

AMP PLUG #745496-2 (ECK786)  
BACKSHELL #17-1726-2 (ECK656)  
682A1023 (ECX413)  
SIGNAL BUNDLE #24 AWG  
UNLESS OTHERWISE NOTED

PIN	WIRE	SIGNAL
13	RED/YEL	BRK-
12	WHT/BLU	CW/+ LMT
11	-	-
10	-	-
9	-	-
8	WHT/BLK/RED	TACH -
7	WHT/GRY	MKR
6	WHT/BRN	MKR-N
5	-	-
4	-	-
3 (1/2)	#22 YEL	ENC +5V
3 (2/2)	#22 PINK	ENC +5V
2	-	-
1	SHIELD	SIG SHLD
14	WHT/RED	COS
15	WHT/ORN	COS-N
16	VIO	LMT +5V
17	WHT/YEL	SIN
18	WHT/GRN	SIN-N
19	GRY	TACH+
20	TAN	LMT COM
21 (1/2)	#22 WHT/BLK	ENC COM
21 (2/2)	#22 BRN	ENC COM
22	RED/BLK	HM LMT
23	-	-
24	WHT/VIO	CCW/- LMT
25	WHT/BLK/BRN	BRK+

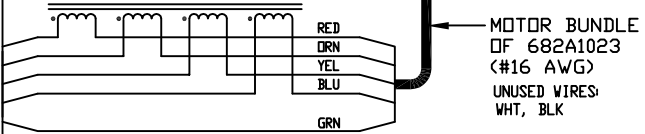
682A1023 (ECX413)  
#24 AWG UNLESS OTHERWISE NOTED

SIGNAL	WIRE	PIN
LMT +5V	VIO	W
LMT COM	TAN	X
TACH+	GRY	Y
TACH-	WHT/BLK/RED	Z
CW/+ LMT	WHT/BLU	R
CCW/- LMT	WHT/VIO	S
HM LMT	RED/BLK	T
BRK-	RED/YEL	U
MTR-	#16 YEL	V
COS-N	WHT/ORN	K
SIN-N	WHT/GRN	L
MKR-N	WHT/BRN	M
FRM GND	#16 GRN	N
MTR+	#16 ORN	P
MTR-	#16 BLU	Q
COS	WHT/RED	E
SIN	WHT/YEL	F
MKR	WHT/GRY	G
BRK+	WHT/BLK/BRN	H
MTR+	#16 RED	J
ENC+5V	#22 YEL	A (1/2)
ENC+5V	#22 PINK	A (2/2)
ENC COM	#22 WHT/BLK	B (1/2)
ENC COM	#22 BRN	B (2/2)
SIG SHLD	SHIELD	C
MTR SHLD	SHIELD	D

STR. PLUG MS3106A-24 (MCM466) (STD)  
ANGLE PLUG MS3108A-24 (DPT.)  
ANGLE PLUG MS3108B-24 (MCM470) (DPT.)  
INSERT MS24-28S (MCM469)  
CLAMP 97-3057-1016 (MCM467)  
BUSHING AN3055-28-16 (MCM474)

REVISIONS				
REV.	ZONE	DESCRIPTION	DATE	DRAWN
A		ADDED ECN6972	05/03	JRF

UNUSED WIRES:  
RED/GRN



MOTOR BUNDLE  
OF 682A1023  
(#16 AWG)  
UNUSED WIRES:  
WHT, BLK

BA SERIES AMP (REF)	FLYING LEAD	WIRE	SIGNAL
MOTOR A	(1/2)	RED	MTR+
	(2/2)	ORN	MTR+
MOTOR C	(1/2)	YEL	MTR-
	(2/2)	BLU	MTR-
SHIELD	(1/2)	SHIELD	MTR SHLD
	(2/2)	GRN	FRM GND

FOR CRIMP TOOL USE AMP HANDLE ASSY 58074-1  
WITH AMP HEAD ASSY 58063-2

DETAIL "A"  
AMP PLUG 745496-2 (ECK786)  
VIEWED FROM WIRE SIDE OF CONNECTOR

2

USE 2" LENGTHS OF THICK WALL HEATSHRINK TUBING TO BUILD UP CABLE DIAMETER FOR PROPER STRAIN RELIEFING. STRAIN RELIEFING MUST WITHSTAND 35 LB. PULL.

CUT THICK WALL HEATSHRINK TUBING WITH CABLE CUTTER SUCH THAT ENDS ARE PERPENDICULAR TO CABLE AND CUT IS SMOOTH.

THICK WALL HEATSHRINK TUBING:  
AMP # 53701-1 (EIW00112) MAX INSIDE DIA = .750" (EXPANDED), MIN INSIDE DIA = .220" (RECOVERED)  
AMP # 53700-1 (EIW00113) MAX INSIDE DIA = .400" (EXPANDED), MIN INSIDE DIA = .150" (RECOVERED)

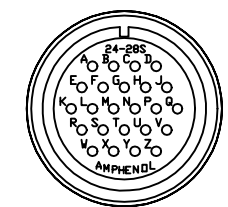
1

STARTING CABLE LENGTH = NOMINAL + 3 FT

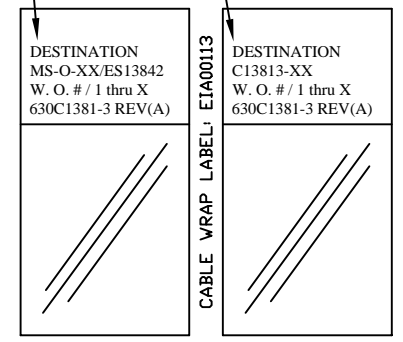
SEE LABELS 1, 2 & 3 FOR DESTINATION

LABELS FOR MS-O CABLES:  
(3) REQUIRED,  
(1 AT EACH END)

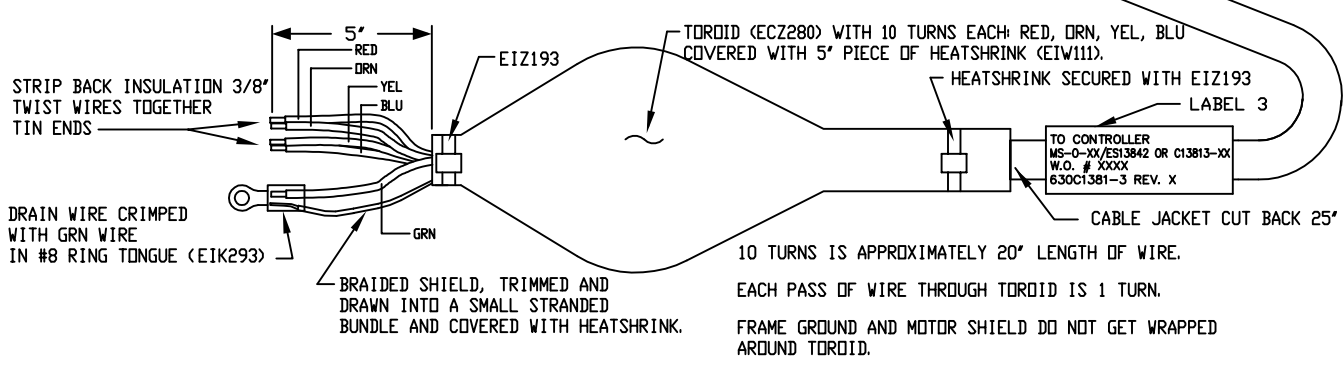
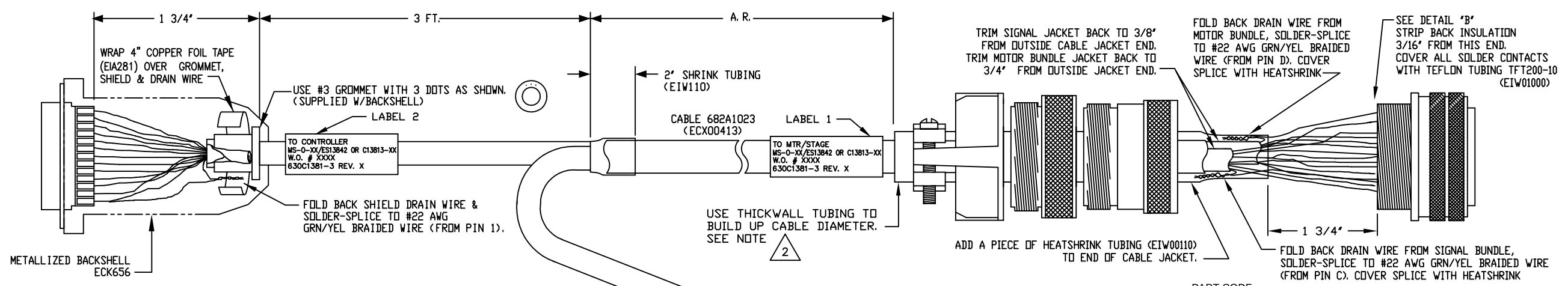
LABELS FOR C13813 CABLES:  
(3) REQUIRED,  
(1 AT EACH END)



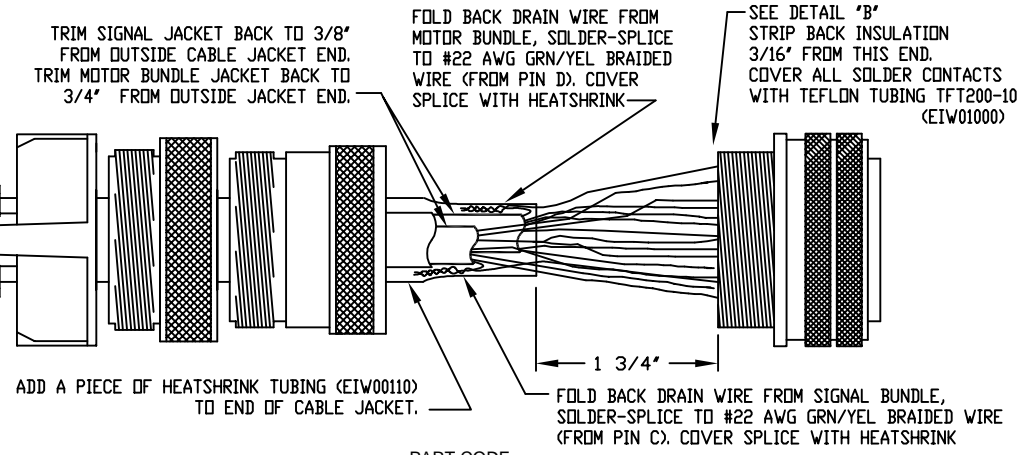
DETAIL "B"  
INSERT MS24-28S (MCM469)  
VIEWED FROM WIRE SIDE OF CONNECTOR



CABLE 682A1023 MOTOR BUNDLE #16 AWG



10 TURNS IS APPROXIMATELY 20' LENGTH OF WIRE.  
EACH PASS OF WIRE THROUGH TOROID IS 1 TURN.  
FRAME GROUND AND MOTOR SHIELD DO NOT GET WRAPPED AROUND TOROID.



PART CODE:	
C13813-XX	C13813-109 TO -183 MAX LENGTH (DECIMETERS)
MS-O-XX/ES13842	MS-O-36/ES13842 TO -60/ES13842 MAX LENGTH (FEET)

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AEROTECH, INC. 101 Zeta Drive  
Pittsburgh, PA. 15238  
(412)963-7470  
www.aerotech.com

TOLERANCES ON		
FRACTIONS	DECIMALS	ANGLES
0 TO 6 ± 1/32	.XX ± .01	± 0-30'
OVER 6 ± 1/16	.XXX ± .005	

**MS-O-XX/ES13842 OUTPUT CABLE (36 TO 60 FT.)**  
183 DECIMETERS (60') MAX LENGTH  
**CABLE: DC MTR & FB-25DU FLT-24MS-MAX183DM**

RMS FINISH	EXCEPT AS NOTED
DRAWN	EJB 4/99
CHECKED	AGS 4/99
APPD.	AGS 4/99

PART CODE	SIZE	REV.
SEE ABOVE	C	A
SCALE NTS		FILE NAME 630C1381-3A1.dwg
SHEET 1 OF 1		