1. GENERAL

1.1 Document Purpose
This document provides installation information for the Charles Industries 3632–09 Error Correction Unit (ECU). Additional information is available in Section 363–204–201.

1.2 Document Status
This document is reprinted to provide a general editorial update.

1.3 Equipment Function
The 3632–09 operates in a Charles 360/363 D4 channel bank with a 3632–00 DS0–DP or 3632–04 56 KB OCU–DP. The 3632–09 provides error correction on a data channel caused by noise or fading of the T1 facility. (Errors incurred on the subscriber’s loop are not affected). The 3632–09 corrects all one–bit and two–bit errors and some three–bit errors incurred in each data byte. Use of the 3632–09 ensures that the data channel will meet the error rate objectives of the Bell System Digital Data Service. A Charles 360/363 D4 Channel Bank equipped with the 3632–09 is compatible with an AT&T Carrier Terminal equipped with either a 56 KB/s OCU DP or a DS0 DP and associated error corrector when terminating opposite ends of the same carrier facility.

2. INSPECTION

2.1 Inspect for Damages
Inspect the equipment thoroughly upon delivery. If the equipment has been damaged in transit, immediately report the extent of damage to the transportation company.
2.2 Equipment Identification
Charles Industries' equipment is identified by a model and issue number imprinted on the front panel or located elsewhere on the equipment. Each time a major engineering design change is made on the equipment, the issue number is advanced by 1 and imprinted on subsequent units manufactured. Therefore, be sure to include both the model number and its issue number when making inquiries about the equipment.

2.3 Static Concerns
Each unit is shipped in static-protective packaging to prevent electrostatic charges from damaging static-sensitive devices. Use approved static-preventive measures, such as static-conductive wrist straps and a static-dissipative mat, when handling units outside of their protective packaging. A unit intended for future use should be tested as soon as possible and returned to its original protective packaging for storage.

![STATIC-SENSITIVE]

This equipment contains static-sensitive electronic devices. To prevent electrostatic charges from damaging static-sensitive units:
- Use approved static preventive measures (such as a static-conductive wrist strap and a static-dissipative mat) at all times whenever touching units outside of their original, shipped static-protective packaging.
- Do not ship or store units near strong electrostatic, electromagnetic, or magnetic fields.
- Use static-protective packaging for shipping or storage.

*CAUTION

3. INSTALLER CONNECTIONS
Extend the ribbon cable attached to the front of the 3632–09 ECU to the connector on the front of its associated 3632–04 Office Channel Unit Dataport (OCU DP) or 3632–00 Digital Signal Level Zero Dataport (DS0 DP).

4. OPTIONING INFORMATION
The 3632–09 requires no optioning.

5. MOUNTING

**CAUTION**
Installation and removal of modules should be done with care. Do not force a module into place. If excessive resistance is encountered while installing a module, remove the module and check the card guides and connector to verify proper alignment and the absence of foreign material.

The 3632–09 ECU serves as a companion unit to either a 3632–04 OCU DP or a 3632–00 DS0 DP. It is installed in the adjacent channel slot on the right of its associated channel unit. The two units are then interconnected via a ribbon cable attached to the 3632–09 and extended to a connector on the front panel of the 3632–04 OCU DP or 3632–00 DS0 DP.

The 3632–09 is equipped a top–hinged insert/eject lever which ensures positive connection of the channel unit’s card–edge connector to the backplane connector.
6. TESTING

If a 3632–09 is suspected of being the cause of faulty data channel operation, temporarily remove the error correctors at both ends of the digital carrier line. If service is restored, change out the error correctors, one unit at a time, to locate the faulty unit.

![ECU Block Diagram](image)

Notes:
1. PC board connector pin.
2. Ribbon cable connector.
3. Primary transmission path.
4. Signal flow direction.
5. The ECU plugs into the channel slot immediately to the right of a DS0 dataport or a 56 KB dataport.
6. Channel slots 12 & 24 cannot be provided with error correction.

Figure 2. 3632–09 ECU Block Diagram

7. TECHNICAL ASSISTANCE

If technical assistance is required, contact Charles Industries' Technical Services Center at:

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