

CQ Connectors

**Click. It's connected.
With equal ease, it's disconnected.
No tools needed.**

The only connectors of their kind, this Tri-Star innovation makes installation, modification, and maintenance faster and easier. The unique lock/unlock mechanism in Tri-Star's CQ connectors mates with an audible "click", making them ideal for blind mating applications and hard-to-reach places. Innovative ideas like this are the reason Tri-Star connectors are becoming the IFE industry standard worldwide.



TRI-STAR
ELECTRONICS INTERNATIONAL, INC.

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El Segundo, CA 90245
Tel: (310) 536-0444
Fax: (310) 536-9322
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www.tri-starelectronics.com

Features and Benefits

- Unique, built-in locking/unlocking mechanism
- Audible “click” confirms connectors are fully mated.
- No tools needed
- 5 different shell sizes
- Standard D-Subminiature insert arrangements for 9 through 50 positions; including 9 additional coaxial arrangements.
- Available in an environmentally sealed version that prevents moisture intrusion when mated.

Applications

- Ideal for blind mating applications and hard-to reach places such as passenger seats.
- Accommodates, power, signal and coaxial contacts.
- Mates with any standard D-Subminiature or MIL-C-24308 connector when lock post hardware is installed.

“CQ” Coaxial Pin and Socket Contacts

The “CQ” Coaxial Pin and Socket contacts were designed for the BMS 13-65 type “OE”, “OF”, and “OG” coaxial cables intended for the “CQ” series connectors.

The impedance for these coaxial contacts is 50 ohm. The termination is crimp style for both inner and outer contacts with a fold over braid over the ferrule with the exception on the 503 series which is overlay braid. The inner pin and socket are size 20 pin. The outer coax body engagement diameter is (.162 +/- .001).

Coaxial Pin Contacts P/N:

CQMEM-501D	For BMS13-65 type OE
CQMEM-502	For BMS13-65 type OF
CQMEM-503	For BMS 13-65 type OG

Coaxial Socket Contacts P/N:

CQMEF-501D	For BMS13-65 type OE
CQMEF-502A	For BMS13-65 type OF
CQMEF-503	For BMS13-65 type OG

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14. CHANGES IN PRODUCT DESIGN OR QUALITY AS SPECIFIED IN THE APPROVED DRAWING BASELINE AND THE BOEING SOW SHALL NOT BE EFFECTED WITHOUT PRIOR BOEING APPROVAL.
- △ CONNECTOR SHOWN DEPICTS SIZE 2 CONNECTOR WITH 11W1 INSERT ARRANGEMENT.
- △ CONTACTS SHOWN FOR REFERENCE ONLY. NOT SUPPLIED WITH THE CONNECTOR.
11. INSTALLING AND REMOVAL TOOL:
 - SIZE 20 CONTACT: M81969/1-02.
 - SIZE 8 REMOVAL TOOL: DRK 38.
- INSTALLING TOOL: BY HAND
10. DELETED
9. MEETS APPLICABLE REQUIREMENTS OF BOEING SPECIFICATION D1-9000.
8. CONNECTOR MEETS THE REQUIREMENTS OF BOEING SOW "MOISTURE RESISTING QUICK DISCONNECT D-SHAPED RECTANGULAR & KEYHOLE ELECTRICAL CONNECTOR DEVELOPMENT PROGRAM STATEMENT OF WORK".

△ SUPPLIED WITH TWO (2) LOCKPOSTS, PART NUMBER CO*P-R3, SHIPPED LOOSE, FOR REAR MOUNTING IN .050 INCH THICK (NOM) PANELS.

△ LOCKPOSTS SHOWN INSTALLED FOR REFERENCE ONLY.

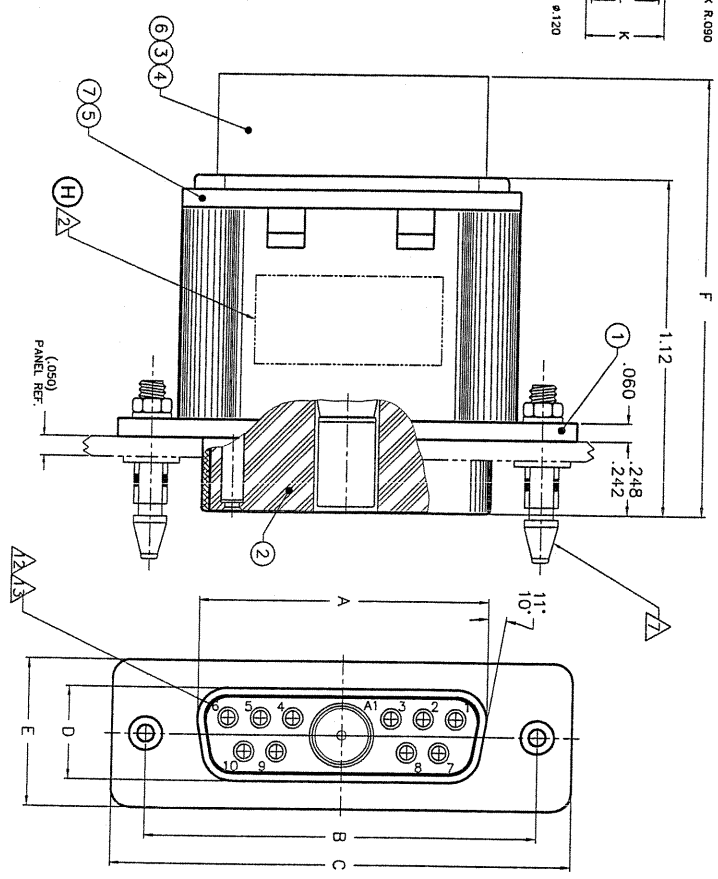
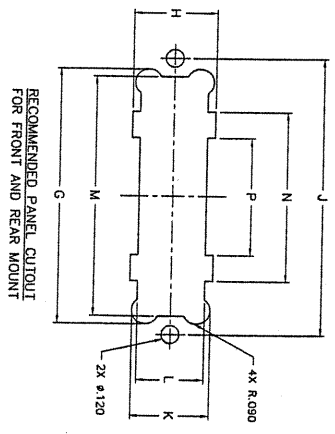
6. BACKSHELL ARE PURCHASED SEPARATELY UNDER FOLLOWING P/N:
 - CO*-PL = POLAR TYPE ORIENTATION
 - CO*-EL = POLAR TYPE ORIENTATION
 - CO*-SL = STRAIGHT TYPE ORIENTATION
 - CO*-OC = CONDUCTIVE ENCLOSED BACKSHELL
5. CONNECTOR IS DESIGNED FOR APPLICATIONS REQUIRING MOISTURE RESISTING PROPERTIES. SEE BOEING SOW FOR LIMITATIONS ON USE.
4. MATES WITH TSEI CO*ME*(***)P AND CO*CE*(***)P MOISTURE RESISTING PLUG CONNECTOR AND TSEI CO*MA*(***)P NON MOISTURE RESISTING PLUG CONNECTOR.

- △ MATERIAL AND FINISH:
- SHELL AND RETAINING PLATE: ALUMINIUM ALLOY WITH ELECTROLESS NICKEL PLATE PER MIL-C-28074.
 - CONTACT RETAINING CLIP: BERYLLIUM COPPER, HEAT TREATED.
 - INSULATOR: HIGH GRADE DIELECTRIC, COLOR BLUE.
 - GROMMET: SILICONE RUBBER, COLOR BLUE.
 - RETAINING PLATE SCREW: STAINLESS STEEL.

Ⓜ MARKINGS: "TSEI", DATE CODE, CAGE CODE "55104" AND PART NUMBER.

1. CONTACT ACCOMMODATION:
 - SIZE 20 CAVITIES:
 - GB007-5P (2020) - TSEI PALLADIUM PLATED L.F. SOCKET CONTACT. OR
 - GB009-5P (2018) - TSEI PALLADIUM PLATED L.F. SOCKET CONTACT.
 - SIZE 8 COAX SKT CONTACT:
 - COMEF-501C FOR BMS 13-65 TYPE "0E".
 - COMEF-502A FOR BMS 13-65 TYPE "0F".
 - COMEF-503 FOR BMS 13-65 TYPE "0G".
 - SIZE 8 POWER SKT CONTACT:
 - CAP002-S103 FOR 16-20 AWG WIRE
 - CAP003-S103 FOR 12-14 AWG WIRE

NOTES (UNLESS OTHERWISE SPECIFIED)



PART NUMBER EXPLANATION
CO*RE*(***)S

INSERT ARRANGEMENT (SEE TABLE)
PART NUMBER EXAMPLE:

- CO*RE*9S - SHELL SIZE 1 WITH 9 PIN INSERT ARRANGEMENT.
- CO*RE*11WS - SHELL SIZE 2 WITH 11W1 INSERT ARRANGEMENT.
- SHELL SIZE:
 - E = 1
 - A = 2
 - B = 3
 - C = 4
 - D = 5

CONTROLLED DRAWING

NO.	DESCRIPTION	QTY	UNIT	REVISION
1	INSULATOR	1	PC	
2	GROMMET	1	PC	
3	INSULATOR	1	PC	
4	INSULATOR	1	PC	
5	INSULATOR	1	PC	
6	INSULATOR	1	PC	
7	INSULATOR	1	PC	

TR-STAR ELECTRONICS INT'L, INC. 2201 ROSECRANS AVE., E. SQUIDRO, CA 90245	DATE: 7/18/72	APPROVALS: Q. JOHN BILDA, JR.
CONNECTOR, RECEPTACLE SOCKET CONTACT, MOISTURE RESISTANT QUICK DISCONNECT		
PART NO: D55104	REV: 1	CO*RE*(***)S

CO*RE*(***)S	REV: 1	DATE: 7/18/72
DESIGNED BY: H	REVISIONS PER E.O. 17108	DATE: 7/18/72
APPROVED BY: H		

THE COMPANY ASSUMES NO RESPONSIBILITY FOR THE USE OF THIS DRAWING AND SPECIFICATIONS IN CONNECTION WITH ANY PRODUCT OR SERVICE PROVIDED BY THE COMPANY. THE COMPANY ASSUMES NO LIABILITY FOR ANY DAMAGE TO PERSONS OR PROPERTY CAUSED BY THE USE OF THIS DRAWING AND SPECIFICATIONS.

REV	DATE	BY	CHKD	DESCRIPTION
1				CO*RE*(***)S
2				SEE SHEET 1 FOR REVISIONS

SHELL SIZE	INSERT ARRANGEMENT	TSEI PART No.	CONTACT		A	B	C	D	E	F	G	H	J	K	L	M	N	P	APPROX WEIGHT (LESS CONTACT)	
			SIZE	QTY.																
1		COBRE9S	#20	9	±.005	±.005	±.015	±.005	±.005	±.03	±.002	±.002	±.004	±.003	±.003	±.003	±.003	±.003	-0-	10.43
			15	15	.643	.984	1.213	.311	.494	1.32	.843	.547	.984	.521	.445	.750	.285	-0-	10.43	
2		COARE15S	#20	10	.971	1.312	1.541	.311	.494	1.32	1.171	.547	1.312	.521	.445	1.078	.595	.275	14.96	
			11W1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3		COBRE25S	#20	25	1.511	1.852	2.088	.311	.494	1.47	1.709	.547	1.852	.521	.445	1.618	1.135	.715	20.85	
			13W3	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
4		COBRE17W2S	#20	15	2.159	2.500	2.729	.311	.494	1.47	2.356	.547	2.500	.521	.445	2.266	1.783	1.213	26.75	
			21W1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
5		COBRE37S	#20	37	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	
			21W4	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
5		COBRE25W3S	#20	22	2.064	2.406	2.635	.423	.605	1.47	2.262	.659	2.406	.633	.557	2.172	1.689	1.115	31.28	
			25W3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
5		COBRE50S	#20	50	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	
			24W7	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
5		COBRE24W7S	#8	7	2.064	2.406	2.635	.423	.605	1.47	2.262	.659	2.406	.633	.557	2.172	1.689	1.115	31.28	
			36W4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5		COBRE36W4S	#8	4	2.064	2.406	2.635	.423	.605	1.47	2.262	.659	2.406	.633	.557	2.172	1.689	1.115	31.28	
			47W1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5		COBRE47W1S	#20	46	2.064	2.406	2.635	.423	.605	1.47	2.262	.659	2.406	.633	.557	2.172	1.689	1.115	31.28	
			#8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

NOTES (UNLESS OTHERWISE SPECIFIED)

TR-STAR ELECTRONICS INT'L, INC.
 2201 ROSECRANS AVE., E. SERRANO, CA 92445
 PHONE: (916) 438-1100
 FAX: (916) 438-1101
 APPROVALS: L. B. ODUICK
 DATE: 7/28/97
 PART: CO*RE*(***)S
 DRAWING NO: 055104
 REV: 2
 SHEET: 2 OF 2

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REV	DATE	DESCRIPTION	BY	APP'D
1		CO-RE-47W1P		
2		CO-RE-47W1P		
SEE SHEET 1 FOR REVISIONS				

SHELL SIZE	INSERT ARRANGEMENT	TSEI PART No.	CONTACT		A	B	C	D	E	F	G	H	J	K	L	M	N	P	APPROX WEIGHT (LESS CONTACT GRAMS)
			SIZE	QTY.															
1	9 	COERE9P	#20	9	±.005	±.005	±.015	±.005	±.005	±.03	.843	.547	.984	±.002	±.002	±.004	±.003	±.003	9.15
			#20	15	.666	.984	1.213	.329	.494	1.16	.547	.521	.445	.750	.285	-0-	12.69		
2	15 	COARE15P	#20	10	.994	1.312	1.541	.329	.494	1.31	1.171	.547	1.312	.521	.445	1.078	.595	.275	9.15
			#8	1															
3	25 	COBRE25P	#20	25						1.16									
			#8	10															
4	13W3 	COBRE13W3P	#20	10	1.534	1.852	2.088	.329	.494	1.31	1.709	.547	1.852	.521	.445	1.618	1.135	.715	17.79
			#8	3															
5	17W2 	COBRE17W2P	#20	15															
			#8	2															
6	21W1 	COBRE21W1P	#20	20															
			#8	1															
7	37 	COCRE37P	#20	37						1.16									
			#8	17															
8	21W4 	COCRE21W4P	#20	17						1.16									
			#8	4															
9	25W3 	COCRE25W3P	#20	22	2.182	2.500	2.729	.329	.494	1.31	2.356	.547	2.500	.521	.445	2.266	1.783	1.213	23.25
			#8	3															
10	50 	CODRE50P	#20	50						1.16									
			#8	17															
11	24W7 	CODRE24W7P	#20	17															
			#8	7															
12	36W4 	CODRE36W4P	#20	32	2.079	2.406	2.635	.436	.605	1.31	2.262	.659	2.406	.633	.557	2.172	1.689	1.115	27.50
			#8	4															
13	47W1 	CODRE47W1P	#20	46															
			#8	1															

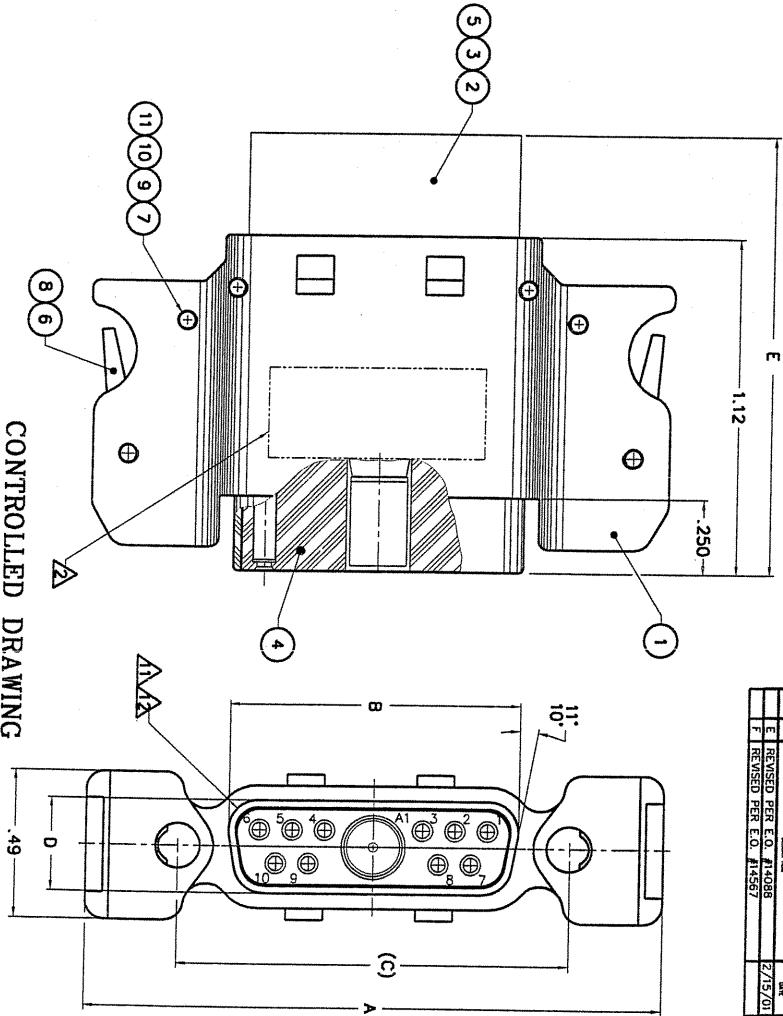
NOTES (UNLESS OTHERWISE SPECIFIED)

PARTS LIST		APPROVALS	
TR-STAR ELECTRONICS INT'L, INC.	DATE	DATE	DATE
2301 ROSEBANK AVE., EL SECONDO, CA 90245			
CONNECTOR, RECEPTACLE, PIN CONTACT, MOISTURE RESISTANT QUICK DISCONNECT			
DB5104	CO-RE-47W1P		
REV 2	REV 2		

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12. CONNECTOR SHOWN DEPICTS SIZE 2 CONNECTOR WITH 11W1 INSERT ARRANGEMENT.
11. CONTACTS SHOWN FOR REFERENCE ONLY. NOT SUPPLIED WITH THE CONNECTOR.
10. INSTALLING AND REMOVAL TOOL:
 - SIZE 20 CONTACT: M81969/1-02.
 - SIZE 8 REMOVAL TOOL: DRK 38.
 - INSTALLING TOOL: BY HAND
9. DELETED
8. MEETS APPLICABLE REQUIREMENTS OF BOEING SPECIFICATION D1-9000.
7. CONNECTOR MEETS THE REQUIREMENTS OF BOEING SOW "MOISTURE RESISTING QUICK DISCONNECT D-SHAPED RECTANGULAR & KEYHOLE ELECTRICAL CONNECTOR DEVELOPMENT PROGRAM STATEMENT OF WORK".
6. BACKSHELL ARE PURCHASED SEPARATELY UNDER FOLLOWING P/Ns:
 - CO*-PL = POLAR TYPE ORIENTATION
 - CO*-EL = POLAR TYPE ORIENTATION
 - CO*-SL = STRAIGHT TYPE ORIENTATION
5. CONNECTOR IS DESIGNED FOR APPLICATIONS REQUIRING MOISTURE RESISTING PROPERTIES. SEE BOEING SOW FOR LIMITATIONS ON USE.
4. MATES WITH TSEI CO*RE*(***)P MOISTURE RESISTING RECEPTACLE CONNECTOR AND TSEI CO*RA*(***)P NON MOISTURE RESISTING RECEPTACLE CONNECTOR.
3. MATERIAL AND FINISH:
 - SHELL BODY & INSULATOR: HIGH GRADE DIELECTRIC, COLOR BLACK.
 - RETURN SPRING, SPRING LATCH, PLATE LOCKING & SLOTTED SPRING PIN: STAINLESS STEEL, PASSIVATED
 - GROMMET & FACE SEAL: SILICONE RUBBER, COLOR BLUE.
 - CONTACT RETAINING CLIP: BERYLLIUM COPPER, HEAT TREATED.
2. MARKINGS: "TSEI", DATE CODE, CAGE CODE "5104" AND PART NUMBER.
1. CONTACT ACCOMMODATION:
 - SIZE 20 CAVITIES:
 - GB07-5P (2020) - TSEI PALLADIUM PLATED LIF SOCKET CONTACT, OR
 - GB09-5P (2018) - TSEI PALLADIUM PLATED L.I.F. SOCKET CONTACT.
 - SIZE 8 COAX PIN CONTACT:
 - COMEF-501D FOR BMS 13-65 TYPE "0E".
 - COMEF-502A FOR BMS 13-65 TYPE "0F".
 - COMEF-503 FOR BMS 13-65 TYPE "0G".
 - SIZE 8 POWER PIN CONTACT:
 - CMP002-5103 FOR 16-20 AWG WIRE
 - CMP003-5103 FOR 12-14 AWG WIRE



PART NUMBER EXPLANATION
CO*ME*(***)S

INSERT ARRANGEMENT (SEE TABLE)
PART NUMBER EXAMPLE:
CO*ME9S - SHELL SIZE 1 WITH 9 PIN
INSERT ARRANGEMENT.
CO*ME11W1S - SHELL SIZE 2 WITH
11W1 INSERT ARRANGEMENT.
SHELL SIZE
E = 1
A = 2
B = 3
C = 4
D = 5

CONTROLLED DRAWING

REV	DATE	DESCRIPTION	BY	CHKD
1	9/7/97	TRISTAR ELECTRONICS INT'L, INC. 2201 ROSEDALE AVE. B. SEPASANO, CA 95065	L. B. DODICK	
2		CONNECTOR, PLUG, SOCKET CONTACT MOISTURE RESISTING, QUICK DISCONNECT (NON-CONDUCTIVE)		

REV	DATE	DESCRIPTION	BY	CHKD
1	9/7/97	CONNECTOR, PLUG, SOCKET CONTACT MOISTURE RESISTING, QUICK DISCONNECT (NON-CONDUCTIVE)	L. B. DODICK	
2		CONNECTOR, PLUG, SOCKET CONTACT MOISTURE RESISTING, QUICK DISCONNECT (NON-CONDUCTIVE)		

REV	DATE	DESCRIPTION	BY	CHKD
1	9/7/97	CONNECTOR, PLUG, SOCKET CONTACT MOISTURE RESISTING, QUICK DISCONNECT (NON-CONDUCTIVE)	L. B. DODICK	
2		CONNECTOR, PLUG, SOCKET CONTACT MOISTURE RESISTING, QUICK DISCONNECT (NON-CONDUCTIVE)		

REV	DATE	DESCRIPTION	BY	CHKD
1	2/15/01	REVISED PER E.O. 11408B		
1	REVISED PER E.O. 11457			

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SHELL SIZE	INSERT ARRANGEMENT	TSEI PART NO.	CONTACT		A ±.030	B ±.005	C REF	D ±.005	E ±.03	APPROX WEIGHT (LESS CONTACT) GRAMS
			SIZE	QTY.						
1		COEME9S	#20	9	1.600	.643	.984	.311	1.32	12.69
			#20	15	1.928	.971	1.312	.311	1.47	17.23
2		COAME11WS	#20	10	1.852	1.511	1.852	.311	1.47	22.21
			#8	1						
			#20	25						
			#8	2						
3		COBME13WS	#20	10	2.468	1.511	1.852	.311	1.47	27.83
			#8	3						
			#20	15						
			#8	2						
4		COBME17WS	#20	17	3.116	2.159	2.500	.311	1.47	34.36
			#8	4						
			#20	22						
			#8	3						
5		COBME25S	#20	50	3.022	2.064	2.406	.423	1.47	34.36
			#20	17						
			#8	7						
			#20	32						
			#8	4						
6		COBME36WS	#20	46	3.022	2.064	2.406	.423	1.47	34.36
			#8	1						

NOTES (UNLESS OTHERWISE SPECIFIED)

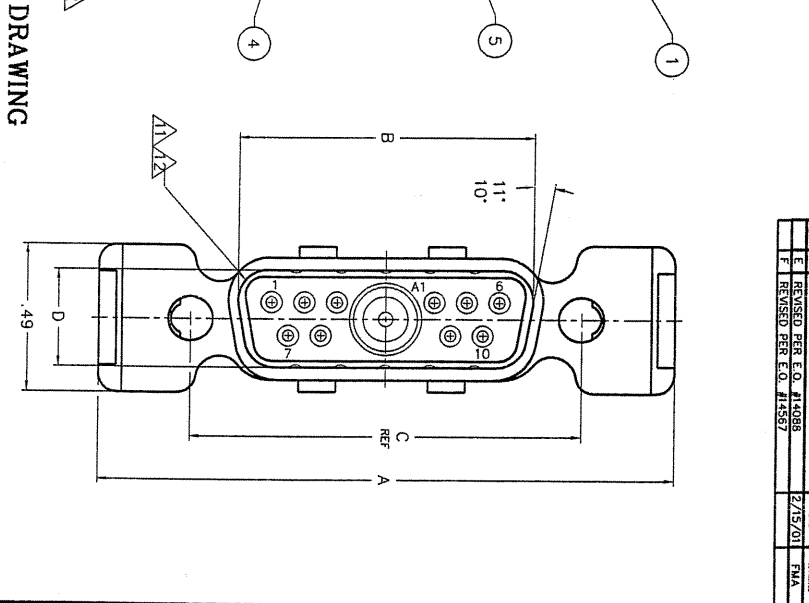
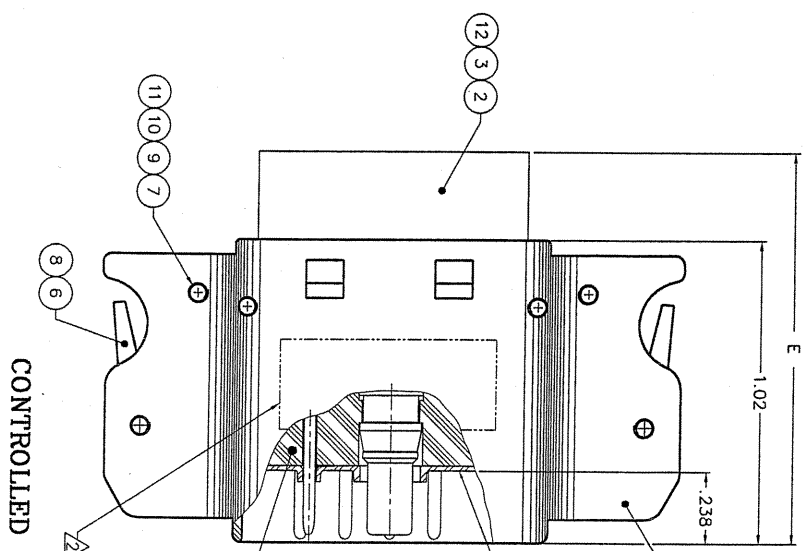
TR-STAR ELECTRONICS INT'L, INC.
 2201 ROBCRAWNS AVE., EL SECONDO, CA 90245
 DATE: 8/1/97
 APPROVALS: L. B. GULLON
 PARTS LIST: CO+ME(***S)
 PRODUCT: CONNECTOR, PLUG, SOCKET CONTACT
 MOISTURE RESISTING, QUICK DISCONNECT
 (NON-CONDUCTIVE)
 D55104
 CO+ME(***S)
 COMASEI

CO+ME(***S) 2
 SEE SHEET 1 FOR REVISION

THE CUSTOMER CANNOT ASSUME RESPONSIBILITY FOR THE DESIGN OF THIS PRODUCT. THE CUSTOMER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PRODUCT. THE CUSTOMER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PRODUCT. THE CUSTOMER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PRODUCT.

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 - SIZE 20 CONTACT: M81969/1-02
 - SIZE 8 REMOVAL TOOL: DRK 38
 INSTALLING TOOL: BY HAND
9. DELETED
8. MEETS APPLICABLE REQUIREMENTS OF BOEING SPECIFICATION D1-9000.
7. CONNECTOR MEETS THE REQUIREMENTS OF BOEING SOW "MOISTURE RESISTING QUICK DISCONNECT D-SHAPED RECTANGULAR & KEHOLE ELECTRICAL CONNECTOR DEVELOPMENT PROGRAM STATEMENT OF WORK".
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 - CO-EL = POLAR TYPE ORIENTATION
 - CO-SL = STRAIGHT TYPE ORIENTATION
5. CONNECTOR IS DESIGNED FOR APPLICATIONS REQUIRING MOISTURE RESISTING PROPERTIES. SEE BOEING SOW FOR LIMITATIONS ON USE.
4. MATES WITH TSEI CO+RE(***S) MOISTURE RESISTING RECEPTACLE CONNECTOR AND TSEI CO+RA(***S) NON MOISTURE RESISTING RECEPTACLE CONNECTOR.
3. MATERIAL AND FINISH:
 - SHELL BODY & INSULATOR: HIGH GRADE DIELECTRIC, COLOR BLACK.
 - RETURN SPRING, SPRING LATCH, PLATE LOCKING & ROLL PIN: STAINLESS STEEL, PASSIVATED
 - GROMMET & FACE SEAL: SILICONE RUBBER, COLOR BLUE.
 - CONTACT RETAINING CLIP: BERYLLIUM COPPER, HEAT TREATED.
2. MARKINGS: TSEI, DATE CODE, CAGE CODE 59104 AND PART NUMBER.
1. CONTACT ACCOMMODATION:
 - SIZE 20 CAVIDIE:
 - CB006-5P (2020) - TSEI PALLADIUM PLATED L.I.F. PIN CONTACT.
 - CB008-5P (2018) - TSEI PALLADIUM PLATED L.I.F. PIN CONTACT.
 - SIZE 8 COAX PIN CONTACT:
 - COMEM-501D FOR BMS 13-65 TYPE "0C".
 - COMEM-502 FOR BMS 13-65 TYPE "0F".
 - COMEM-503 FOR BMS 13-65 TYPE "0G".
 - SIZE 8 POWER PIN CONTACT:
 - CWP002-P103 FOR 16-20 AWG WIRE
 - CWP003-P103 FOR 12-14 AWG WIRE

NOTES (UNLESS OTHERWISE SPECIFIED)



CONTROLLED DRAWING

PART NUMBER EXPLANATION
CO+ME(***S)P

INSERT ARRANGEMENT (SEE TABLE)
PART NUMBER EXAMPLE:
CO+ME5P - SHELL SIZE 1 WITH 9 PIN
INSERT ARRANGEMENT.
CO+ME11WP - SHELL SIZE 2 WITH
11W1 INSERT ARRANGEMENT.

SHELL SIZE
E = 1
A = 2
B = 3
C = 4
D = 5

REVISION	DATE	BY	CHKD	APP'D	DESCRIPTION
1	7/19/97	D. BIRDA, JR.			MOISTURE RESISTING QUICK DISCONNECT (NON-CONDUCTIVE)

REV	DATE	BY	CHKD	APP'D	DESCRIPTION
1	7/19/97	D. BIRDA, JR.			MOISTURE RESISTING QUICK DISCONNECT (NON-CONDUCTIVE)
2					CLIP RETAINING, SZ 20
3					PIN SPRING
4					SPRING COMPRESSION
5					PLATE LOCKING
6					LATCH SPRING, RETURN
7					INTERFACIAL SEAL
8					INSULATOR, PIN, FRONT
9					INSULATOR, PIN, REAR
10					GROMMET
11					SHELL PLUG, PIN
12					REAR CONTACT

TR-STAR ELECTRONICS INT'L, INC.
2201 REDWOODS AVE., EL SECONDO, CA 90225

DATE: 7/19/97
BY: D. BIRDA, JR.
CHKD: []
APP'D: []

MOISTURE RESISTING QUICK DISCONNECT (NON-CONDUCTIVE)

59104

CO+ME(***S)P

REV	DATE	BY	CHKD	APP'D	DESCRIPTION
1	7/15/01				REVISION
2					REVISION
3					REVISION
4					REVISION
5					REVISION
6					REVISION
7					REVISION
8					REVISION
9					REVISION
10					REVISION
11					REVISION
12					REVISION

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REV	DATE	DESCRIPTION
1		CO*RE*(***)S
2		SEE SHEET 1 FOR REVISIONS

SHELL SIZE	INSERT ARRANGEMENT	TSEI PART No.	CONTACT		A ±.005	B ±.005	C ±.015	D ±.005	E ±.005	F ±.03	G	H	J	K ±.002	L ±.002	M ±.004	N ±.003	P ±.003	APPROX WEIGHT (LESS CONTACT) GRAMS		
			SIZE	QTY.																	
1		COERE9S	#20	9	.643	.984	1.213	.311	.494	1.32	.843	.547	.984	.521	.445	.750	.285	-0-	10.43		
			#20	15	.971	1.312	1.541	.311	.494	1.32	1.171	.547	1.312	.521	.445	1.078	.595	.275	14.96		
2		COARE11WIS	#20	10						1.47											
			#8	1																	
			#20	25							1.32										
			#8	10																	
3		COBRE13W3S	#20	10																	
			#8	3																	
			#20	15	1.511	1.852	2.088	.311	.494	1.47	1.709	.547	1.852	.521	.445	1.618	1.135	.715	20.85		
			#8	2																	
			#20	20																	
			#8	1																	
4		COCRE37S	#20	37						1.32											
			#8	17																	
			#20	4	2.159	2.500	2.729	.311	.494	1.47	2.356	.547	2.500	.521	.445	2.266	1.783	1.213	26.75		
			#8	22																	
5		COCRE25W3S	#20	22																	
			#8	3																	
			#20	50							1.32										
			#20	17																	
			#8	7																	
5		COCRE24W7S	#20	7																	
			#8	32	2.064	2.406	2.635	.423	.605	1.47	2.262	.659	2.406	.633	.557	2.172	1.689	1.115	31.28		
			#20	46																	
5		COCRE36W4S	#20	4																	
			#8	4																	
5		COCRE47W1S	#20	1																	
			#8	1																	

NOTES (UNLESS OTHERWISE SPECIFIED)

TR-STAR ELECTRONICS INT'L, INC.
 2201 ROSCOWNS AVE., E. SECONDO, CA 90245
 CONNECTOR, RECEPTACLE,
 SOCKET CONTACT, MOISTURE RESISTING
 QUICK DISCONNECT
 PARTS LIST
 APPROVALS: L. B. DUDACK 7/28/97
 DATE: 7/28/97
 DRAWING NO: DB5104
 CO*RE*(***)S
 PART 2 OF 2

8 7 6 5 4 3 2 1

THIS PRODUCT IS A REGISTERED TRADEMARK OF TRI-STAR ELECTRONICS INTERNATIONAL, INC. ALL RIGHTS RESERVED. THIS PRODUCT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM TRI-STAR ELECTRONICS INTERNATIONAL, INC.

COBARE2 (***)P		2		1	
REV	DATE	DESCRIPTION	BY	CHKD	APPROVED
1		SEE SHEET 1 FOR REVISIONS			

SHELL SIZE	INSERT ARRANGEMENT	TSEI PART No.	CONTACT		A	B	C	D	E	F	G	H	J	K	L	M	N	P	APPROX WEIGHT (LESS CONTACT) GRAMS
			SIZE	QTY.															
1	9 	COERE9P	#20	9	±.005	±.005	±.015	±.005	±.005	±.03	.843	.547	.984	.521	.445	.750	.285	-0-	9.15
			#8	15	.666	.984	1.213	.329	.494	1.16	1.171	.547	1.312	.521	.445	1.078	.595	.275	12.69
2	11W1 	COARE11W1P	#20	10	.994	1.312	1.541	.329	.494	1.31	1.16	.547	1.312	.521	.445	1.078	.595	.275	12.69
			#8	1															
3	13W3 	COBRE13W3P	#20	10	1.534	1.852	2.088	.329	.494	1.16	1.709	.547	1.852	.521	.445	1.618	1.135	.715	17.79
			#8	3															
3	17W2 	COBRE17W2P	#20	15	1.534	1.852	2.088	.329	.494	1.31	1.709	.547	1.852	.521	.445	1.618	1.135	.715	17.79
			#8	2															
3	21W1 	COBRE21W1P	#20	20						1.31	1.709	.547	1.852	.521	.445	1.618	1.135	.715	17.79
			#8	1															
4	21W4 	COCRE21W4P	#20	37						1.16	2.356	.547	2.500	.521	.445	2.266	1.783	1.213	23.25
			#8	17	2.182	2.500	2.729	.329	.494	1.31	2.356	.547	2.500	.521	.445	2.266	1.783	1.213	23.25
4	25W3 	COCRE25W3P	#20	22						1.31	2.356	.547	2.500	.521	.445	2.266	1.783	1.213	23.25
			#8	3	2.182	2.500	2.729	.329	.494	1.31	2.356	.547	2.500	.521	.445	2.266	1.783	1.213	23.25
5	50 	COORE50P	#20	50						1.16	2.356	.547	2.500	.521	.445	2.266	1.783	1.213	27.50
			#8	17															
5	24W7 	COORE24W7P	#20	17						1.16	2.356	.547	2.500	.521	.445	2.266	1.783	1.213	27.50
			#8	7															
5	36W4 	COORE36W4P	#20	32	2.079	2.406	2.635	.436	.605	1.31	2.262	.659	2.406	.633	.557	2.172	1.689	1.115	27.50
			#8	4															
5	47W1 	COORE47W1P	#20	46						1.31	2.262	.659	2.406	.633	.557	2.172	1.689	1.115	27.50
			#8	1															

NOTES (UNLESS OTHERWISE SPECIFIED)

PARTS LIST		APPROVALS	
DATE	BY	DATE	BY
TRI-STAR ELECTRONICS INT'L, INC. 2301 ROSBORO AVE., EL SEGUNDO, CA 90245		CONNECTOR, RECEPTACLE, PIN CONTACT, MOISTURE RESISTANT QUICK DISCONNECT	
PART NO: COBARE2 REV: 2		PART NO: D55104 REV: 2	

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13. CHANGES IN PRODUCT DESIGN OR QUALITY AS SPECIFIED IN THE APPROVED DRAWING BASELINE AND THE BOEING SOW SHALL NOT BE EFFECTED WITHOUT PRIOR BOEING APPROVAL.

11W INSERT ARRANGEMENT.

CONNECTOR SHOWN DEPICTS SIZE 2 CONNECTOR WITH THE CONNECTOR.

INSTALLING AND REMOVAL TOOL:

SIZE 20 CONTACT: M81969/1-02.

SIZE 8 REMOVAL TOOL: DRK 38.

INSTALLING TOOL: BY HAND

DELETED

MEETS APPLICABLE REQUIREMENTS OF BOEING SPECIFICATION DT-9000.

CONNECTOR MEETS THE REQUIREMENTS OF BOEING SOW "MOISTURE RESISTING QUICK DISCONNECT D-SHAPED RECTANGULAR & KEYHOLE ELECTRICAL CONNECTOR DEVELOPMENT PROGRAM STATEMENT OF WORK."

BACKSHELL ARE PURCHASED SEPARATELY UNDER FOLLOWING P/N:

CO*-PL = POLAR TYPE ORIENTATION

CO*-EL = POLAR TYPE ORIENTATION

CO*-SL = STRAIGHT TYPE ORIENTATION

CONNECTOR IS DESIGNED FOR APPLICATIONS REQUIRING MOISTURE RESISTING PROPERTIES. SEE BOEING SOW FOR LIMITATIONS ON USE. MATES WITH TSEI CO*RE*(***)P MOISTURE RESISTING RECEPTACLE CONNECTOR AND TSEI CO*RA*(***)P NON MOISTURE RESISTING RECEPTACLE CONNECTOR.

MATERIAL AND FINISH:

SHELL BODY & INSULATOR: HIGH GRADE DIELECTRIC, COLOR BLACK.

RETURN SPRING, SPRING LATCH, PLATE LOCKING & SLOTTED SPRING PIN: STAINLESS STEEL, PASSIVATED

GROMMET & FACE SEAL: SILICONE RUBBER, COLOR BLUE.

CONTACT RETAINING CLIP: BERYLLIUM COPPER, HEAT TREATED.

MARKINGS: "TSEI", DATE CODE, CAGE CODE "55104" AND PART NUMBER.

CONTACT ACCOMMODATION:

SIZE 20 CAVITIES:

CB007-5P (2020) - TSEI PALLADIUM PLATED L.I.F. SOCKET CONTACT; OR

CB009-5P (2018) - TSEI PALLADIUM PLATED L.I.F. SOCKET CONTACT.

SIZE 8 COAX PIN CONTACT:

COMEF-501D FOR BMS 13-65 TYPE "OC".

COMEF-502A FOR BMS 13-65 TYPE "OF".

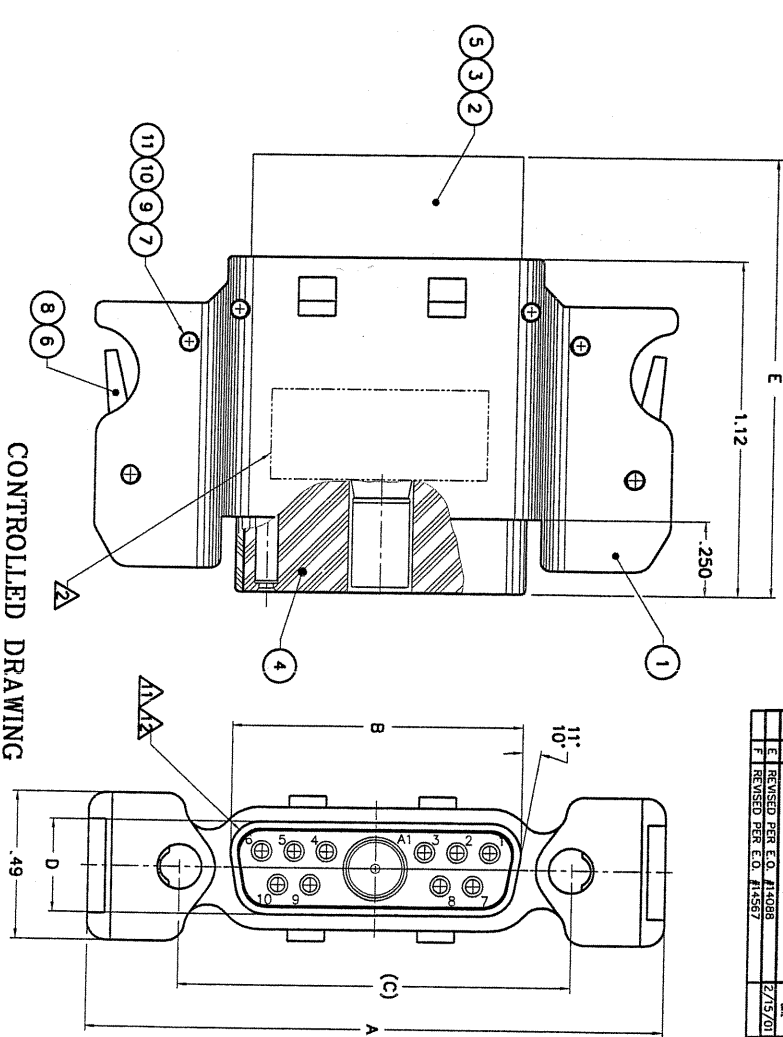
COMEF-503 FOR BMS 13-65 TYPE "OC".

SIZE 8 POWER PIN CONTACT:

CMPO02-5103 FOR 16-20 AWG WIRE

CMPO03-5103 FOR 12-14 AWG WIRE

NOTES (UNLESS OTHERWISE SPECIFIED)



PART NUMBER EXPLANATION
CO*ME*(***)S

INSERT ARRANGEMENT (SEE TABLE)
PART NUMBER EXAMPLE:
CO*ME*9S - SHELL SIZE 1 WITH 9 PIN
INSERT ARRANGEMENT.
CO*ME*11WS - SHELL SIZE 2 WITH
11W INSERT ARRANGEMENT.
SHELL SIZE
E = 1
A = 2
B = 3
C = 4
D = 5

REV	DATE	DESCRIPTION	BY	CHKD
1	9/7/97	TR-STAR ELECTRONICS INT'L, INC. 2201 ROSCROWNS AVE., B. SEGUNDO, CA 90245	L. B. OQUICK	

REV	DATE	DESCRIPTION	BY	CHKD
1	9/7/97	CONNECTOR, PLUG, SOCKET CONTACT MOISTURE RESISTING, QUICK DISCONNECT (NON-CONDUCTIVE)	L. B. OQUICK	

REV	DATE	DESCRIPTION	BY	CHKD
1	9/7/97	CONNECTOR, PLUG, SOCKET CONTACT MOISTURE RESISTING, QUICK DISCONNECT (NON-CONDUCTIVE)	L. B. OQUICK	

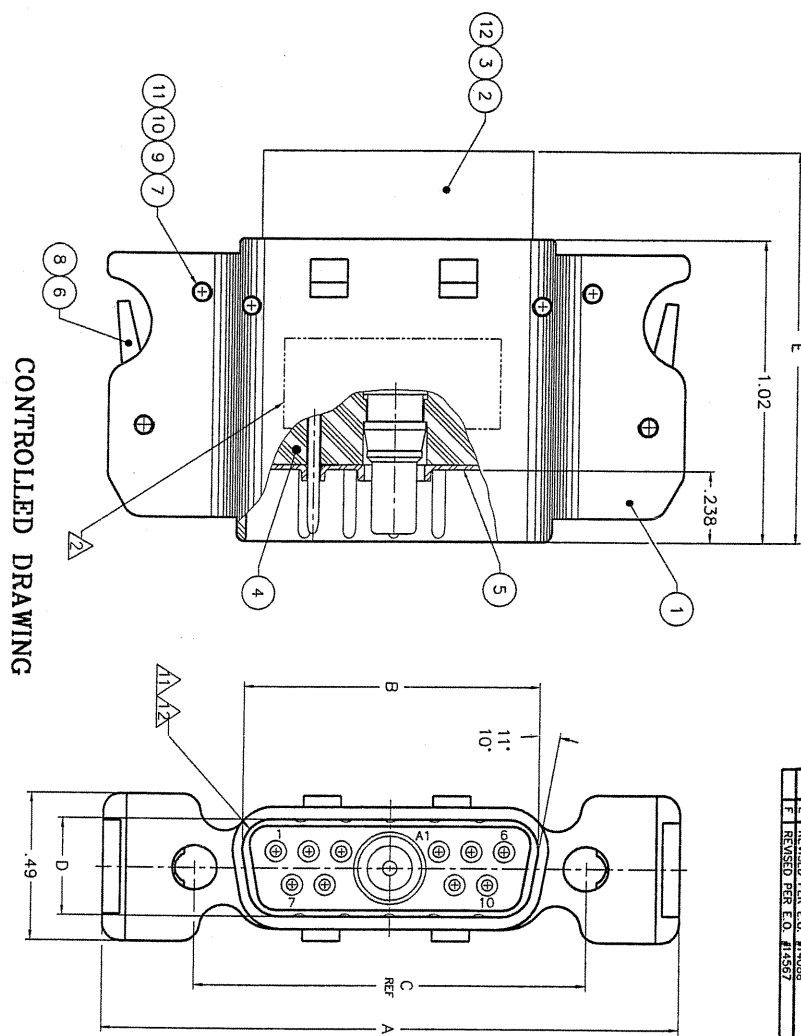
REV	DATE	DESCRIPTION	BY	CHKD
1	9/7/97	CONNECTOR, PLUG, SOCKET CONTACT MOISTURE RESISTING, QUICK DISCONNECT (NON-CONDUCTIVE)	L. B. OQUICK	

REV	DATE	DESCRIPTION	BY	CHKD
1	2/15/01	REVISED PER E.O. 11498		
2	2/15/01	REVISED PER E.O. 11498		

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13. CHANGES IN PRODUCT DESIGN OR QUALITY AS SPECIFIED IN THE APPROVED DRAWING BASELINE AND THE BOEING SOW SHALL NOT BE EFFECTED WITHOUT PRIOR BOEING APPROVAL.
- △2 CONNECTOR SHOWN DEPICTS SIZE 2 CONNECTOR WITH 11WV INSERT ARRANGEMENT.
- △1 CONTACTS SHOWN FOR REFERENCE ONLY. NOT SUPPLIED WITH THE CONNECTOR.
10. INSTALLING AND REMOVAL TOOL:
 - SIZE 20 CONTACT: MB1969/1-02
 - SIZE 8 REMOVAL TOOL: DRK 38
 - INSTALLING TOOL: BY HAND
9. DELETED
8. MEETS APPLICABLE REQUIREMENTS OF BOEING SPECIFICATION DT-9000.
7. CONNECTOR MEETS THE REQUIREMENTS OF BOEING SOW "MOISTURE RESISTING QUICK DISCONNECT D-SHAPED RECTANGULAR & KEYHOLE ELECTRICAL CONNECTOR DEVELOPMENT PROGRAM STATEMENT OF WORK."
6. BACKSHELL ARE PURCHASED SEPARATELY UNDER FOLLOWING P/N:
 - CO+PL = POLAR TYPE ORIENTATION
 - CO+EL = POLAR TYPE ORIENTATION
 - CO+SL = STRAIGHT TYPE ORIENTATION
5. CONNECTOR IS DESIGNED FOR APPLICATIONS REQUIRING MOISTURE RESISTING PROPERTIES. SEE BOEING SOW FOR LIMITATIONS ON USE.
4. MATES WITH TSEI CO*ME*(***)S MOISTURE RESISTING RECEPTACLE CONNECTOR AND TSEI CO+RAY*(***)S NON MOISTURE RESISTING RECEPTACLE CONNECTOR.
3. MATERIAL AND FINISH:
 - SHELL BODY & INSULATOR: HIGH GRADE DIELECTRIC, COLOR BLACK.
 - RETURN SPRING, SPRING LATCH, PLATE LOCKING & ROLL PIN: STAINLESS STEEL, PASSIVATED
 - GROMMET & FACE SEAL: SILICONE RUBBER, COLOR BLUE.
 - CONTACT RETAINING CLIP: BERYLLIUM COPPER, HEAT TREATED.
2. MARKINGS: TSEI, DATE CODE, CAGE CODE 55104 AND PART NUMBER.
1. CONTACT ACCOMMODATION:
 - SIZE 20 CONTACTS:
 - CB006-SP (2020) - TSEI PALLADIUM PLATED L.I.F. PIN CONTACT; OR
 - CB008-SP (2018) - TSEI PALLADIUM PLATED L.I.F. PIN CONTACT;
 - SIZE 8 COAX PIN CONTACT:
 - CO*ME-501D FOR BMS 13-65 TYPE "OC".
 - CO*ME-502 FOR BMS 13-65 TYPE "OF".
 - CO*ME-503 FOR BMS 13-65 TYPE "OC".
 - SIZE 8 POWER PIN CONTACT:
 - CMP002-P103 FOR 16-20 AWG WIRE
 - CMP003-P103 FOR 12-14 AWG WIRE

NOTES (UNLESS OTHERWISE SPECIFIED)



CONTROLLED DRAWING

PART NUMBER EXPLANATION
CO*ME*(***)P

INSERT ARRANGEMENT (SEE TABLE)
PART NUMBER EXAMPLE:
CO*ME*SP - SHELL SIZE 1 WITH 9 PIN
INSERT ARRANGEMENT.
CO*ME*11WP - SHELL SIZE 2 WITH
11WV INSERT ARRANGEMENT.

SHELL SIZE
E = 1
A = 2
B = 3
C = 4
D = 5

REV	DATE	DESCRIPTION	BY	CHKD
1	7/18/97	ISSUED FOR PRODUCTION	D. SHADA, JR.	
2				
3				
4				
5				

REV	DATE	DESCRIPTION	BY	CHKD
1	7/18/97	ISSUED FOR PRODUCTION	D. SHADA, JR.	
2				
3				
4				
5				

REV	DATE	DESCRIPTION	BY	CHKD
1	7/18/97	ISSUED FOR PRODUCTION	D. SHADA, JR.	
2				
3				
4				
5				

REV	DATE	DESCRIPTION	BY	CHKD
1	7/18/97	ISSUED FOR PRODUCTION	D. SHADA, JR.	
2				
3				
4				
5				

REV	DATE	DESCRIPTION	BY	CHKD
1	7/18/97	ISSUED FOR PRODUCTION	D. SHADA, JR.	
2				
3				
4				
5				

TR-STAR ELECTRONICS INT'L, INC.
2201 REDCRAWNS AVE., EL SEGUNDO, CA 90245

CONNECTOR, PLUG, PIN CONTACT
MOISTURE RESISTING, QUICK DISCONNECT
(NON-CONDUCTIVE)

055104 CO*ME*(***)P

1 1 1

THIS COMPANY ASSUMES NO LIABILITY FOR THE USE OF THIS PRODUCT IN ANY MANNER OTHER THAN THAT SPECIFIED IN THE ORIGINAL PRODUCT DATA SHEET. THE USER SHALL BE RESPONSIBLE FOR THE PROPER USE OF THIS PRODUCT.

SHELL SIZE	INSERT ARRANGEMENT	TSEI PART NO.	CONTACT		A ±.030	B ±.005	C REF	D ±.005	E ±.03	APPROX WEIGHT (LESS CONTACT) GRAMS
			SIZE	QTY.						
1		CQEME9P	#20	9	1.600	.666	.984	.329	1.16	11.79
			15	15	1.928	.994	1.312	.329	1.16	15.87
2		CQAME11WP	#20	10	2.468	1.534	1.852	.329	1.31	20.40
			#8	1						
			#20	25						
			#8	10						
3		CQBME13WP	#20	3	3.116	2.182	2.500	.329	1.31	22.67
			#8	15						
			#20	2						
			#8	20						
4		CQBME21WP	#20	1	3.022	2.079	2.406	.436	1.31	31.73
			#8	1						
			#20	17						
			#8	4						
5		CQOME37P	#20	3	2.079	2.406	.436	1.31	31.73	
			#8	22						
			#20	50						
			#8	3						
5		CQOME25WP	#20	17	2.079	2.406	.436	1.31	31.73	
			#8	4						
			#20	7						
			#8	32						
5		CQOME24WP	#20	4	2.079	2.406	.436	1.31	31.73	
			#8	4						
			#20	4						
			#8	46						
5		CQOME50P	#20	1	2.079	2.406	.436	1.31	31.73	
			#8	1						
5		CQOME36WP	#20	4	2.079	2.406	.436	1.31	31.73	
			#8	4						
5		CQOME47WP	#20	1	2.079	2.406	.436	1.31	31.73	
			#8	1						

NOTES (UNLESS OTHERWISE SPECIFIED)

TR-STAR ELECTRONICS INT'L, INC.
 2201 ROBINSONS AVE., EL SEGUNDO, CA 90245
 TEL: (213) 805-1000
 FAX: (213) 805-1001
 MOISTURE RESISTING, QUICK DISCONNECT (NON-CONDUCTIVE)
 CONNECTOR, PLUG, PIN CONTACT
 APPROX. WEIGHT: 11.79 GRAMS
 PART NO: CQ+ME(***P)
 DATE: 7/17/97
 BY: H. COMLEY JR.
 CHECKED: []
 APPROVED: []
 APPLICATION: []
 USE IN: []
 DATE: []
 PARTS LIST: []
 DRAWING NO: D55104
 REV: 2
 DATE: 7/17/97
 BY: H. COMLEY JR.
 CHECKED: []
 APPROVED: []

SEE SHEET 1 FOR REVISION
 DATE: []
 APPROVED: []

