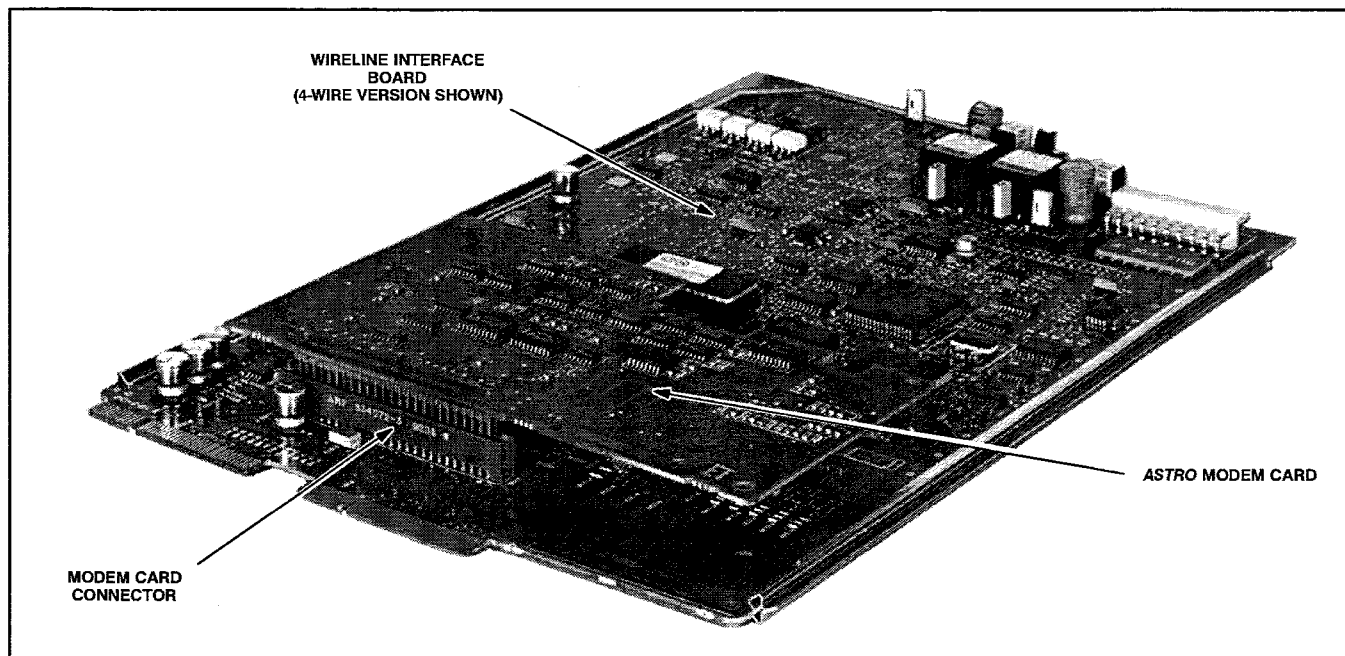


# RA/RT Quantar Repeater to Quantar Base Station Interface

T57 50 pin Telco Adapter*				T57 50 pin Telco Adapter*			
Quantar	Function		RJ45	Cable	RJ45	Function	Quantar
J-17			(568A)		(568A)		J-17
1	L1+	←	1	Blue	→	1	L1+
26	L1-	←	2	Orange	→	2	L1-
2	L2+	→	5	Green	→	5	L2+
27	L2-	→	4	Red	→	4	L2-
18	RDStat+	→	8	Gray	→	8	RDStat+
47	Ext PTT-	←	3	Black	→	3	Ext PTT-
32	Gnd	←					Gnd
43	RDStat-	←					RDStat-
8	5V	←					5V
22	Ext PTT+	←					Ext PTT+
6	Spare	←	6	Yellow	→	6	Spare
7	Gnd	←	7	Brown	→	7	Gnd
	*Allen Tel AT153K-M8						

Board TLN 3265A  
Stocks CLN 8211A\*  
4385211004



**Figure 1.** ASTRO Modem Card Installed on Wireline Interface Board

## 1 DESCRIPTION

Option X437AA provides a single ASTRO Modem Card for use with *Quantar* station products. The ASTRO Modem Card provides the interface between the station and the wireline in systems using ASTRO 9.6 kbps signaling. The card connects to the Wireline Interface Board, as shown in Figure 1. Note that 8-wire Wireline Interface Boards are equipped with connectors for two ASTRO modem cards.

### General Description

**Note:** The ASTRO modem card contains no jumpers or switches and requires no adjustments. The card is auto-configured upon station power-up.

The modem card accepts ASTRO modem signaling from the wireline and converts the signal to detected data, which is then fed to the Station Control Module for further processing. Data from the Station Control Module is fed to the modem card, which converts the signal to an ASTRO modem signal and outputs the signal to the wireline. (Refer to the Wireline Interface Board sections in this manual for block diagrams showing the interface between the ASTRO modem card and the wireline/station.)

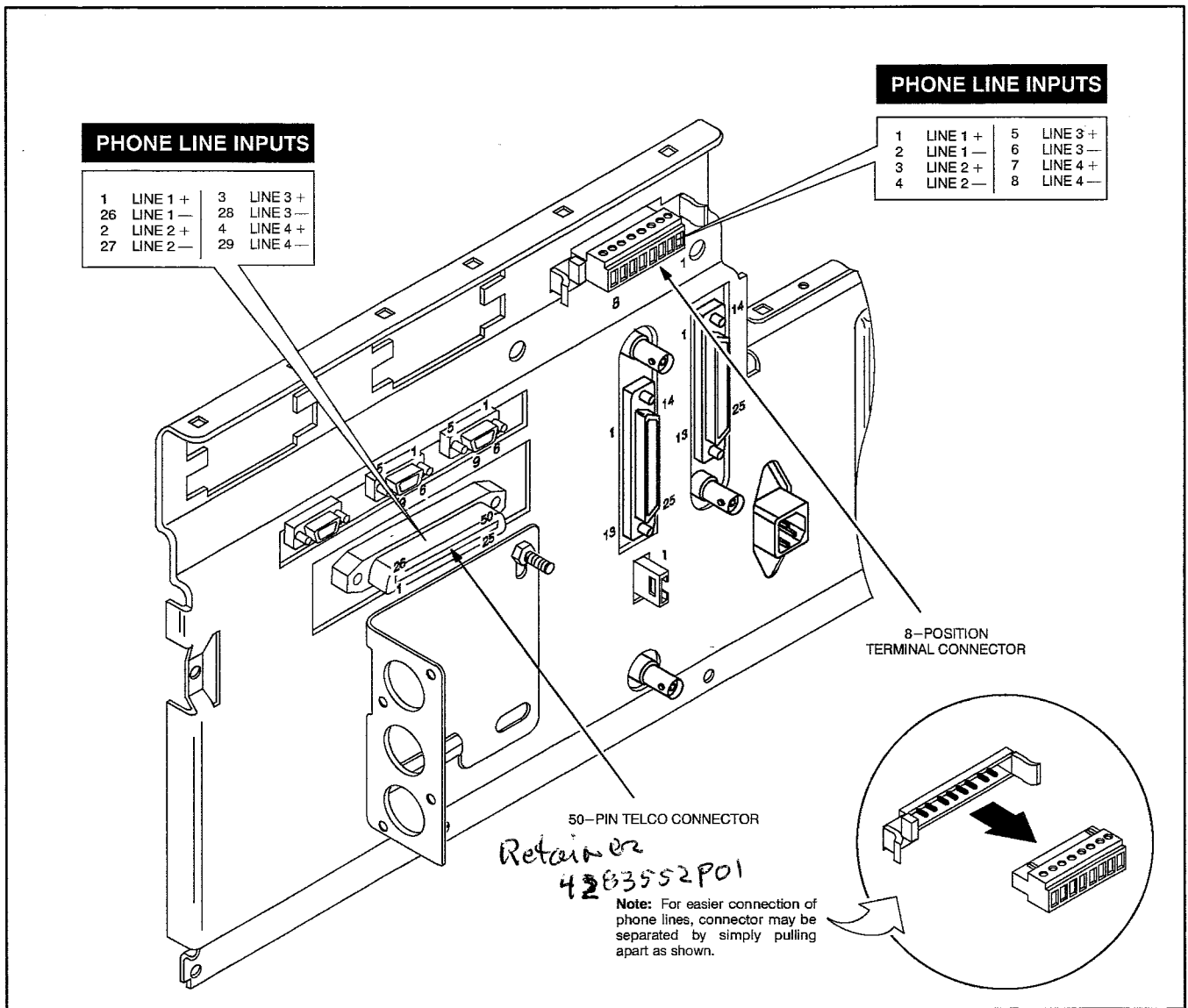
## Connecting Telephone Lines (Continued)

### Location of Telephone Line Connections

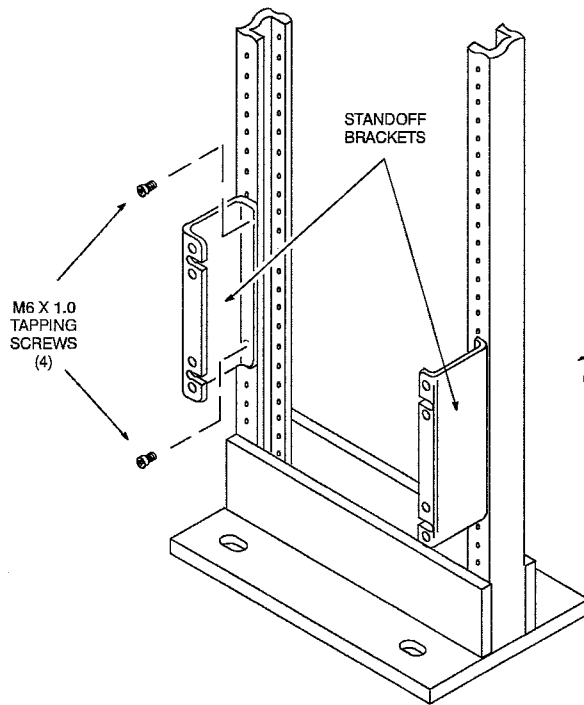
For added convenience, telephone line connections may be made in one of two locations on the station rear panel.

- 50-pin Telco Systems Connector
- Orange 8-Position Screw Terminal Connector

The location of the telephone line connections is shown in Figure 26. Note that these connections are **not** surge or transient protected. Refer to *Standards and Guidelines for Communication Sites (R56)* 68P81089E50-A for details.

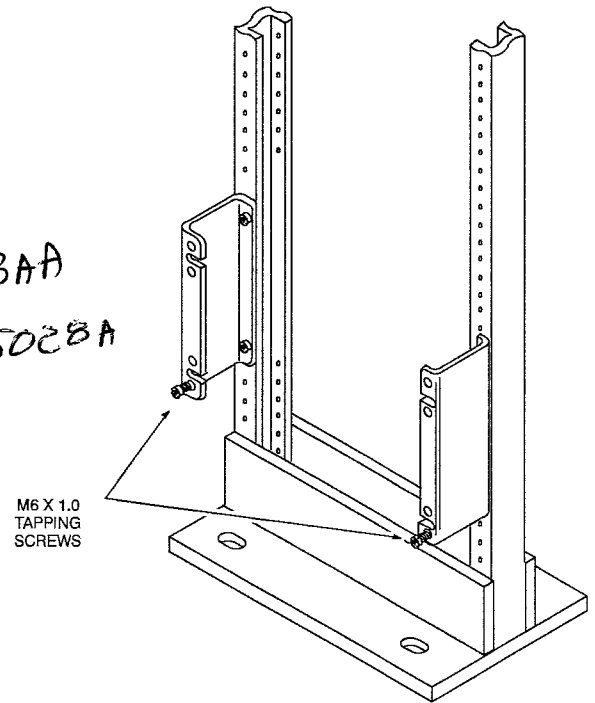


**Figure 26.** Two Locations for Telephone Line Connections

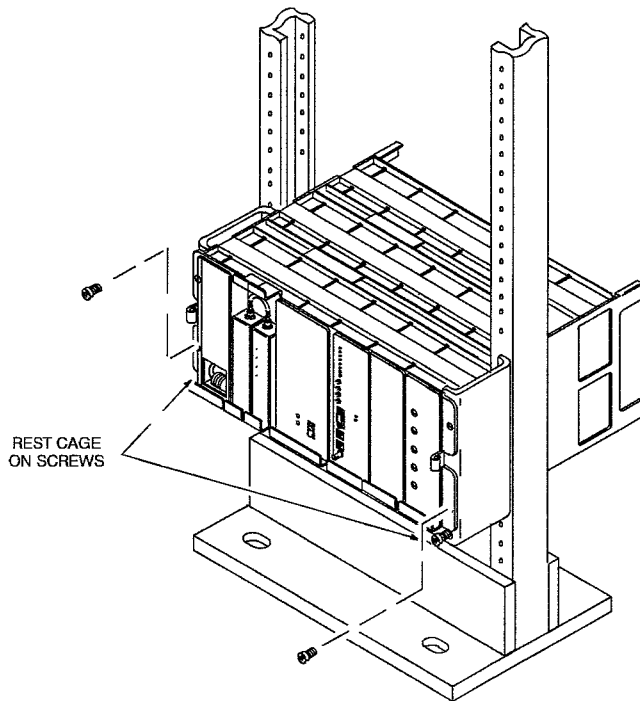


**1** Position standoff brackets at desired position on rack (as shown). Secure to rack using M6 x 1.0 tapping screws.

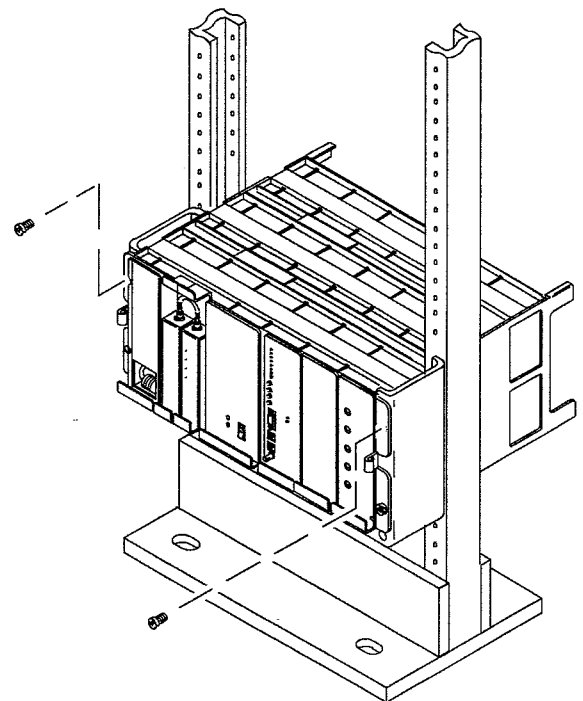
X 153AA  
TTP 5028A



**2** Partially install M6 x 1.0 tapping screws in bottom holes in brackets, as shown.



**3** Rest cage on lower two screws and install two M6 x 1.0 tapping screws in holes as shown. Tighten securely.



**4** Remove two screws used to support cage and install in the upper two holes of the brackets. Tighten securely.

**Figure 11.** Installation Procedure for Rack Standoff Brackets

## Physical Dimensions and Clearances (Continued)

### 30" x 20" Cabinet

Figure 5 shows the physical dimensions for a 30" x 20" cabinet (Option X52AA). Minimum recommended clearances are 30" (front) and 36" (rear) for installation access. Refer to Equipment Ventilation on Page 3 for recommended ventilation clearances.

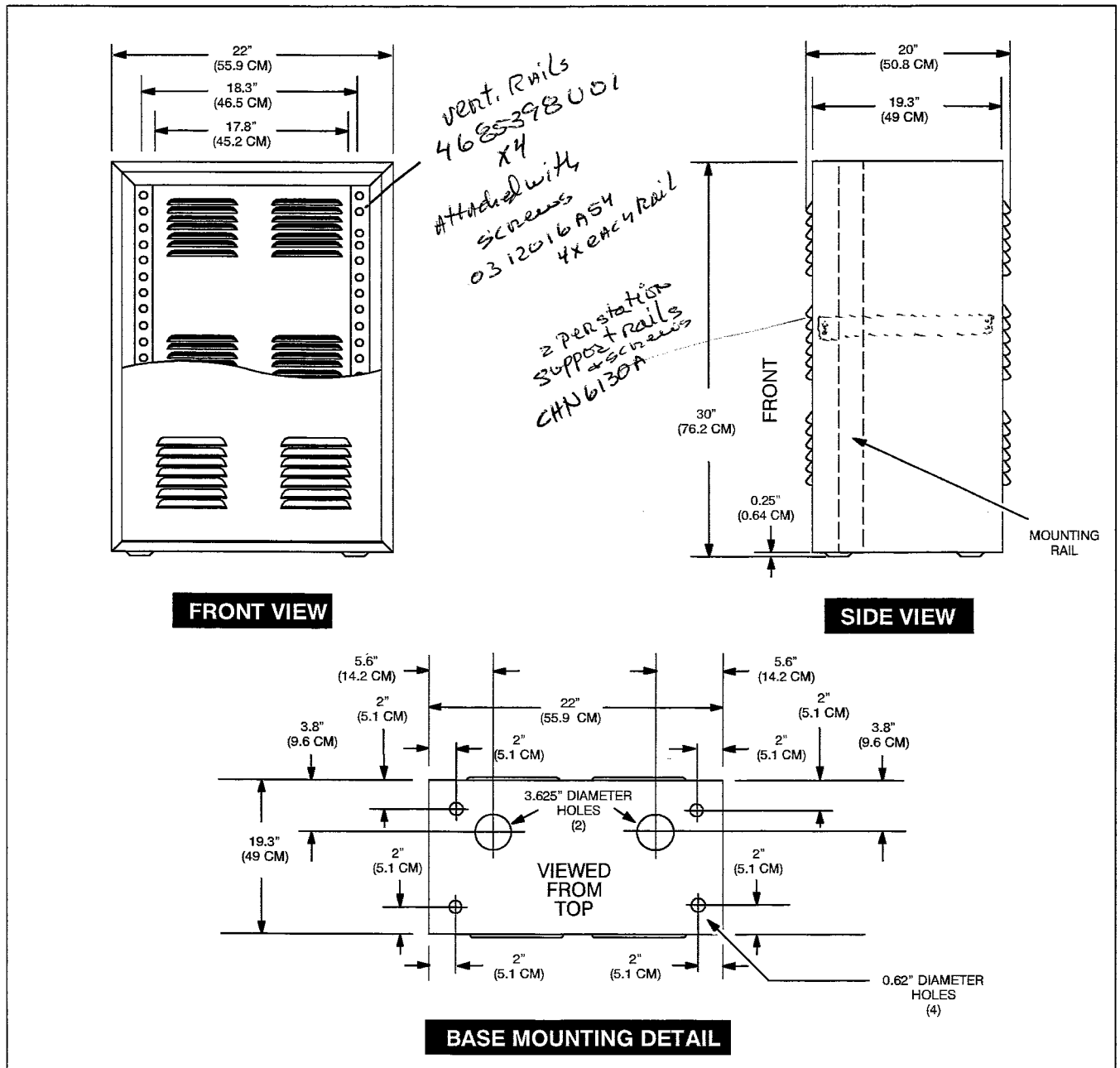


Figure 5. 30" x 20" Cabinet Dimensions

## Power Supply Connections (Continued)

**Important!** Connect the charged battery to the station **before** applying AC power. Failure to do so may prevent the Power Supply Module from reverting to battery power upon AC failure.

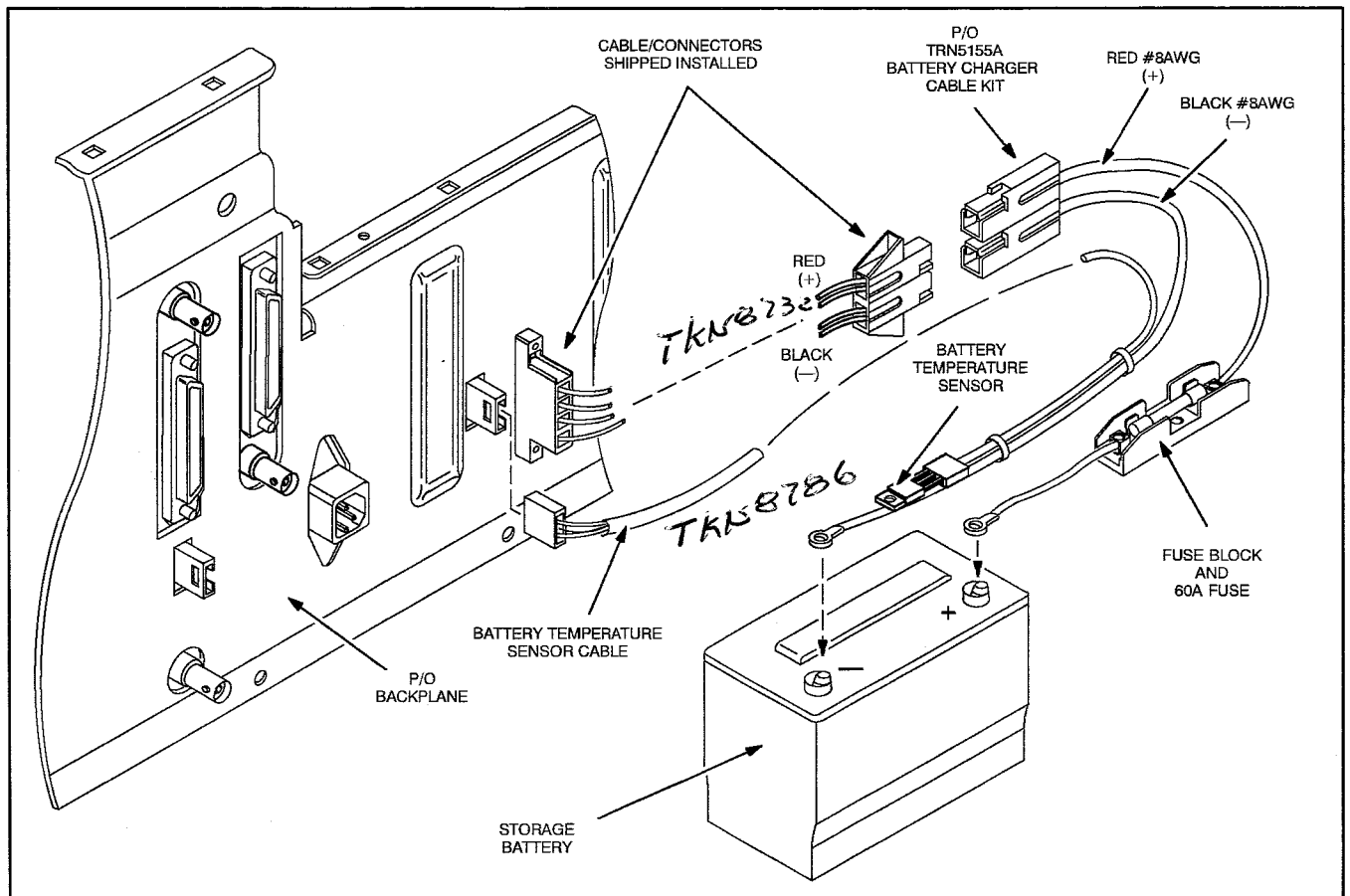
**Important!** For Motorola Power Supply Modules with battery charging capability, the card edge connector used to connect to an external battery (located on the backplane) **may not** be used as a secondary source of dc output power. In order to prevent charging a battery with one or more dead cells, the supply is designed to provide charging current only if the battery is above +21.5 V (High Power Supplies) or +10.5 V (Low Power Supplies).

**Important!** Be sure to connect the battery cables **exactly** as shown in the illustration below, making certain to observe wire colors and polarities.

## Storage Battery Connections

Stations with a power supply module equipped with the battery charger/revert option offer the capability of reverting to battery backup power in the event of an ac power failure. Connections associated with the battery charger/revert feature are:

- **Charger/Revert Cable** — the station is shipped with a 4-wire cable terminated in a heavy duty 2-position connector; cable kit TRN5155A (shipped with station) contains mating connector, two 10' lengths of red and black #8 AWG gauge wires, a fuse block and 60A fuse, and crimp-on ring lugs. Make connections to the storage battery as shown in Figure 15.
- **Battery Temperature Cable** — thermistor (TKN8786A) and cable (TKN8732A) are shipped with charger-style power supply; cable with three wires carries a variable resistance signal from the thermistor which is mounted in close proximity to storage battery; resistance is proportional to battery temperature and is used by diagnostic circuitry in power supply module. Make thermistor connections as shown in Figure 15.



**Figure 15.** Making Connections to Storage Battery