

J-Tech Rugged RJ45 Product Line

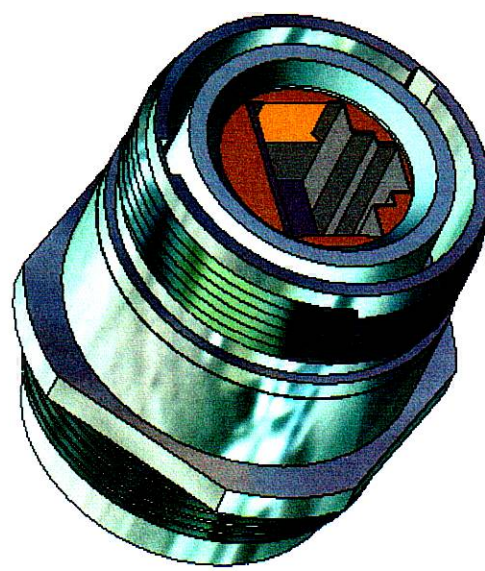
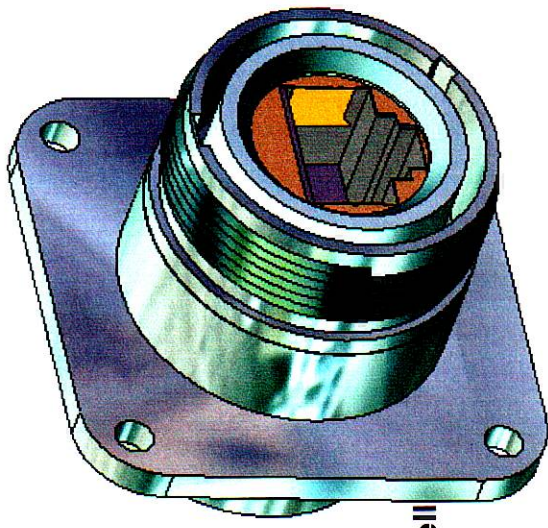
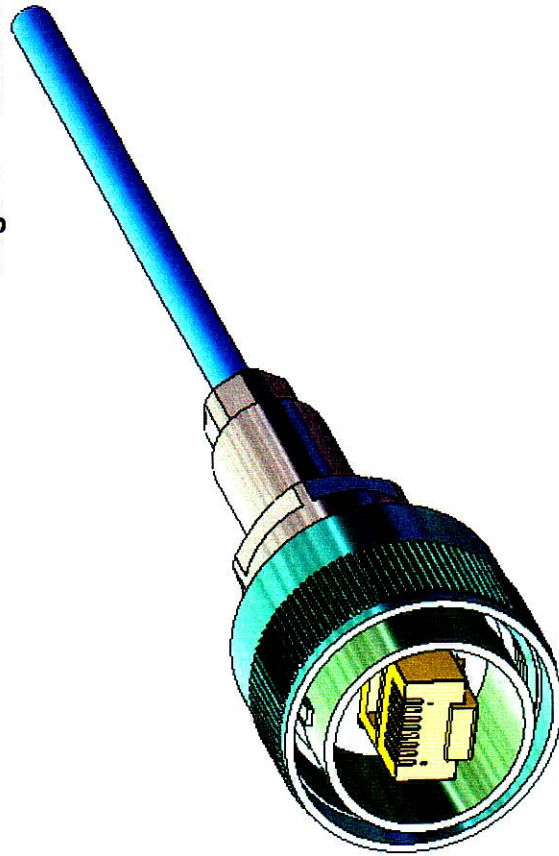
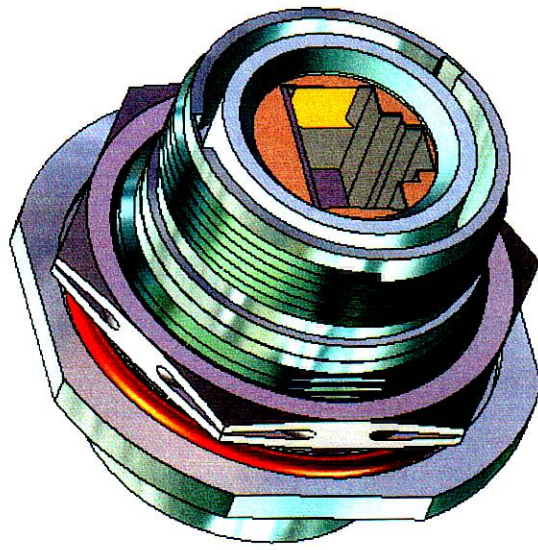


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4 | 3 | 2 | 1

J-Tech RJ-45 Connectors Test Methods

Test	Specification Paragraph Ref.	Description	Requirement
Temperature Cycling	EIA364.32	Per Method EIA364.32 of EIA-364, Condition A except that steps 2 and 4 shall be of 2 minutes maximum duration. The temperature of step 1 shall be -40°C +0°C, -3°C and the temperature of step 3 shall be 85°C +5°C, -0°C.	No evidence of breaking or electrical deterioration.
Durability	EIA364.09	Per Method EIA364.09, Mated and unmated 500 times to mating connector.	No electrical or mechanical defects affecting performance.
Insert Retention	EIA364.35	Per Method EIA364.35 of EIA-364.	Inserts shall not be displaced or show evidence of damage.
Salt Spray (Corrosion)	EIA364.26	Per Method EIA364.26 of EIA-364, Condition B for Nickel Plating. Condition D for Olive Drab Cadmium Plating.	Shell show no exposure of base metal.
Vibration	EIA364.28	Per Method EIA364.28 of EIA-364, Condition VI Letter J, 8 hrs. longitudinal and perpendicular axis.	No evidence of deterioration of Attenuation or IR.
Shock	EIA364.27	Per Method EIA364.27 of EIA-364, Test condition D.	No evidence of deterioration of Attenuation or IR.
Sealing	IP67	Submerge mated connector to a depth of 1m for a period of 30 minutes.	Dust Proof, protected from water intrusion at a depth of 1m for a period of 30 minutes.
Cable Retention	EIA364.38	Per Method EIA364.38 of EIA-364. Apply 100N in the axial direction of the cable.	Cable shall show no evidence of damage detrimental to the function of the connector.

J-Tech RJ-45 Performance Compliance

Test	Performance
CAT 5e/6	Meets requirements of TIA/EIA 568A-5 for CAT 5e. Meets requirements of TIA/EIA 568B.2-1 for CAT 6.
Operating Temperature	-40 C to +85 C
Thermal Cycling	-40 C to +85 C, 5 Cycles
Temperature Life	+85 C for 1000 hours
Random Vibration	41.7 G rms
Shock (half sine)	300 G peak load
Mating Durability	500 Cycles
Salt Spray	48 hours for Nickel Plating. >1000 hours for Olive Drab Cadmium Plating.
Cable Retention Force	Exceeds 100 N in the cable axis.
Sealing	IP67, 1m for a period of 30 minutes.
Insert Retention	100 PSI

REVISIONS			
REV	DESCRIPTION	DATE	APPRD
-	RELEASED PER ECO 6610	1/11/08	CR

J-TECH INC.
1631 E. St. Andrew Pl.
Santa Ana, California 92705

J-TECH
CONCRETSYS

DRW. NO. RJ-45 PERFORMANCE
(QUALIFIED TO EIA-364, IP67)

DATE: 10/24/07
SCALE: C
SIZE: 11x17

DESIGNER: M. GONZALEZ
CHECKER: ENGR. M. GONZALEZ
DATE: 10/24/07

UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS IN INCHES
PART TO BE FREE OF BURRS
FINISH ALL MACHINED SURFACES
MAX. FINISH .0005 IN.
MACHINE FINISH .001-0.002 IN.
X1: 4:10
X2: 4:10
X3: 4:10
X4: 4:10
X5: 4:10
X6: 4:10
X7: 4:10
X8: 4:10
X9: 4:10
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X100: 4:10

DO NOT SCALE DRAWING

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APPLICATION:

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DRW. NO. RJ-45 PERFORMANCE
(QUALIFIED TO EIA-364, IP67)

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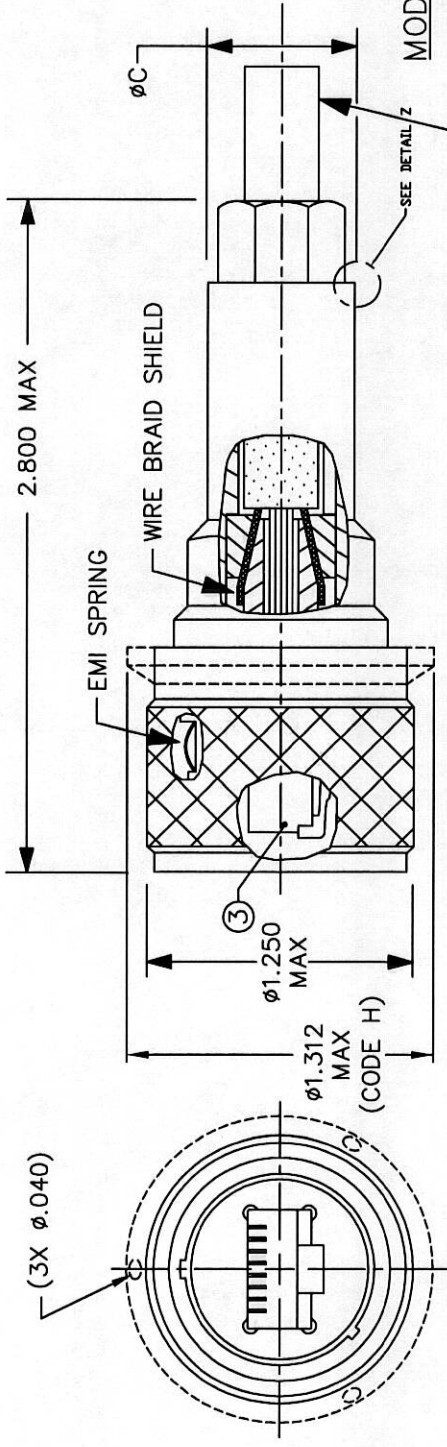
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CHECKER: ENGR. M. GONZALEZ
DATE: 10/24/07

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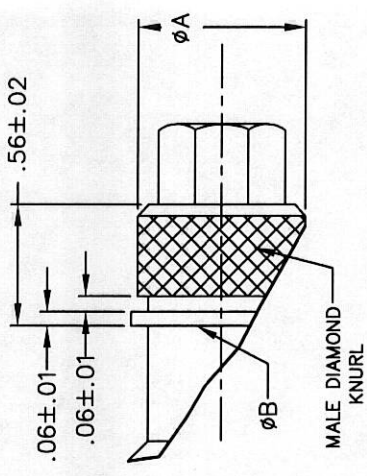
J-TECH CABLE SIZE	ØA	ØB	ØC	ØD
S & L	±.015	±.015	±.015	±.015
ML & XL	.600	.600	.500	—
	.725	.755	.625	.600

REV	DESCRIPTION	DATE	APPR'D
—	INITIAL RELEASE	4.16.02	GS
A	REVISED	7.2.02	GS
B	REVISED	12.1.02	GS
C	REDRAWN PER ECD 5064	1.7.03	D.B.
D	REVISED	2.25.03	GS
E	REVISED PER ECD 5100	3.21.03	D.B.
F	REVISED PER ECD 5206	5.29.03	D.B.
G	REVISED PER ECD 5263	9.11.03	D.B.
H	REVISED PER ECD 5265	9.30.03	D.B.
J	REVISED PER ECD 5265	09/08/05	D.B.
K	REVISED PER ECD 5120	4/12/06	D.B.
L	REVISED PER ECD 5106	9/7/06	D.B.
M	REVISED PER ECD 9438	7/7/07	C.R.



ML & XL ONLY
DETAIL Z

MODIFICATION CODE SB ONLY



SHRINK BOOT/LIP FEATURE DETAIL

PART NUMBER DESCRIPTION:

JTRJ45 - 16 N L H SB
PLUG

SIZE
16 = SIZE 16

MODIFICATION CODE
BLANK - NO INSULATING WASHER
SB = SHRINK BOOT/LIP FEATURE ON BACKSHELL BODY

WIRE HOLES
BLANK - NO WIRE HOLES
H = WITH 3 WIRE HOLES

PLATING
N = NICKEL
C = CADMIUM

CABLE SIZE
S = .170/.230 O.D.
L = .230/.300 O.D.
ML = .325/.375 O.D.
XL = .390/.460 O.D.

NOTES:
1. PLUG INTERFACE CONFORMS TO MIL-C-83723, SERIES III, EXCEPT AS NOTED.

2. MATERIAL:
-HARDWARE~ALUMINUM ALLOY; PLATE PER P/N CODE.
-EMI SPRING~COPPER ALLOY/ NICKEL PLATE.
-SEALS~SILICONE RUBBER.

3. R445 PLUG SHOWN AS REFERENCE.

CONSULT FACTORY FOR SPECIAL PLUG TO USE WITH OVERSIZE WIRE INSULATION.

4. FOR USE WITH APPLICABLE CAT CODE MILITARY CABLE WITH BRAIDED SHIELD.

CONSULT FACTORY FOR OTHER CABLES.

SALES DRAWING

J-TECH 1631 E. ST. ANDREW PLACE SANTA ANA CA 92705

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TOLERANCES ON:
.X .XX .XXX ANGLES
±.1 ±.01 ±.000 ±1/2

DO NOT SCALE THIS DRAWING

REF. M CODE BENT. NO. 1 91

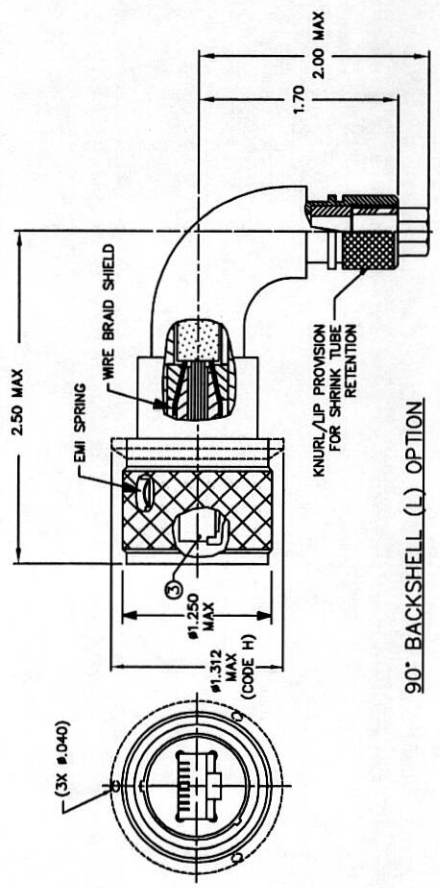
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CHECKED BY: []
APPROVED BY: []

DESCRIPTION: STRAIGHT PLUG, SIZE 16, CAT 5/5e/6 CABLE.

PART NUMBER: JTRJ45-16

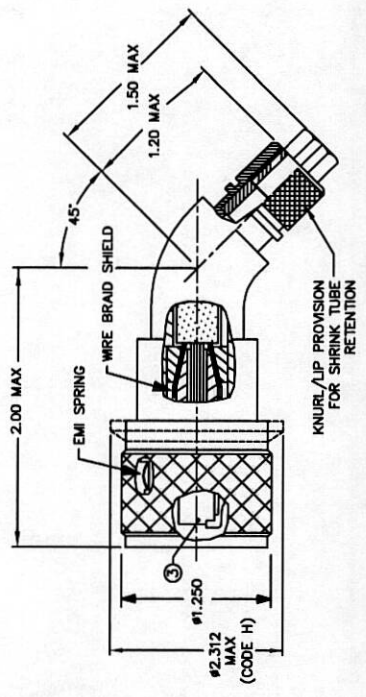
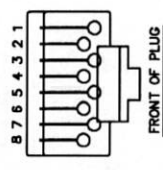
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REV	DESCRIPTION	DATE	APPR'D
-	RELEASED PER ECO 9674	8/4/04	DB
A	REVISED PER ECO 9620	4/17/06	DB
B	REVISED PER ECO 9438	7/17/07	CR
C	REVISED PER ECO 9485	8/16/07	CR



90° BACKSHELL (L) OPTION

- TIA/EIA 568B COLOR CODE
- 1 WHITE W/ORANGE
 - 2 ORANGE
 - 3 WHITE W/GREEN
 - 4 BLUE
 - 5 WHITE W/BLUE
 - 6 GREEN
 - 7 WHITE W/BROWN
 - 8 BROWN



45° BACKSHELL (Y) OPTION

PART NUMBER DESCRIPTION:

JTRJ45 L 16 N H -M***
 PLUG

MOD CODE-M***
 SEE FACTORY

BLANK- NO WIRE HOLES
 H = WITH 3 WIRE HOLES

CABLE SIZE
 XL = .380/.460 O.D.
 L = .230/.300 O.D.
 S = .170/.230 O.D.
 ML = .325/.375 O.D.

SIZE 16 = SIZE 16

PLATING-
 N = NICKEL
 C = CADMIUM

SALES DRAWING

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PROJECT: PROTECTION	PART NUMBER: JTRJ45L16***	DO NOT SCALE THIS DRAWING	CODE DESC. NO. C CODE QW78
DRAWN BY:	CHECKED BY:	CABLE ASSEMBLY JTRJ45 SIZE 16 W/30° SHRINK BOOT BACKSHELL CAT 9/56/6	SHEET 1 of 1

- NOTES:**
1. PLUG INTERFACE CONFORMS TO MIL-C-83723, SERIES III.
 2. MATERIAL:
 - HARDWARE-ALUMINUM ALLOY; PLATE PER P/N CODE
 - EMI SPRING: COPPER ALLOY/ NICKEL PLATE.
 - SEALS-SILICONE RUBBER.
- ③ RJ45 PLUG SHOWN FOR REFERENCE.

REV	DESCRIPTION	DATE	APPR'D
B	REDESIGNED PER ECN 3004 WAS JTRJ45 REV A	1.7.03	D.B.
C	REVISED PER ECN 5238	5.7.03	D.B.
D	REVISED PER ECN 5905	8/08/05	D.B.
E	REVISED PER ECN 6001	12/19/05	D.B.
F	REVISED PER ECN 6104	4/4/06	D.B.
G	REVISED PER ECN 6120	4/12/06	D.B.
H	REVISED PER ECN 8438	7/17/07	CR

FIGURE 2 (INNER GROUND RING DETAILS)

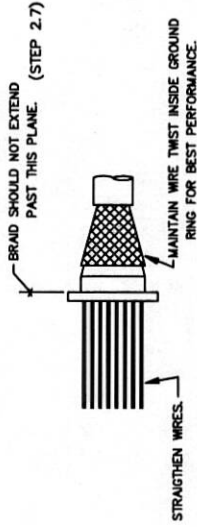
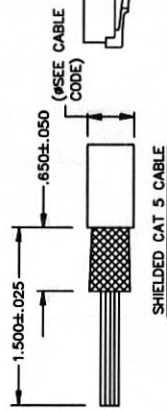


FIGURE 1 (STRIPPING DIMENSIONS)



PART NUMBER DESCRIPTION:

JTRJ45 - 16 N L
 PLUG - SIZE 16 CABLE SIZE
 SIZE 12 PLATING XL = .390/.460 O.D.
 N = NICKEL L = .230/.300 O.D.
 C = CADMIUM S = .170/.230 O.D.

1. TOOLS REQUIRED
 - 1.1 STANDARD MOLECULAR PLUG CRIMP TOOL
 - 1.2 CABLE JACKET STRIPPER
2. ASSEMBLY INSTRUCTIONS: ASSEMBLY TIME IS 3 TO 4 MINUTES.
 - 2.1 DISASSEMBLE COMPONENTS (ITEMS 2 THRU 6) AND SLIDE OVER CABLE.
 - 2.2 STRIP JACKET FROM CABLE TO DIMENSIONS SHOWN IN FIGURE 1. IMPORTANT: DO NOT CUT OR NICK STRANDS OF BRAIDED SHIELD.
 - 2.3 SLIDE INNER GROUNDING RING (ITEM 2) OVER WIRES AND UNDER BRAIDED SHIELD.
 - 2.4 STRAIGHTEN WIRES. DO NOT UNTWIST WIRES FURTHER THAN NEEDED. ARRANGE WIRES PER APPLICABLE CAT CODE TIA/EIA 568.
 - 2.5 PUSH WIRES INTO RJ45 PLUG. MAKE SURE ALL WIRES EXTEND TO THE FRONT OF THE PLUG.
 - 2.6 TERMINATE WIRES TO PLUG WITH CRIMP TOOL.
 - 2.7 DRESS BRAID OVER GROUND RING (2). BRAID STRANDS SHOULD BE BUNCHED TOGETHER. IT IS IMPORTANT TO BUNCH BRAID TOGETHER. TRIM STRAY BRAID WIRES.
 - 2.8 INSERT RJ45 ADAPTER INTO BARREL (ITEM 1). MAKE SURE TOP OF RJ45 PLUG IS FACING UP TOWARD MASTER KEY AS SHOWN IN FIGURE 2.
 - 2.9 PUSH OUTER GROUND RING (3) AND BACKSHELL (4) FORWARD.
 - 2.10 INSERT BARREL (1) INTO RECEPTACLE SHELL (SHELL- PROVIDED WITH ASSEMBLY INSTRUCTIONS) AND TIGHTEN COUPLING RING.
 - 2.11 FIRMLY PUSH CABLE JACKET FORWARD PRIOR TO SCREWING ON BACKSHELL.
 - 2.12 SCREW BACKSHELL (ITEM 4) ONTO PLUG BARREL.
 - 2.13 TIGHTEN BACKSHELL WITH 3/4" BOX WRENCH.
 - 2.14 SLIDE CABLE SEAL (ITEM 5) INTO BACKSHELL.
 - 2.15 SCREW NUT (ITEM 6) ONTO BACKSHELL. TIGHTEN NUT WITH WRENCH 3/8" OR 7/16" BOX WRENCH. USE MATING RECEPTACLE TO HOLD BARREL.
 - 2.16 UNSCREW PLUG FROM RECEPTACLE SHELL.

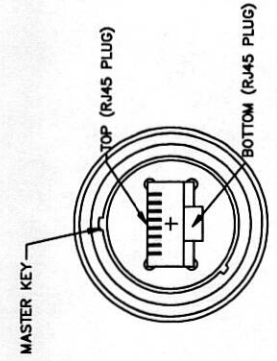
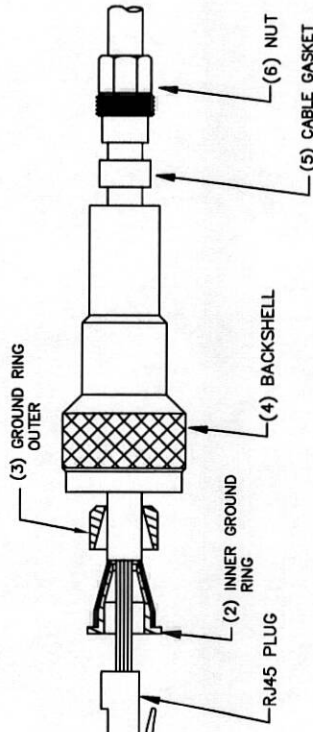
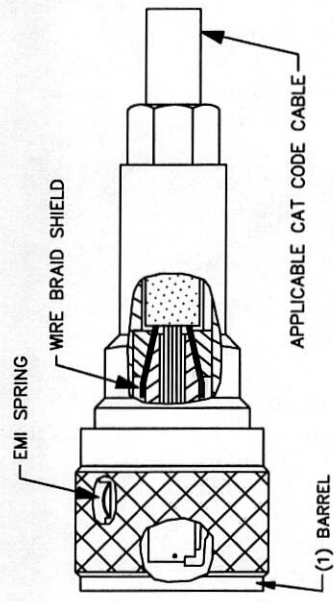


FIGURE 2: PLUG ORIENTATION



FIELD ASSY DRAWING

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DRAWN BY: J-TECH CHECKED BY: J-TECH APPROVED BY:	TITLE:	DESCRIPTION:	ASSEMBLY STEPS RJ45 CONNECTOR WIRE BRAID SHIELD CAT 5/5e/6 CABLE
PART NUMBER: JTRJ45-*****	DO NOT SCALE THIS DRAWING	REV: H	CODE IDENT. NO. 08W78
DIMENSIONS ARE IN INCHES TOLERANCES ON: X .XX .XXX ANGLES ±.1 ±.01 ±.005 ±.1/2	FILE NUMBER: JTRJ45-FIELD-ASSY/G	PROJECTION:	SHEET: 1 of 1

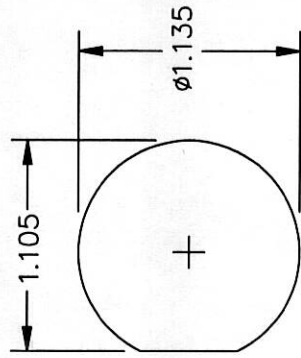
PART NUMBER DESCRIPTION:

JTRJ45F - 16 N J S F S
 RECEPTACLE - SHIELDING OPTIONS
 PS = PASS THRU SHIELDED (REQUIRES SHIELDED RJ PLUG BOTH SIDES)
 S = SHIELD CABINET SIDE ONLY (REQUIRES SHIELDED RJ PLUG THAT SIDE ONLY)
 CONTACT TAIL
 F = FEEDTHRU
 O-RING, PANEL
 PLATING
 N = NICKEL
 C = CADMIUM
 MOUNTING
 J = JAM NUT
 F = FLANGE MOUNT
 SEE SHEET 2

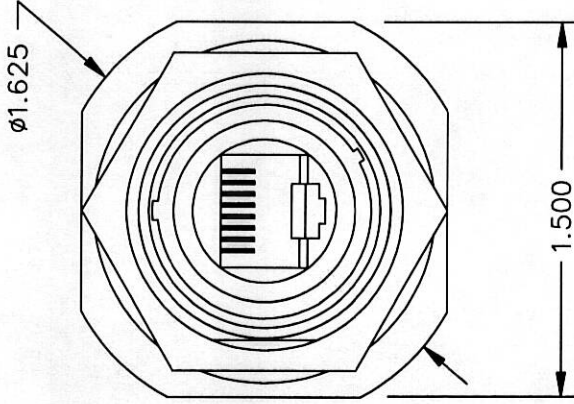
ANSI/TIA/EIA 568B

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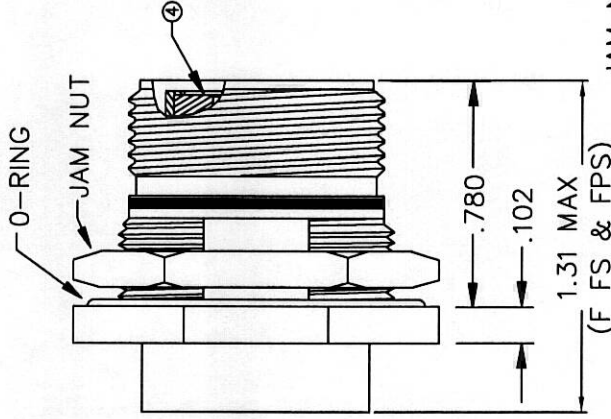
WIRING SCHEMATIC
 FOR ALL COUPLERS
 TYPE F FS & FPS



PANEL CUT-OUT
 JAM NUT MOUNT



JAM NUT MOUNT



(F FS & FPS)

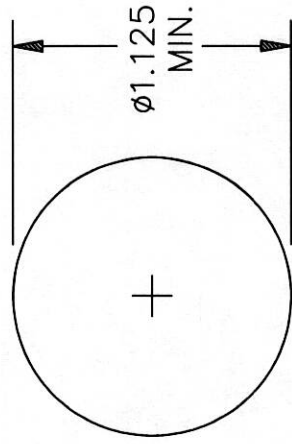
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C	REVISED PER EDR 3270	6/11/03	DB
D	REVISED PER EDR 3538	8/12/03	DB
E	REVISED PER EDR 3581	9/11/03	DB
F	REVISED PER EDR 3748	11/6/05	DB
G	REVISED PER EDR 3748	11/6/05	DB
H	REVISED PER EDR 3979	11/4/05	DB
I	REVISED PER EDR 4407	5/15/07	CR
J	REVISED PER EDR 6438	7/17/07	CR
K	REVISED PER EDR 6438	7/17/07	CR
L	REVISED PER EDR 6438	8/16/07	CR

SALES DRAWING

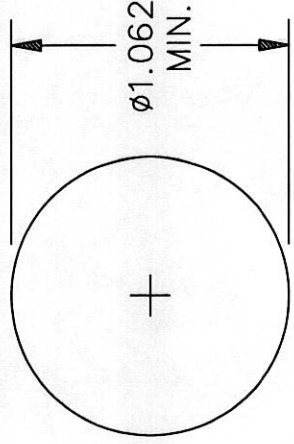
J-TECH 14251 Franklin Ave., Tustin, CA 92780-7008	
PROJECT: THIS DOCUMENT INFORMATION OBTAINED BY USER IS UNCLASSIFIED AND IS TO BE RELEASED TO THE PUBLIC WITHOUT LIMITATION UNLESS INDICATED OTHERWISE IN WRITING.	DRAWN BY: [] CHECKED BY: [] APPROVED BY: []
RECEPTACLE, SIZE 16, CATEGORY 5/5e/6,	PART NUMBER: JTRJ45F-16 *** DO NOT SCALE THIS DRAWING
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: .125 & .1875 ANGLES .010 .015 .020 .030 .040 .050	QTY: 1000 CODE: 01018-EGN8173 REV: L SHEET: 1 OF 2

- NOTES:**
- RECEPTACLE INTERFACE CONFORMS TO MIL-C-83723, SERIES III.
 - MATERIAL:
 HARDWARE-ALUMINUM ALLOY; PLATE PER PART NUMBER.
 SEALS-STANDARD: SILICONE.
 CONDUCTIVE: SILICONE IMPREGNATED WITH SILVER PLATED
 COPPER PER MIL-G-83528.
 3. SEALED DUST CAPS AVAILABLE.
 - RECEPTACLE COUPLER MEETS REQUIREMENTS OF APPLICABLE CAT CODE PER TIA/EIA 568.

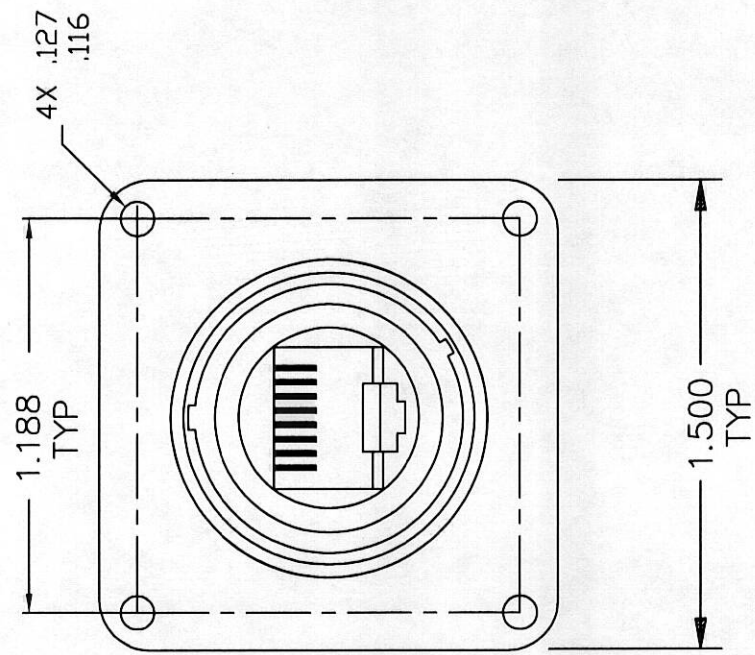
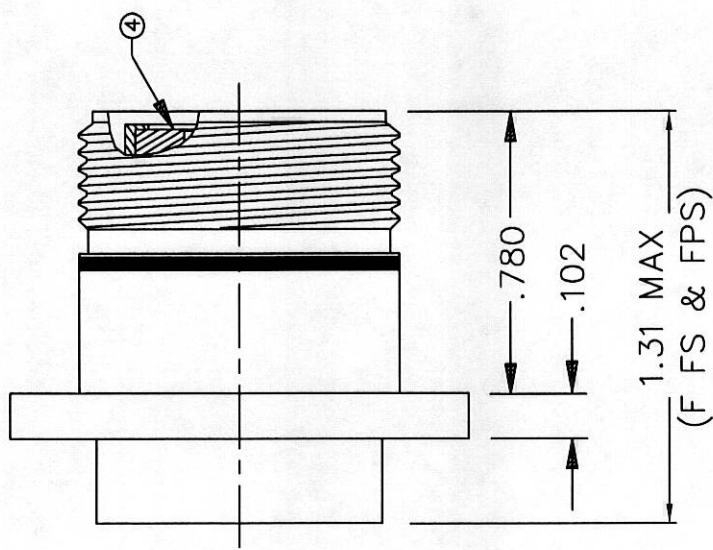
REV	DESCRIPTION	DATE	APPR'D
	SEE SHEET 1		



PANEL CUT-OUT
REAR MOUNT



PANEL CUT-OUT
FRONT MOUNT



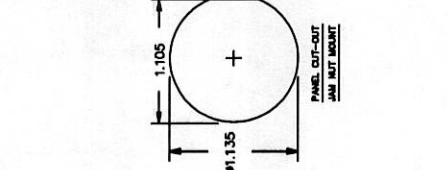
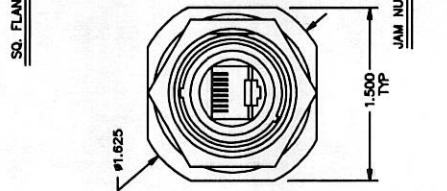
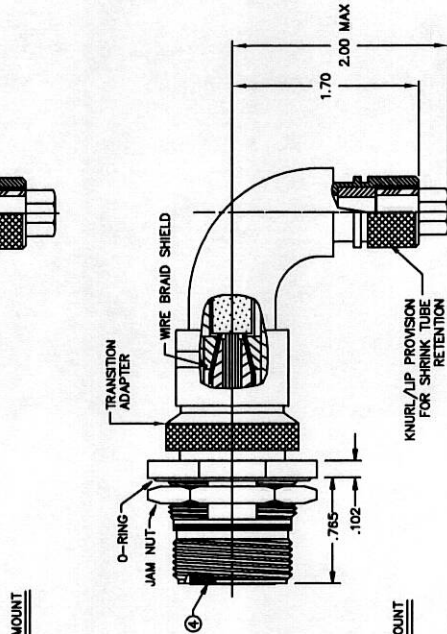
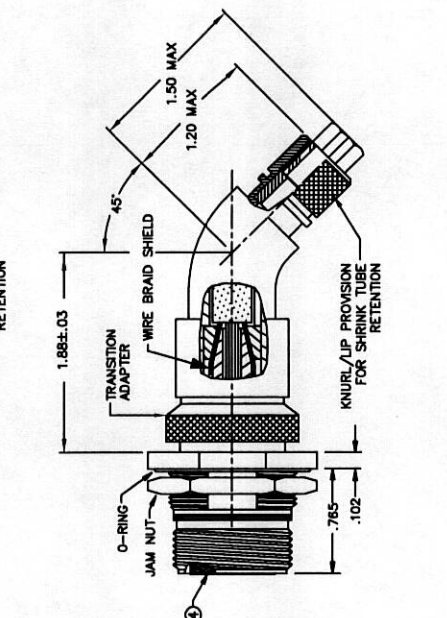
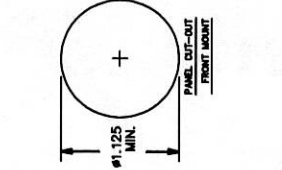
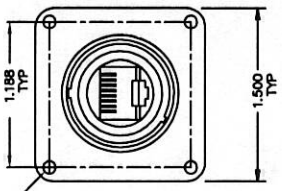
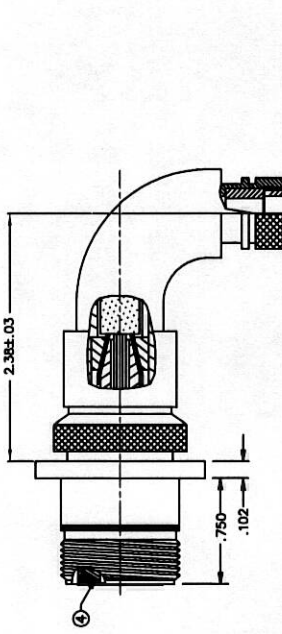
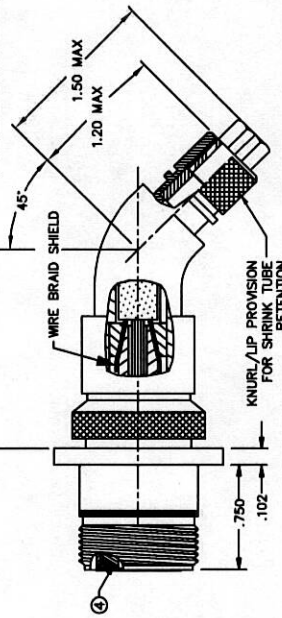
SQ. FLANGE MOUNT

SALES DRAWING

		14251 Franklin Ave., Tustin, CA 92780-7008	
PROPRIETARY: THIS DOCUMENT CONTAINS PROPRIETARY DESIGN INFORMATION, OWNED BY J-TECH INC. NEITHER THIS DOCUMENT NOR ANY PART OF THIS DESIGN MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT WRITTEN PERMISSION.	PART NUMBER: JTR-J45F-16 ***	DESCRIPTION: RECEPTACLE, SIZE 16, CATEGORY 5/5e/6,	DO NOT SCALE THIS DRAWING
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	FILE NUMBER: JTR-J45F-16-00-SALES	PROJECTION:	REV: L
TOLERANCES ON: .X .XX .XXX ANGLES ±.1 ±.01 ±.01 ±1/2°	QF301B-ECON173	PART NUMBER: JTR-J45F-16 ***	SHEET 2 of 2

- NOTES:
- PANEL MOUNTING DIMENSIONS ARE NOT PER MIL-C-83723.
 - MAXIMUM PANEL THICKNESS TO BE .150".

REV	DESCRIPTION	DATE	APPR'D
-	RELEASED PER ESD 8750	4/12/06	DR
A	REVISED PER ESD 8750	7/17/07	DR
B	REVISED PER ESD 8750	8/19/07	DR
C	REVISED PER ESD 8750	11/22/07	DR



ANSI/TIA/EIA 568

1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8

WIRING SCHEMATIC FOR ALL COUPLERS TYPE F & FS

MODIFICATION CODE SEE FACTORY FOR OPTIONS

CABLE SIZE
S = 170/230 O.D.
L = 230/300 O.D.
ML = .325/.375 O.D.
XL = .390/.460 O.D.

CONTACT TAIL
F = FEEDTHRU, SHIELDED RJ PLUG
FS = FEEDTHRU, SHIELDED RJ PLUG
REQUIRES SHIELDED RJ PLUG

O-RING, PANEL
S = SILICONE, STANDARD
C = CONDUCTIVE

MOUNTING
P = PANEL MOUNT
L = IN LINE

PLATING
N = NICKEL
C = CHROMIUM

RECEPTACLE
L = 90° BACKSHELL OPT.
Y = 45° BACKSHELL OPT.

CATEGORY
0 = CAT 5/5e
6 = CAT 6

SIZE
16 = SIZE 16

JTRAFSE L - 16 N J S F L



SALES DRAWING

J-TECH
1631 E. ST. ANDREW PLACE SANTA ANA CA 92705

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:
.125 ±.01
.125 ±.01
.517 ±.01

DO NOT SCALE THIS DRAWING

DATE: 11/22/07
DRAWN BY: DR
CHECKED BY: DR
APPROVED BY: DR

RECEPTACLE
SIZE 16, 90 DEG
CATEGORY 5/5e/6

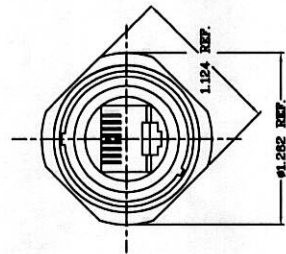
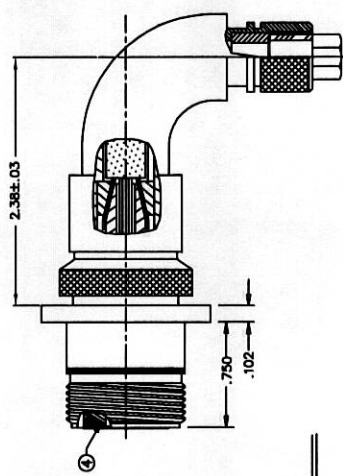
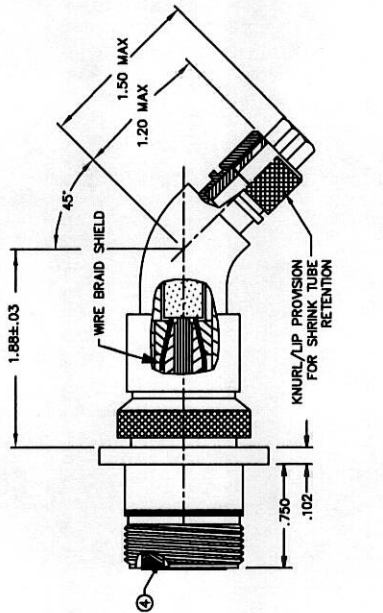
PART NUMBER: JTRAFSEL-16***

DATE: 11/22/07
DRAWN BY: DR
CHECKED BY: DR
APPROVED BY: DR

DATE: 11/22/07
DRAWN BY: DR
CHECKED BY: DR
APPROVED BY: DR

- NOTES:
- RECEPTACLE INTERFACE CONFORMS TO MIL-C-83723, SERIES III EXCEPT AS SHOWN.
 - MATERIAL:
HARDWARE--ALUMINUM ALLOY; PLATE PER PART NUMBER.
O-RINGS--STANDARD: SILICONE
CONDUCTIVE: SILICONE IMPREGNATED WITH SILVER PLATED
COPPER PER MIL-G-83528.
CABLE SEAL--SILICONE.
 - SEALED DUST CAPS AVAILABLE.
 - RECEPTACLE COUPLER MEETS REQUIREMENTS OF APPLICABLE CAT CODE PER TIA/EIA 568.
 - PANEL MOUNTING DIMENSIONS ARE NOT PER MIL-C-83723.
 - MAXIMUM PANEL THICKNESS TO BE .150".

REV	DESCRIPTION	DATE	APPR'D
	SEE SHEET 1		



IN LINE

SALES DRAWING

	1631 E. ST. ANDREW PLACE SANTA ANA CA 92705 J-TECH TEL: 714/261-1111	RECEIPT NO. RECEIVED BY APPROVED BY	DESCRIPTION RECEPTACLE. SIZE 16, 90 DEG CATEGORY 5/5e/6
	PART NUMBER JTR45FL-16	DO NOT SCALE THIS DRAWING DR. C DATE 08/78	TOLERANCES ARE IN INCHES .125 .001 .062 .001 .031 .001 .015 .001 .007 .001 .003 .001 .001 .001

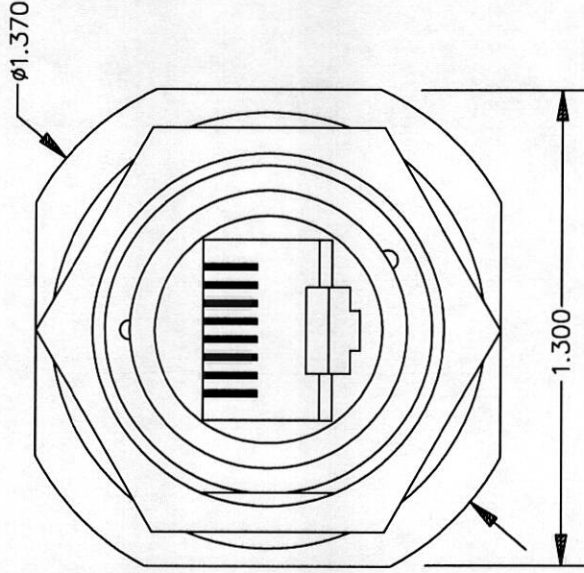
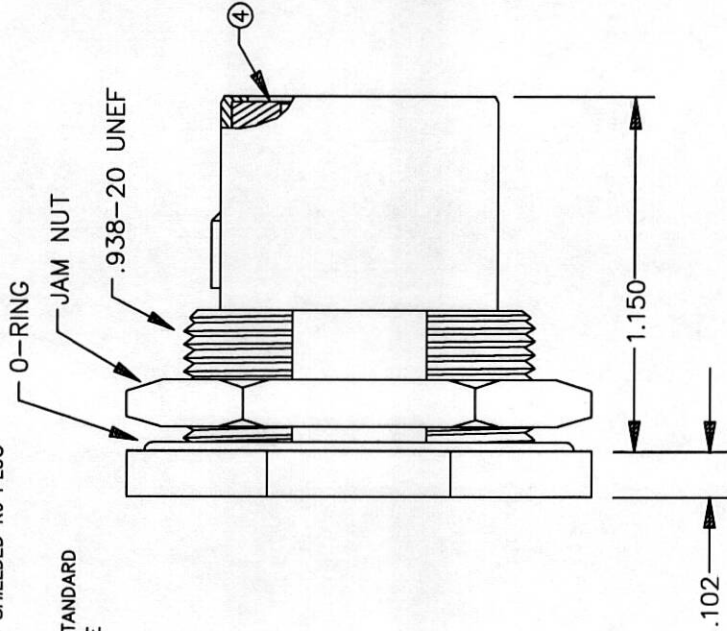
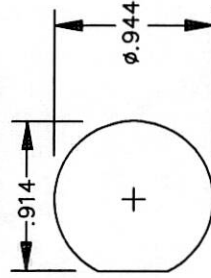
REV	DESCRIPTION	DATE	APPRD
-	INITIAL RELEASE	12/08/00	G.S.
A	REVISED	2/26/03	G.S.
B	REVISED PER EGN 5270	6.11.03	DB
C	REVISED PER EGO 5336	6.12.03	DB
D	REVISED PER EGO 5758	11.17.04	DB
E	REVISED PER EGO 6191	XXXX	DB
F	REVISED PER EGO 6438	7/17/07	CR
G	REVISED PER EGO 6495	18/19/07	CR

PART NUMBER DESCRIPTION:

JTR45F - 12 N J S F
 RECEPTACLE
 CATEGORY
 () = CAT 5/5e
 6 = CAT 6
 SIZE
 12 = SIZE 12
 PLATING
 N = NICKEL
 C = CADMIUM
 MOUNTING
 J = JAM NUT
 F = FLANGE MOUNT
 SEE SHEET 2
 CONTACT TAIL
 F = FEEDTHRU
 FS = FEEDTHRU, SHIELDED
 REQUIRES SHIELDED RJ PLUG
 FPS = FEEDTHRU, RECEPTACLE, PASS
 THROUGH SHIELDED
 REQUIRES SHIELDED RJ PLUG
 O-RING, PANEL
 S = SILICONE, STANDARD
 C = CONDUCTIVE

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____

WIRING SCHEMATIC



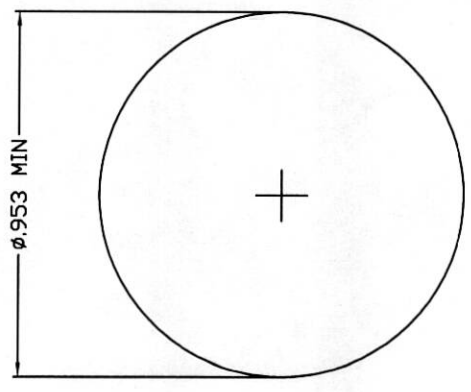
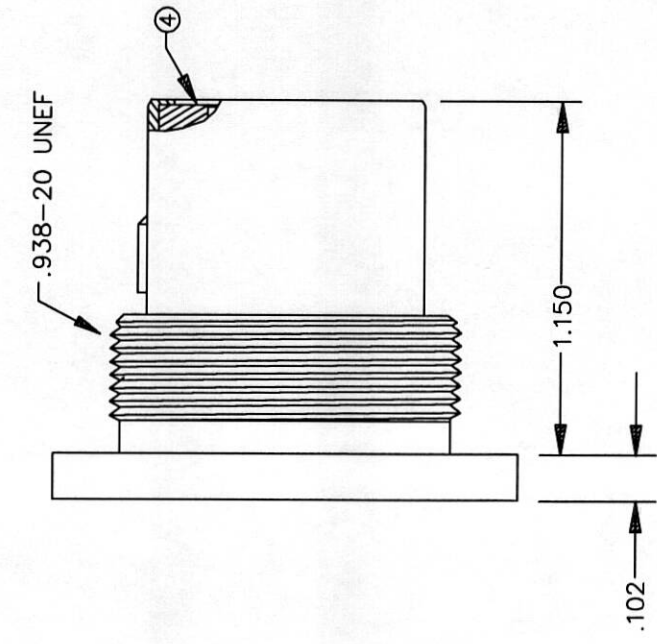
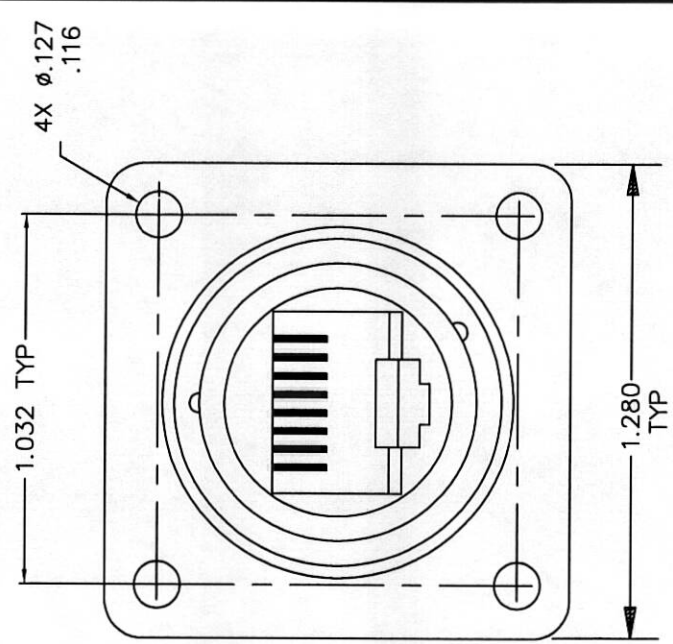
NOTES:

1. MATERIAL:
HARDWARE-ALUMINUM ALLOY; PLATE PER PART NUMBER.
SEALS: STANDARD: SILICONE.
CONDUCTIVE: SILICONE IMPREGNATED WITH SILVER PLATED
COPPER PER MIL-G-83528.
2. SEALED DUST CAPS AVAILABLE.
3. MAXIMUM PANEL THICKNESS IS .150 INCHES.
- ④ RECEPTACLE COUPLER MEETS REQUIREMENTS OF THE APPLICABLE CAT CODE PER TIA/EIA 568.

SALES DRAWING


J-TECH CONCEPTS INC. 14251 Franklin Ave., Tustin, CA 92780-7008
 MAIN OFFICE: 714/945-1200
 CHECKED BY: G. SCHAEFFER 12/09/00
 APPROVED BY: [Signature]
 DESCRIPTION: RECEPTACLE, SIZE 12, CATEGORY 5/5e/6
 PART NUMBER: JTR45F-12****
 DO NOT SCALE THIS DRAWING
 FILE NUMBER: JTR45F-12-SALES
 OF 301B-ECNS173
 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 TOLERANCES ON:
 .X ±.1
 .XX ±.01
 .XXX ±.01
 ANGLES ±1/2
 REV. G
 CODE IDENT. NO. 081W78
 SHEET 1 of 2

REV	DESCRIPTION	DATE	APPR'D
	SEE SHEET 1		



PANEL CUT-OUT

SALES DRAWING

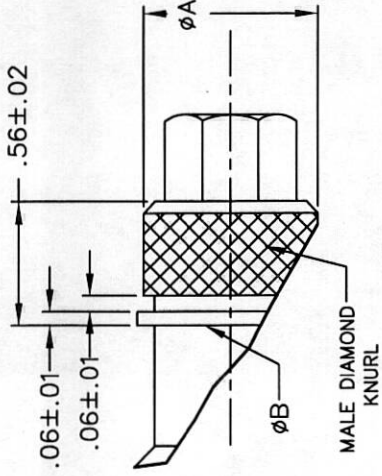
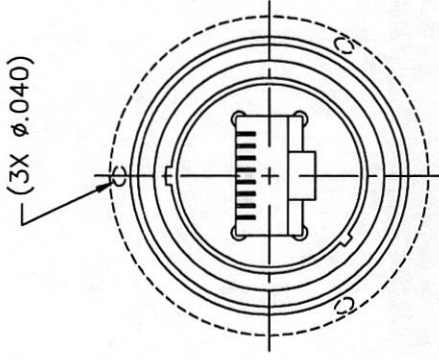
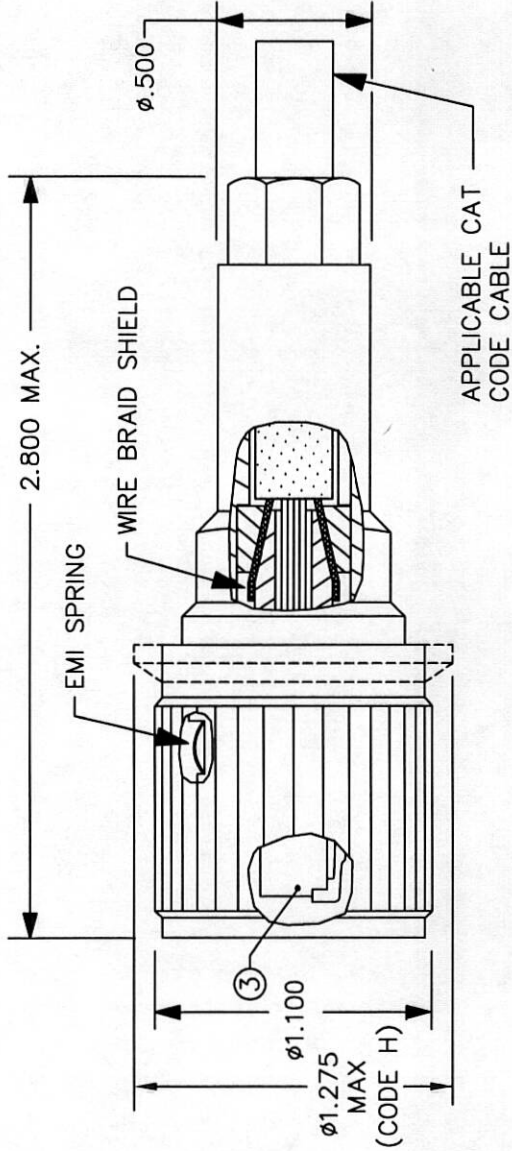
 J-TECH 14251 Franklin Ave., Tustin, CA 92780-7008 CONCEPTS		12/09/00 G. SCHAEFFER 12/09/00	
PROPRIETARY: THIS DOCUMENT CONTAINS PROPRIETARY DESIGN INFORMATION OWNED BY J-TECH INC. NEITHER THIS DOCUMENT NOR ANY PART OF THIS DESIGN MAY BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION.		DESCRIPTION: RECEPTACLE, SIZE 12, CATEGORY 5,	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		PART NUMBER: JTRJ45F-12****	
TOLERANCES ON: X .XX .XX ANGLES ±.1 ±.01 ±1/2		DO NOT SCALE THIS DRAWING	
FILE NUMBER: JTRJ45F-12-SALES QF301B-ECN5173		REV: G	
		CODE IDENT. NO. 08/07/8	
		SHEET 2 of 2	

NOTES:

1. PANEL MOUNTING DIMENSIONS ARE NOT PER MIL-C-83723.
2. MAXIMUM PANEL THICKNESS TO BE .150".

J-TECH CABLE SIZE	φA	φB	φC	φD
S & L	±.015	±.015	±.015	±.015
ML & XL	.600	.600	.500	—
	.725	.755	.625	.600

REV	DESCRIPTION	DATE	APPR'D
—	INITIAL RELEASE	2.27.03	GS
A	REVISED PER ECN 5259	5.29.03	DB
B	REVISED PER ECN 5905	11/21/05	DB
C	REVISED PER ECN 6120	4/12/06	DB
D	REVISED PER ECN 6436	7/17/06	CR



PART NUMBER DESCRIPTION:
 JTRJ45 - 12 N L H SB
 PLUG SIZE 12 = SIZE 12
 PLATING N = NICKEL
 C = CADMIUM
 MODIFICATION CODE:
 SB=SHRINK BOOT/LIP FEATURE ON BACKSHELL BODY
 BLANK - NO WIRE HOLES
 H = WITH 3 WIRE HOLES
 CABLE SIZE
 XL = .390/.460 O.D.
 L = .230/.300 O.D.
 S = .170/.230 O.D.
 ML = .325/.375 O.D.

SHRINK BOOT/LIP FEATURE DETAIL
MODIFICATION CODE SB ONLY

SALES DRAWING

NOTES:

1. PLUG INTERFACE CONFORMS TO MIL-C-83723, SERIES III.
2. MATERIAL:
 -HARDWARE-ALUMINUM ALLOY; PLATE PER P/N CODE.
 -EMI SPRING: COPPER ALLOY/ NICKEL PLATE.
 -SEALS-SILICONE RUBBER.
3. RJ45 PLUG SHOWN FOR REFERENCE.
4. FOR USE WITH APPLICABLE CAT CODE MILITARY CABLE WITH BRAIDED SHIELD. CONSULT FACTORY FOR OTHER CABLES.

J-TECH INC. 1631 E. ST. ANDREW PLACE SANTA ANA CA 92705
 con@sys

DATE: 2.27.03
 DRAWN BY: GSCHEPSTER 2.27.03
 CHECKED BY:
 APPROVED BY:

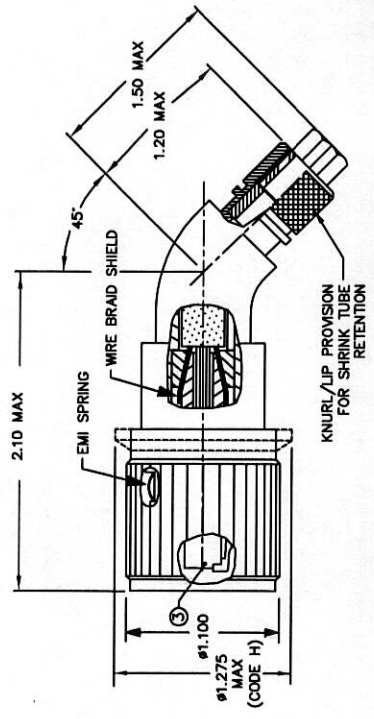
PROPRIETARY: THIS DOCUMENT CONTAINS PROPRIETARY DESIGN INFORMATION. OWNED BY J-TECH INC. NEITHER THIS DOCUMENT NOR ANY PART OF THIS DESIGN MAY BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 TOLERANCES ON:
 .X .XX .XXX ANGLES
 ±.1 ±.01 ±.005 ±1/2

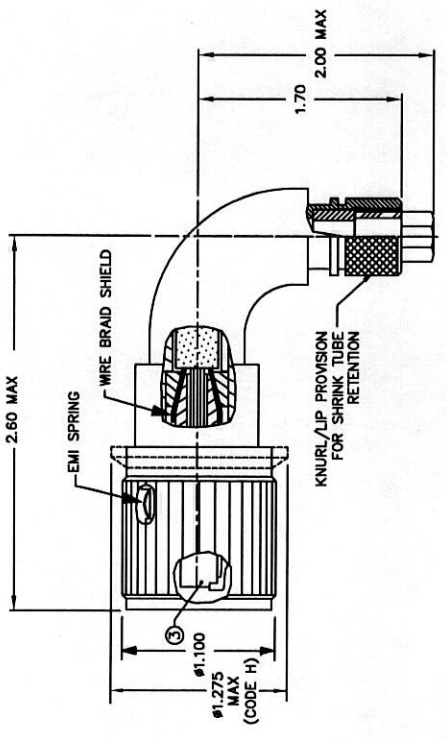
DESCRIPTION: STRAIGHT PLUG, SIZE 12
 CAT 5/5e/6 CABLE

PART NUMBER: JTRJ45-12**
 DO NOT SCALE THIS DRAWING
 REV. D CODE IDENT. NO. 08W78 1 of 1

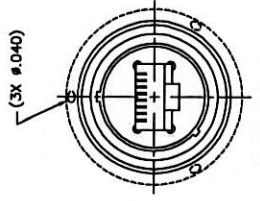
REV	DESCRIPTION	DATE	APPR'D
-	RELEASED PER ECD 8436	7/17/07	GR



45° BACKSHELL (Y) OPTION

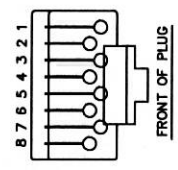


90° BACKSHELL (L) OPTION



PART NUMBER DESCRIPTION:
 JTRJ45 L 12 N L H -M***
 PLUG - MOD CODE-M*** SEE FACTORY
 L-90 DEG BACKSHELL - BLANK- NO WIRE HOLES
 Y-45 DEG BACKSHELL - H = WITH 3 WIRE HOLES
 SIZE - CABLE SIZE
 12 = SIZE 12 XL = .390/.460 O.D.
 L = .230/.300 O.D.
 S = .170/.230 O.D.
 ML = .325/.375 O.D.
 PLATING - N = NICKEL
 C = CADMIUM

- 1 WHITE W/ORANGE
 - 2 ORANGE
 - 3 WHITE W/GREEN
 - 4 BLUE
 - 5 WHITE W/BLUE
 - 6 GREEN
 - 7 WHITE W/BROWN
 - 8 BROWN
- TIA/EIA 568B COLOR CODE



		1631 E. ST. ANDREW PLACE SANTA ANA CA 92705	
PROPRIETARY: THIS DOCUMENT CONTAINS PROPRIETARY DESIGN INFORMATION. IT IS THE PROPERTY OF J-TECH. NEITHER THIS DOCUMENT NOR ANY PART OF THIS DESIGN MAY BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION.	DRAWN BY: [] CHECKED BY: [] APPROVED BY: []	DESCRIPTION: CABLE ASSEMBLY JTRJ45 SIZE 12 W/45 OR 90° SHRINK BOOT BACKSHELL CAT 5/5e/6	PART NUMBER: JTRJ45L12*** DO NOT SCALE THIS DRAWING
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: X .000 Y .000 Z .100 ±.012	FILE NUMBER: JTRJ45L12-SALES OF 3010-ECN6021	PROJECTION: []	REV: - CODE BENT. NO.: 08W7B 1 of 1

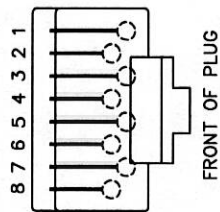
SALES DRAWING

- NOTES:**
- PLUG INTERFACE CONFORMS TO MIL-C-83723, SERIES III.
 - MATERIAL: -HARDWARE-ALUMINUM ALLOY; PLATE PER P/N CODE
 -EMI SPRING- COPPER ALLOY/ NICKEL PLATE.
 -SEALS-SILICONE RUBBER.
 - RJ45 PLUG SHOWN FOR REFERENCE.
 - FOR USE WITH APPLICABLE CAT CODE MILITARY CABLE WITH BRAIDED SHIELD. CONSULT FACTORY FOR OTHER CABLES.

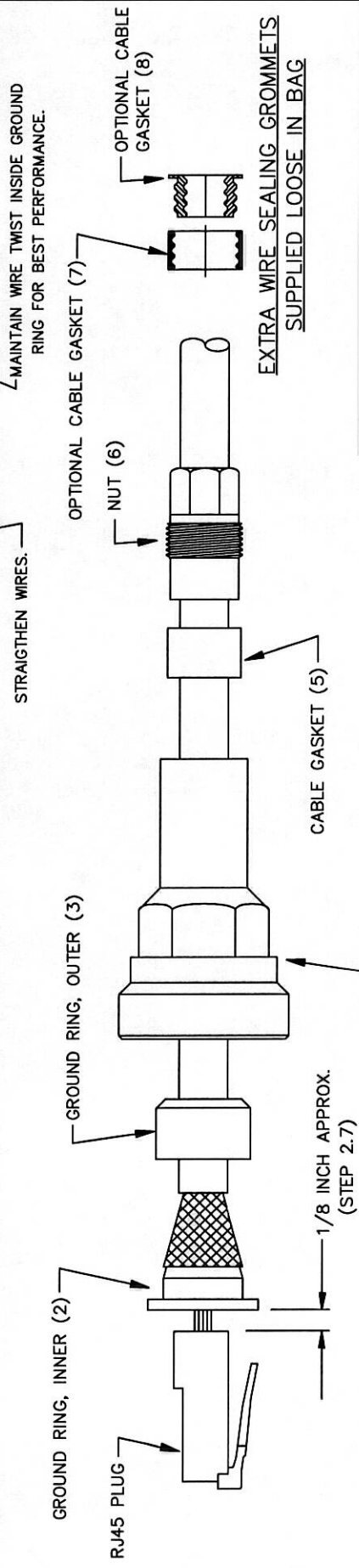
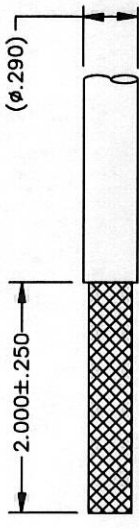
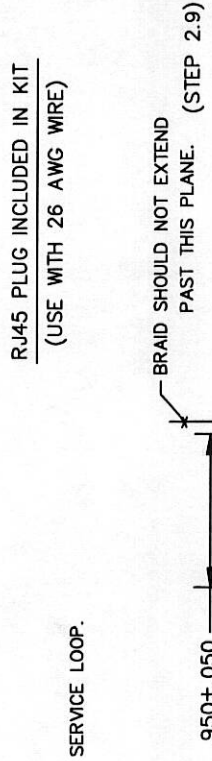
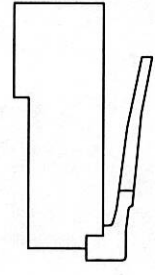
REV	DESCRIPTION	DATE	APPR'D
-	INITIAL RELEASE	7/23/02	G.S.
A	REVISED	9/28/03	G.S.
B	REVISED PER ECN 5805	8/06/05	D.B.
C	REVISED PER ECN 6104	4/4/06	D.B.

- 1 WHITE W/ORANGE
- 2 ORANGE
- 3 WHITE W/GREEN
- 4 BLUE
- 5 WHITE W/BLUE
- 6 GREEN
- 7 WHITE W/BROWN
- 8 BROWN

TIA/EIA 568B COLOR CODE



1. TOOLS REQUIRED
 - 1.1 STANDARD MODULAR PLUG CRIMP TOOL
BELKIN MODEL #F4F198 OR EQUIVALENT
 - 1.2 WRENCH, 3/4 AND 3/8 INCH
2. ASSEMBLY INSTRUCTIONS: ASSEMBLY TIME IS 3 TO 4 MINUTES.
 - 2.1 DISASSEMBLE COMPONENTS (ITEMS 3 THRU 6) AND SLIDE OVER CABLE. ALTERNATE CABLE GASKETS (WIRE SEALS) (ITEMS 7 & 8) ARE PROVIDED TO OFFER ADDITIONAL WIRE DIAMETER SEALING OPTIONS. RUBBING ALCOHOL MAY BE NEEDED TO INSTALL ITEM 7 OVER WIRE. ITEM 7 CAN FIT INSIDE ITEM 8.
 - 2.2 STRIP JACKET FROM CABLE TO DIMENSIONS SHOWN WITH A KNIFE. IMPORTANT: DO NOT CUT OR NICK STRANDS OF BRAIDED SHIELD.
 - 2.3 FOLD BACK BRAID OVER CABLE. TRIM AWAY COPPER FOIL, MYLAR, AND ANY STRENGTH MEMBERS. THESE MEMBERS MAY EXTEND 1/2 INCH MAXIMUM BEYOND CABLE JACKET.
 - 2.4 SLIDE INNER GROUND RING (2) OVER WIRES. MAKE SURE NON-CONDUCTIVE CABLE MEMBERS DO NOT STRAY OUTSIDE OF GROUND RING.
 - 2.5 STRAIGHTEN WIRES. DO NOT UNTWIST WIRES FURTHER THAN NEEDED. ARRANGE WIRES PER TIA/EIA 568B COLOR CODE AS SHOWN.
 - 2.6 TRIM WIRES STRAIGHT TO .950 INCHES AS SHOWN.
 - 2.7 PUSH WIRES INTO RJ45 PLUG. MAKE SURE ALL WIRES EXTEND TO THE FRONT OF THE PLUG. THERE SHOULD BE A 1/8 INCH GAP BETWEEN THE RJ45 PLUG AND INNER GROUND RING FOR WIRE SERVICE LOOP.
 - 2.8 TERMINATE WIRES TO PLUG WITH CRIMP TOOL.
 - 2.9 DRESS BRAID OVER GROUND RING (2). BRAID STRANDS SHOULD BE BUNCHED TOGETHER. IT IS IMPORTANT TO BUNCH BRAID TOGETHER. TRIM STRAY BRAID WIRES.



STEP 1

INSTRUCTIONS FOR WOODHEAD CABLE (#84-2481-01; #26 AWG STRANDED) ONLY. FOR OTHER CABLE, CONSULT FACTORY FOR INSTRUCTIONS.

J-TECH
1631 E. ST. ANDREW PLACE SANTA ANA CA 92705

DESIGNER: J. SCHAEFFER 9/7/97
CHECKED BY: J. TECH
DATE: 9/7/97
APPROVED BY: J. TECH

PROJECTION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON:
.X .XX .XXX ANGLES
±.01 ±.005 ±1/2

ASSEMBLY STEPS,
RJ-45 PLUG, SIZE 12,
WIRE BRAID SHIELD

PART NUMBER: JTB3723RJ45-12
DO NOT SCALE THIS DRAWING

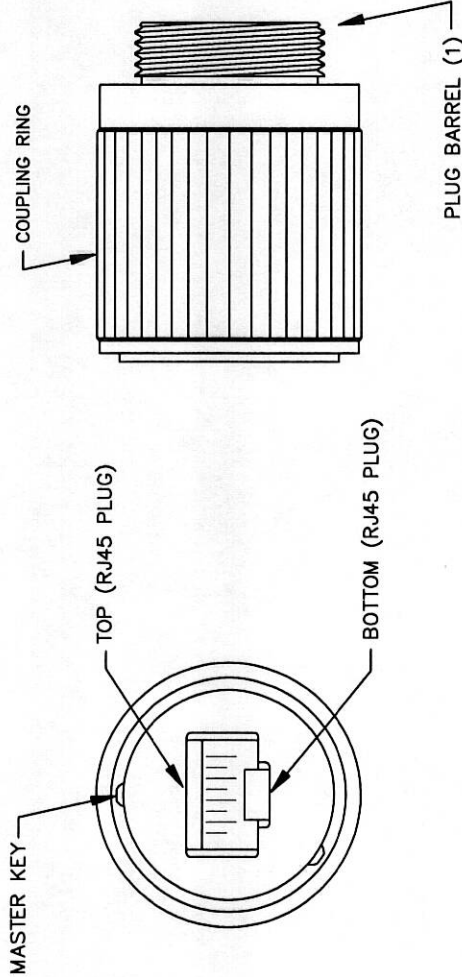
REV. C CODE DENT. NO. 08076
1 of 2

REV	DESCRIPTION	DATE	APPR'D
	SEE SHEET 1		

2. ASSEMBLY INSTRUCTIONS (CONTINUED):

- 2.10 PUSH RJ45 PLUG INTO BARREL (1). MAKE SURE TOP OF RJ45 PLUG IS FACING UP TOWARD MASTER KEY AS SHOWN.
- 2.11 PUSH OUTER GROUND RING (3) AND BACKSHELL (4) FORWARD.
- 2.12 INSERT BARREL (1) INTO RECEPTACLE SHELL (JT83723SHELL)- PROVIDED WITH ASSEMBLY INSTRUCTIONS) AND TIGHTEN COUPLING RING.
- 2.13 FIRMLY PUSH CABLE JACKET FORWARD PRIOR TO SCREWING ON BACKSHELL. THIS IS IMPORTANT TO INSURE CABLE SEAL COMPRESSES AROUND JACKET AND NOT BRAIDED SHIELD.
- 2.14 SCREW BACKSHELL (4) ONTO BARREL. TIGHTEN BACKSHELL WITH 3/4 INCH WRENCH.
- 2.15 SLIDE CABLE GASKET (5) INTO BACKSHELL.
- 2.16 SCREW NUT (6) ONTO BACKSHELL AND TIGHTEN WITH 3/8 INCH WRENCH. DO NOT OVERTIGHTEN TO THE POINT OF STRIPPING THREADS.
- 2.17 UNSCREW PLUG FROM RECEPTACLE SHELL.

J-TECH PART NUMBER (PREFERRED)	EQUIVALENT TO J-TECH PART NUMBER
JTRJ45-12CL	JT83723RJ45C-12
JTRJ45-12NL	JT83723RJ45-12



BACKSHELL, GASKET, AND NUT ARE NOT SHOWN IN THIS VIEW.

STEP 2

INSTRUCTIONS FOR WOODHEAD CABLE (#84-2481-01; #26 AWG STRANDED) ONLY. FOR OTHER CABLE, CONSULT FACTORY FOR INSTRUCTIONS.

		1631 E. ST. ANDREW PLACE SANTA ANA CA 92705 PHONE: 714-261-8888 FAX: 714-261-8889	
PROPRIETARY: THIS DOCUMENT CONTAINS PROPRIETARY DESIGN INFORMATION. USE OF THIS INFORMATION FOR ANY OTHER THAN THE INTENDED PURPOSE IS PROHIBITED. ANY PART OF THIS DESIGN MAY BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION.	FILE NUMBER: JT83723RJ45-12 DO NOT SCALE THIS DRAWING	PROJECT: PROJECTION OF 3010-ECN8021	ASSEMBLY STEPS: RJ-45 PLUG, SIZE 12, WIRE BRAID SHIELD PART NUMBER: JT83723RJ45-12 CODE BREV: NO. 2 P.2 DATE: 08/97B

