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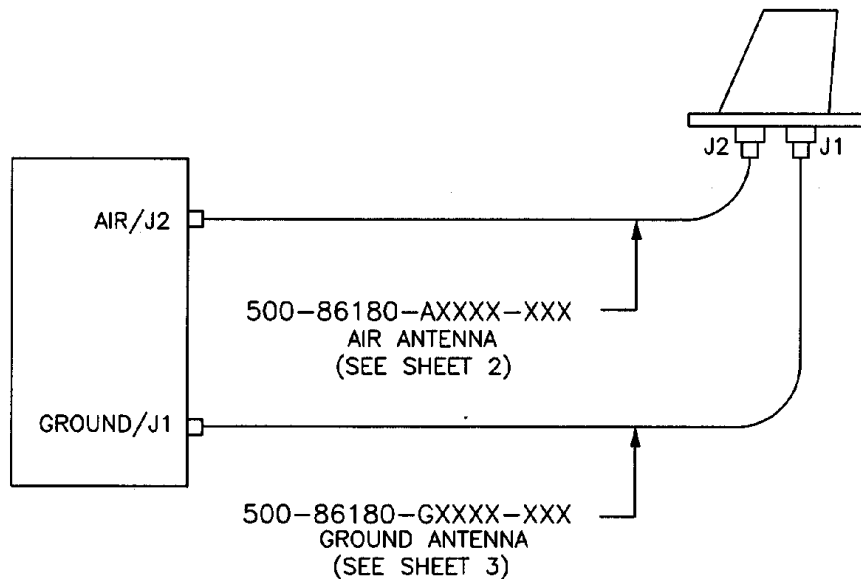
DWG. NO. 500-86180 SHEET 1 REV. N/C

REVISIONS						DATE	APPROVED
EDN	SHEET	ZONE	REV.	BRIEF DESCRIPTION (SEE EDN FOR COMPLETE CHANGE DETAILS)			
13110	1		N/C	NEW RELEASE		1/17/01	<i>David S. Howell</i>

**NOTES: UNLESS OTHERWISE SPECIFIED**

- 1 LABEL BOTH ENDS OF CABLE.  
 COVER ALL LABELS WITH CLEAR HEAT SHRINK.  
 APPLY BLACK ADHESIVE SHRINK TUBING ACCORDING  
 TO ECS WORK INSTRUCTION WI007.
2. MARK OUTSIDE OF BOX WITH CONTENTS DESCRIPTION,  
 P.O. # AND SERIAL # PER EXAMPLE:  
 AIRCELL RF COAX CABLE  
 P/N 500-86180-XXXX-XXX  
 P.O. # XXXXX  
 SER # EFXXXX
3. COAXIAL CABLE ASSEMBLY LENGTH TOLERANCE, UNLESS OTHERWISE NOTED;

LENGTH	≤ 12	12-120	> 120
TOL	+0.5/-0.0	+3.5/-0.0	+5.5/-0.0
4. INCLUDE APPROPRIATE TEST DOCUMENTATION WITH EACH SET.
5. TEST CABLES AT 900 MHz.  
 ATTENUATION: ≤ 1.5 dB FOR AIR ANTENNA CABLE.  
 ATTENUATION: ≤ 3.0 dB FOR GROUND ANTENNA CABLE.  
 VSWR: ≤ 1.4:1 FOR AIR ANTENNA CABLE.  
 VSWR: ≤ 1.5:1 FOR GROUND ANTENNA CABLE.
- 6 DO NOT TERMINATE CONNECTOR. TERMINATE PIN CONTACT FOR TESTING.  
 AFTER TESTING, REMOVE CONNECTOR AND COVER CONTACT WITH HEAT SHRINK.  
 BAG CONNECTOR, LABEL, AND HEAT SHRINK AND SHIP WITH CABLE ASSEMBLY.



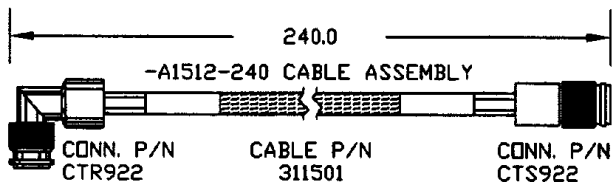
ALL LENGTHS IN INCHES		ECS ELECTRONIC CABLE SPECIALISTS FRANKLIN, WI 53133 PHONE: (414) 421-5300	
APPROVALS	DATE	TITLE: AIRCELL AGT.01 RF COAX CABLES	
DESIGNED BY: C. CHAPMAN	01/04/01	SIZE: C	QTY: 66197
DESIGNED BY:	1/17/01	LEVEL:	DWG NO. 500-86180
PROJECT ENG:		SCALE:	EFFECTIVITY:
APPROVED BY: <i>David S. Howell</i>	1/17/01	SHEET 1 OF 3	

# AIR ANTENNA CABLE

CONNECTOR ● LRU (TABLE 2)  
 \*CABLE TYPE (TABLE 1)  
 AIR ANT. CABLE  
**P/N 500-86180-AXXX-XXX**  
 CONNECTOR ● ANTENNA (TABLE 2)  
 LENGTH IN INCHES

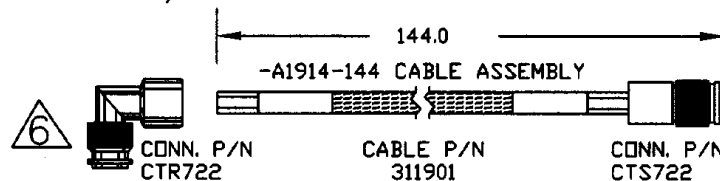
## EXAMPLE TERMINATED CABLE ASSEMBLY

(EXAMPLE : 500-86180-A1512-240 = 240" AIR ANTENNA ASSEMBLY OF 311501 WITH A CTS922 & CTR922 CONNECTOR TERMINATED ON BOTH ENDS OF CABLE. SEE TABLES BELOW).



## EXAMPLE UNTERMINATED CABLE ASSEMBLY

(EXAMPLE : 500-86180-A1914-144 = 144" AIR ANTENNA ASSEMBLY OF 311901 WITH A CTS722 CONNECTOR TERMINATED AND CTR722 UNTERMINATED (PIN CONTACT TERMINATED FOR TESTING). SEE TABLES BELOW).



### CABLE LABELING



P/N 500-86180-AXXX-XXX  
 SER# EFXXXX  
 AIR/J2

**TABLE 1**

"XX"	*CABLE TYPE	CONNECTOR	MAX LENGTH IN INCHES
14	3C142B	CTS722 OR CTR722	120
19	311901	CTS722 OR CTR722	144
16	311601	CTS922 OR CTR922	198
15	311501	CTS922 OR CTR922	240
12	311201	CTS122 OR CTR122	318
08	310801	CTS022 OR CTR022	480

\*CABLE TYPE DETERMINED BY LENGTH OF CABLE

**TABLE 2**

"X"	TNC CONNECTOR	
1	TERMINATED 180 DEG CONNECTOR	(CTSXXX)
2	TERMINATED 90 DEG CONNECTOR	(CTRXXX)
3	 UNTERMINATED 180 DEG CONNECTOR	(CTSXXX)
4	 UNTERMINATED 90 DEG CONNECTOR	(CTRXXX)

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SIZE	CODE	LEVEL	DRG NO.
C	66197		500-86180
SCALE:	SPECIMEN:	SHEET 2 OF 3	

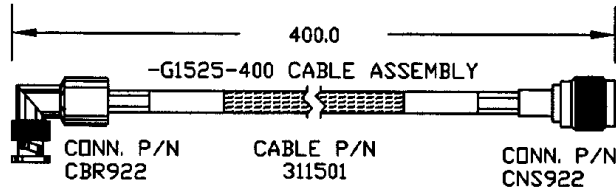
NOTES: SEE SHEET 1


# GROUND ANTENNA CABLE

CONNECTOR @ LRU (TABLE 2)  
 \*CABLE TYPE (TABLE 1)  
 GROUND ANT. CABLE  
**P/N 500-86180-GXXXX-XXX**  
 CONNECTOR @ ANTENNA (TABLE 3)  
 LENGTH IN INCHES

### EXAMPLE TERMINATED CABLE ASSEMBLY

(EXAMPLE : 500-86180-G1525-400 = 400" GROUND ANTENNA ASSEMBLY OF 311501 WITH A CBR922 & CNS922 CONNECTOR TERMINATED ON BOTH ENDS OF CABLE. SEE TABLES BELOW).



CABLE LABELING   
 P/N 500-86180-GXXXX-XXX  
 SER# EFXXXX  
 GND/J1

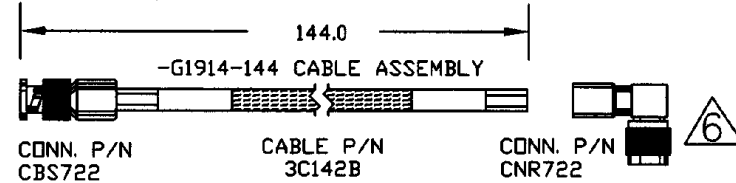
**TABLE 1**

"XX"	*CABLE TYPE	LRU CONNECTOR	ANTENNA CONNECTOR	MAXIMUM LENGTH IN INCHES
14	3C142B	CBS722 OR CBR722	CNS722 OR CNR722	240
19	311901	CBS722 OR CBR722	CNS722 OR CNR722	288
16	311601	CBS922 OR CBR922	CNS922 OR CNR922	372
15	311501	CBS922 OR CBR922	CNS922 OR CNR922	456
12	311201	CBS122 OR CBR122	CNS122 OR CNR122	576



\*CABLE TYPE DETERMINED BY LENGTH OF CABLE

### EXAMPLE UNTERMINATED CABLE ASSEMBLY



(EXAMPLE : 500-86180-G1418-144 = 144" GROUND ANTENNA ASSEMBLY OF 3C142B WITH A CBS722 CONNECTOR TERMINATED AND CNR722 UNTERMINATED (PIN CONTACT TERMINATED FOR TESTING). SEE TABLES BELOW).




**TABLE 2**

"X"	"N" CONNECTOR @ LRU	
1	TERMINATED 180 DEG CONNECTOR	(CBSXXX)
2	TERMINATED 90 DEG CONNECTOR	(CBRXXX)
3	 UNTERMINATED 180 DEG CONNECTOR	(CBSXXX)
4	 UNTERMINATED 90 DEG CONNECTOR	(CBRXXX)

**TABLE 3**

"X"	"N" CONNECTOR @ ANTENNA	
5	TERMINATED 180 DEG CONNECTOR	(CNSXXX)
6	TERMINATED 90 DEG CONNECTOR	(CNRXXX)
7	 UNTERMINATED 180 DEG CONNECTOR	(CNSXXX)
8	 UNTERMINATED 90 DEG CONNECTOR	(CNRXXX)

NOTES: SEE SHEET 1

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SIZE	CAGE CODE	LEVEL	DRW. NO.
C	66197		500-86180
SCALE	EFFECTIVITY	SHEET 3 OF 3	