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DWG NO.	SHEET	REV
500-82290	1	C

1

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CAD GENERATED DOCUMENT

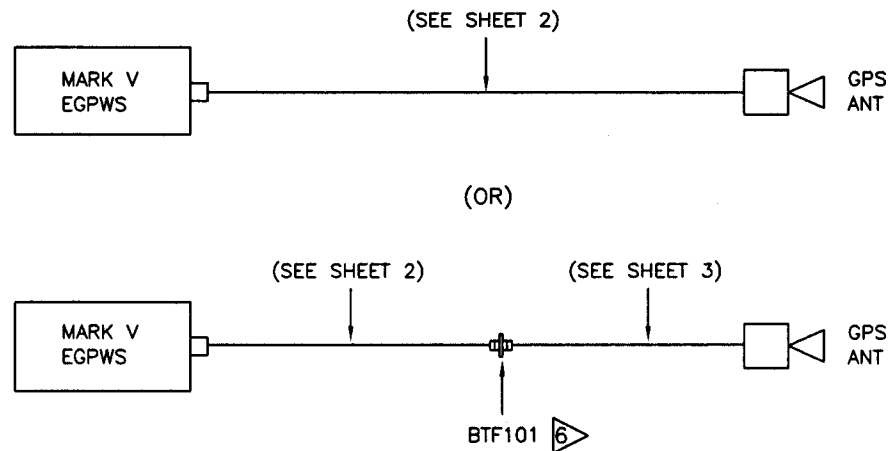
ANY CHANGES TO THIS DOCUMENT MUST BE SUBMITTED TO THE DESIGN/DRAFTING DEPARTMENT FOR PROPER UPDATE

REVISIONS

ECH	ZONE	REV.	BRIEF DESCRIPTION (SEE ECH FOR COMPLETE CHANGE DETAILS)	DATE	APPROVED
8684	A1	N/C	NEW RELEASE	3/24/99	MCT
10230	A1	A	ADD ALT PART NUMBERS	11/06/99	MCT
17299	A1	B	DELETED "ALLIED SIGNAL" FROM TITLE	3/26/03	GJS
21523	B4	C	CHANGED NOTE 4 AND ADDED NOTE 7	12/3/04	<i>83/K</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 WI0007.
2. MARK OUTSIDE OF BOX WITH P.O. #, SERIAL #, AND CONTENTS DESCRIPTION PER EXAMPLE:
P.O. # XXXXX
SER # EGXXXX
500-82290-XXX-XXX-X EGPWS/GPS RF COAX ANT. CABLE
3. INCLUDE APPROPRIATE TEST DOCUMENTATION WITH EACH CABLE.
4. TEST WITH MARKER SET AT 1575.42 MHz.
ATTENUATION: FOR 500-82290-XXX-X3X-A < 8 dB.
ATTENUATION: FOR 500-82290-XXX-X3X-B < CALCULATED LOSS PER NOTE 7.
ATTENUATION: FOR 500-82290-XXX-XXX-C < CALCULATED LOSS PER NOTE 7.
ATTENUATION: FOR 500-82290-XXX-XXX-B WITH 500-82290-XXX-XXX-C < 8 dB.
VSWR: ≤ 1.50:1 FOR EACH ANT. RUN AND CABLE.
5. MANUFACTURE CABLE ASSEMBLIES WITHIN TOLERANCE PER ECS WORK INSTRUCTION WI009.
- 6 A F/F TNC ADAPTER, ECS P/N BTF101, IS REQUIRED FOR MULTIPLE ANTENNA CABLE RUNS. (BTF101 TO BE ORDERED SEPARATELY)
7. CALCULATED LOSS = CABLE LOSS (dB/FT) x LENGTH (FT) x 1.15 + 0.09 dB. CABLE LOSS PER FOOT IS SPECIFIED IN TABLE 1 (PAGE 2 OR 3).



ALL LENGTHS IN INCHES		ECS ELECTRONIC CABLE SPECIALISTS FRANKLIN, WI 53132 PHONE: (414) 421-5300	
APPROVALS	DATE	TITLE : MARK V EGPWS : GPS RF COAX ANTENNA CABLES	
DRAWN BY: C CHAPMAN	03/19/99	SIZE	CAGE CODE
CHECKED BY: C CHAPMAN	03/24/99	B66197	LEVEL
DESIGNED BY:		DWG NO.	500-82290
PROJECT ENG: M TAUBENHEIM	03/24/99	SCALE	SHEET 1 OF 3
ENG. MGR:			

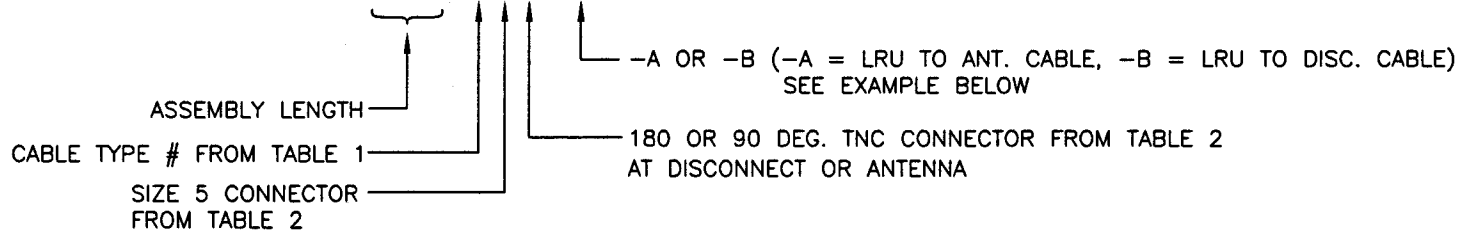
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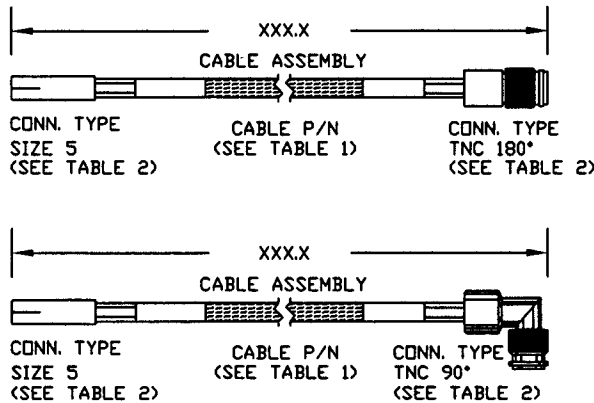
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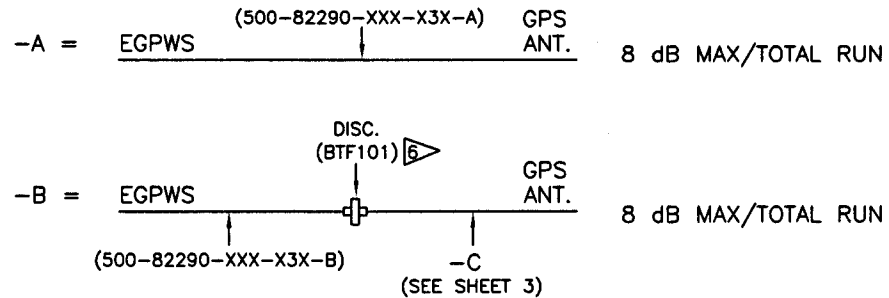
P/N 500-82290-XXX-X3X-X (ALL LENGTHS IN INCHES)



CABLE ASSEMBLY CONFIGURATION



EXAMPLE : 500-82290-168-131-A = 168" ASSEMBLY OF 3C142B WITH A 620021 & CTS722 CONNECTOR AND ONLY A SINGLE (-A) ANT. CABLE IS REQUIRED FOR ENTIRE ANT. RUN.



CABLE LABELING

500-82290-XXX-X3X-X
SER# EGXXXX
GPS ANT.

TABLE 1 (ECS COAX CABLE)

2	311901	50 OHM COAX, .157 dB/FT @ 1.575 GHz.
1	3C142B	50 OHM COAX, .200 dB/FT @ 1.575 GHz.
#	ECS P/N	DESCRIPTION

TABLE 2 (ECS COAX CONNECTORS)

3	620021	CONN., SIZE 5 FOR 3C142B, 311901	225791-2
2	CTR722	CONN., TNC, 90 DEG. FOR 3C142B, 311901	M39012/30-0503, 225554-6, 31-4474, KA-59-236
1	CTS722	CONN., TNC, 180 DEG. FOR 3C142B, 311901	M39012/26-0503, 225555-6, 31-4452, KA-59-292
#	ECS P/N	DESCRIPTION	ALTERNATE P/N

NOTES: SEE SHEET 1

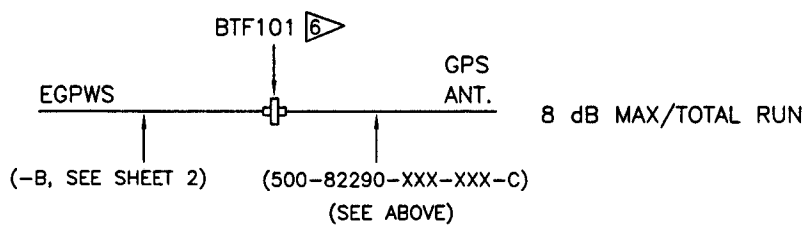
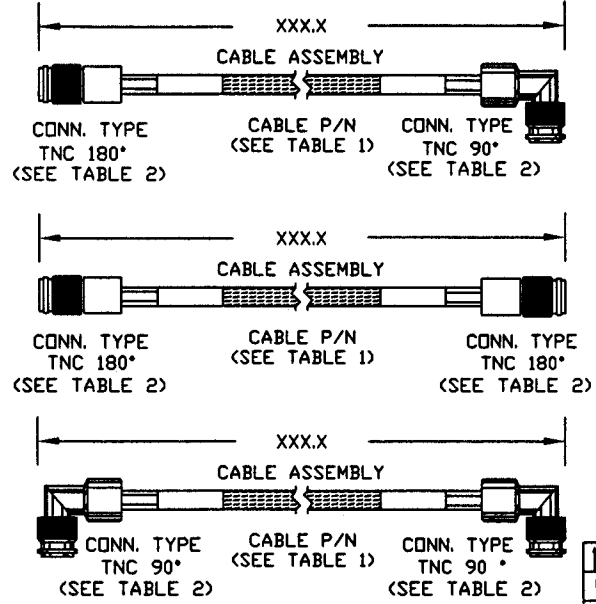
ELECTRONIC CABLE SPECIALISTS FRANKLIN, WI 53132 PHONE: (414) 421-8300			
SIZE	CAGE CODE	LEVEL	DWG. NO.
C	66197		500-82290
SCALE:	EFFECTIVITY:	SHEET: 2 OF 3	

P/N 500-82290-XXX-XXX-C (ALL LENGTHS IN INCHES)

ASSEMBLY LENGTH
 CABLE TYPE # FROM TABLE 1
 180 OR 90 DEG. TNC CONNECTOR FROM TABLE 2 @ DISCONNECT
 -C = DISC. TO ANT. CABLE (SEE EXAMPLE BELOW)
 180 OR 90 DEG. TNC CONNECTOR FROM TABLE 2 @ ANTENNA

EXAMPLE : 500-82290-168-112-C = 168" ASSEMBLY OF 3C142B WITH A CTS722 & CTR722 CONNECTOR W/MULTIPLE ANT. CABLES (-B AND -C) REQUIRED FOR ENTIRE ANT. RUN.

CABLE ASSEMBLY CONFIGURATIONS



CABLE LABELING
 500-82290-XXX-XXX-C
 SER# EGXXXX
 GPS ANT.

TABLE 1 (ECS COAX CABLE)

#	ECS P/N	DESCRIPTION
7	310801	50 OHM COAX, .053 dB/FT @ 1.575 GHz.
6	311201	50 OHM COAX, .077 dB/FT @ 1.575 GHz.
5	311501	50 OHM COAX, .100 dB/FT @ 1.575 GHz.
4	311601	50 OHM COAX, .120 dB/FT @ 1.575 GHz.
3	352001*	50 OHM COAX, .157 dB/FT @ 1.575 GHz.
2	311901	50 OHM COAX, .157 dB/FT @ 1.575 GHz.
1	3C142B	50 OHM COAX, .200 dB/FT @ 1.575 GHz.

* 352001 COAX CABLE IS SUPERFLEXIBLE, LIGHTWEIGHT CABLE WITH SLIGHTLY HIGHER COST THAN CABLE 311901.

TABLE 2 (ECS COAX CONNECTORS)

#	ECS P/N	DESCRIPTION	ALTERNATE P/N
10	CTS022	CONN.,TNC, 180 DEG. FOR 310801	
9	CTR022	CONN.,TNC, 90 DEG. FOR 310801	
8	CTS122	CONN.,TNC, 180 DEG. FOR 311201	
7	CTR122	CONN.,TNC, 90 DEG. FOR 311201	
6	CTS922	CONN.,TNC, 180 DEG. FOR 311601,311501	
5	CTR922	CONN.,TNC, 90 DEG. FOR 311601,311501	
4	CTS3522	CONN.,TNC, 180 DEG. FOR 352001	
3	CTR3522	CONN.,TNC, 90 DEG. FOR 352001	
2	CTS722	CONN.,TNC, 180 DEG. FOR 3C142B,311901	M39012/26-0503,225555-6,31-4452,KA-59-292
1	CTR722	CONN.,TNC, 90 DEG. FOR 3C142B,311901	M39012/30-0503,225554-6,31-4474,KA-59-236

NOTES: SEE SHEET 1

ELECTRONIC CABLE SPECIALISTS FRANKLIN, WI 53132 PHONE (414) 421-8300			
SIZE	CODE CODE	LEVEL	DRG. NO.
C	66197		500-82290
SCALE:	EFFECTIVITY:	SHEET 3 of 3	