenance nterface Card)	To permit testing of T1/T1C interface and MPU card replacement.	CCA058G1E

TABLE D. Recommended Tools and Accessories

EQUIPMENT	APPLICATION	PART NUMBER
1. (1) Anti-static Wri Strap	st Circuit card protection against random static electrical discharge.	EMX031-1
2. (1) Protective Anti static Package	<ul> <li>Circuit card protection against random static electrical dis- charge while the module is re- moved from the equipment cage.</li> </ul>	PKG033-1
3. (2) 310 Patch Cords to connector compatible with Test set	310 plugs fit patch panel	
4. (2) 310 Patch Cords to 310	DS-1 interface tests loop backs of T1 or T1C lines at a Cross Connect Panel.	
5. (4) Fiber optic tes cables, 6 foo long, equippe with proper conn. for your system	t optical loopback testing	AWX110-19G9 AWX112-1
6. (1) Fault Test Prob	e Fault and alarm testing with test link.	HPS015-1
	Optional Customer fabricated.	
4. Special LS Test Cable	LS connectors from test set wired to a 15 pin D type connector for direct LS test signal interface.	
5. Special LS Test fixture	LS loop back wired into a 15 pin connector.	

A4-349-AB

### Telephone Equipment Order

TELCO PURCHASE ORDER NO.				
QTY.	DESCRIPTION OF ITEM	UNIT PRICE	TOTAL PRICE	
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CON.	TINUED ON ADDITIONAL SHEETS YES NO	TOTAL THIS PAGE		

Figure 2. Telephone Equipment Order Form

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