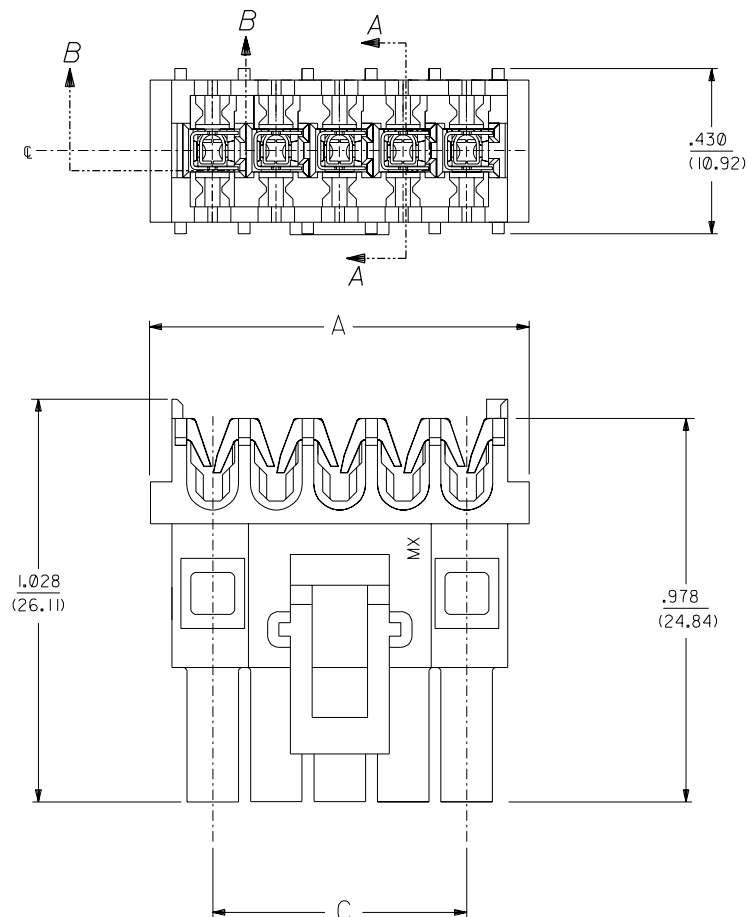




HOUSING MATERIAL: 94V-0
UNFILLED POLYESTER
MATERIAL COLOR: WHITE

TERMINAL MATERIAL: PHOSPHOR BRONZE

SEE NOTE 9

SECTION A-A

SECTION B-B

NOTES:

1. ASSEMBLY NO. 71694-I5** SHOWN FOR ILLUSTRATION.
2. MATES WITH PART NUMBER 71690-****.
3. SEE FOLLOWING PAGES FOR PART NUMBERS AND THEIR CONFIGURATIONS.
4. FINISHES (SEE CHART):
TIN OVERALL - .000100/(0.00254) MINIMUM TIN OVERALL, OVER NICKEL UNDERPLATING OVERALL.
15 GOLD - .000015/(0.00038) MINIMUM SELECT GOLD AND .000150/(0.00380) MINIMUM SELECT TIN OVER NICKEL UNDERPLATING OVERALL.
5. ITEM NOS. PRECEDED BY AN 'X' IN THE CHART ARE NOT AVAILABLE.
6. RECOMMENDED FOR USE WITH UL STYLE # 1007 WIRE.
7. PART CONFORMS TO SPECIFICATION NO. PS-71690-001.
8. MATERIAL RECYCLING LOGO TO BE LOCATED ON SIDE OF PART.
9. IDT SLOT IDENTIFIER COLOR STRIPE TO BE LOCATED ON THIS SURFACE. ID PER CHART BELOW.

WIRE GAUGE	ID COLOR
18	FLRSCNT MAGENTA
20	BLUE
22	GREEN
24	BLACK

10. OPTIONAL COVER NUMBERS: 71161-**-01 (FEED THRU) OR -**-02 (FEED TO VERSION).
11. SEE SMES-71690-0000 FOR TERMINATION SPECIFICATIONS.
12. PACKAGE PER PK-71690-0000.

NOTE FOR LEAD FREE CONVERSION:

THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO ROHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.

REV.	DATE	BY	CHK'D.	SCALE
5	N			
4	N			
3	N			
2	N			
1	N			

MFG.	SH.	REV.	LTR.	REVISIONS

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°		TITLE MINI-FIT IDT SINGLE ROW RECEPTACLE SALES ASSEMBLY	
3 PLACE ± .010 2 PLACE ± .014 1 PLACE --- ± 0.25	INCH METRIC --- ± 0.25 --- ± 0.36	SHEET NO. 1 OF 5 DATE 01/28/93	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INCORPORATED U.S.A. 60532	
DRWG. NO. 71694-I5**	CHK'D. BY SAS	SDA-71694-****	
APP'D. BY	SCALE 4:1	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.	

		I3		I2		I1		I0		9		8		7		6		71694		4		3		2		1																			
J	CKT SIZE	S T A T	ASSEMBLY ITEM NUMBER	WIRE AWG	WIRE DESCRIPTION	DIMENSION A		DIMENSION B		DIMENSION C		PLATING SEE NOTE 4															J																		
						INCH	(MM)	INCH	(MM)	INCH	(MM)																																		
						7	71694-1801	18	SOLID, FUSED,STRANDED	1.317	(33.45)																	1.205	(30.60)	0.9924	(25.20)														
						7	71694-1803	20		1.317	(33.45)																	1.205	(30.60)	0.9924	(25.20)														
I	7	71694-1804	22		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)	TIN OVERALL															I																			
	7	71694-1805	24		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)																																			
	7	71694-1807	18		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)																	I5 GOLD															I			
	7	71694-1809	20		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)																																			
H	7	71694-1810	22		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)	TIN OVERALL															H																			
	7	71694-1811	24		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)																																			
	8	71694-1901	18		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)																	I5 GOLD															H			
	8	71694-1903	20		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)																																			
G	8	71694-1904	22		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)	TIN OVERALL															G																			
	8	71694-1905	24		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)																																			
	8	71694-1907	18		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)																	I5 GOLD															G			
	8	71694-1909	20		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)																																			
F	8	71694-1910	22		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)	TIN OVERALL															F																			
	8	71694-1911	24		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)																																			
	9	71694-2001	18		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)																	I5 GOLD															F			
	9	71694-2003	20		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)																																			
E	9	71694-2004	22		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)	TIN OVERALL															E																			
	9	71694-2005	24		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)																																			
	9	71694-2007	18		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)																	I5 GOLD															E			
	9	71694-2009	20		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)																																			
D	9	71694-2010	22		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)	TIN OVERALL															D																			
	9	71694-2011	24		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)																																			
	10	71694-2101	18		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)																	I5 GOLD															D			
	10	71694-2103	20		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)																																			
C	10	71694-2104	22		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)	TIN OVERALL															C																			
	10	71694-2105	24		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)																																			
	10	71694-2107	18		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)																	I5 GOLD															C			
	10	71694-2109	20		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)																																			
B	10	71694-2110	22		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)	TIN OVERALL															B																			
	10	71694-2111	24		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)																																			
	11	71694-2201	18		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)																	I5 GOLD															B			
	11	71694-2203	20		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)																																			
A	11	71694-2204	22		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)	TIN OVERALL															A																			
	11	71694-2205	24		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)																																			
	11	71694-2207	18		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)																	I5 GOLD															A			
	11	71694-2209	20		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)																																			
J	11	71694-2210	22		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)	TIN OVERALL															J																			
	11	71694-2211	24	SOLID, FUSED,STRANDED	1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)																																			
	I																										TIN OVERALL															I			
H													I5 GOLD															H																	
G													TIN OVERALL															G																	
F													I5 GOLD															F																	
E													TIN OVERALL															E																	
D													I5 GOLD															D																	
C													TIN OVERALL															C																	
B													I5 GOLD															B																	
A													TIN OVERALL															A																	
		I3		I2		I1		I0		9		8		7		6		5		4		3		2		1																			

5 PLACE ± .010 ---

2 PLACE ± .014 ± 0.25

1 PLACE --- ± 0.36

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DRWG. BY: RWB

CHK'D. BY: SAS

APPR'D. BY: SCALE :

UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°

INCH METRIC

MOLEX INCORPORATED U.S.A. 60532

FILE NAME: S71694X3.DGN

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DIV. TC

SIZE C

TITLE: MINI-FIT IDT SINGLE ROW RECEPTACLE SALES ASSEMBLY

PART NO. SEE CHART

DRWG. NO. SDA-71694-*****

SHEET NO. 3

DATE 03/10/93

MFG. SH. REV. LTR. REVISIONS

N SEE SHEET I

H SEE SHEET I

F SEE SHEET I

E SEE SHEET I

A SEE SHEET I

4 SEE SHEET I

2 SEE SHEET I

1 SEE SHEET I

71694



WIRE TERMINATION SPECIFICATION

1.0 APPLICABLE DRAWINGS:

THIS SPECIFICATION APPLIES TO A-71690 AND A-71694 SERIES OF INSULATION DISPLACEMENT CONNECTORS.

2.0 SCOPE:

THIS SPECIFICATION IS DESIGNED TO INSURE THE PROPER TERMINATION AND PERFORMANCE OF THE A-71690 AND A-71694 SERIES OF INSULATION DISPLACEMENT CONNECTORS.

3.0 GENERAL:

THE .1654/(4.20) CENTER INSULATION DISPLACEMENT CONNECTOR SYSTEM IS DESIGNED TO INTERCONNECT DISCRETE WIRE AS OUTLINED IN THIS SPECIFICATION.

4.0 CONDUCTOR REQUIREMENTS:

4.1 CONDUCTOR SIZE IDENTIFICATION:

CONDUCTOR SIZE	CONDUCTOR STYLE	HOUSING ID COLOR (SEE FIG. 4)	TERMINAL ID HOLE POSITION (SEE FIG.8; SHT.5)
18 AWG	STRANDED WITH TOPCOAT,FUSED, SOLID	RED	POSITION 1
20 AWG	STRANDED WITH TOPCOAT,FUSED, SOLID	BLUE	POSITION 2
22 AWG	STRANDED WITH TOPCOAT,FUSED, SOLID	GREEN	POSITION 3
24 AWG	STRANDED WITH TOPCOAT,FUSED, SOLID	BLACK	POSITION 4

RECOMMENDED UL STYLE: 1007, 1061

4.2 INSULATION REQUIREMENTS:

INSULATION DIAMETER: .090 MAX

INSULATION HARDNESS: 85 MAX ON THE SHORE A SCALE

5.0 TERMINATION REQUIREMENTS:

5.1 CABLE INSERTION DEPTH:

THE CABLE SHOULD BE INSERTED TO DEPTH OF .140/(3.56)* FROM THE TOP OF THE HOUSING TO THE TOP OF THE WIRE (SEE FIGURE 2). WIRE MUST BE LOCATED BELOW THE BOTTOM OF EAGLES.

* TERMINATION DEPTH FOR THE 24 AWG WIRES IN THE FOLLOWING ASSEMBLIES TO BE .138±.005/(3.51±0.13); 71690-6008 AND 71694-2402.

STRAIN RELIEF

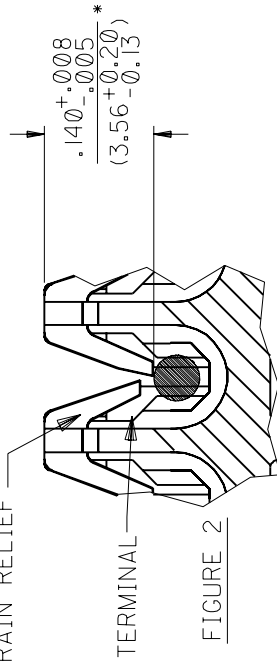


FIGURE 2

REV.	B	A	B	B	B
SHT.	1	2	3	4	5

FILE NAME

T71690X1

▽ C = 0



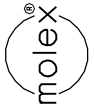
▽ = 0

REVISE ONLY ON CAD SYSTEM

REV. B

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SHT. 1 OF 5

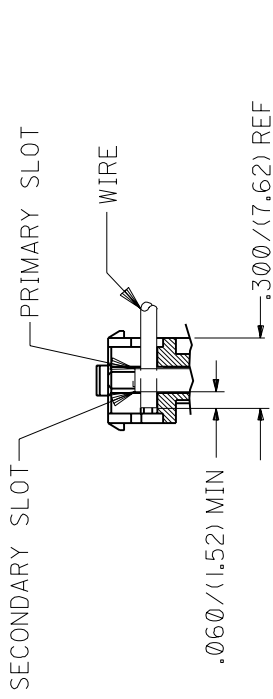


WIRE TERMINATION SPECIFICATION

5.2 WIRE CUT OFF

IN THE FEED-TO VERSION THE WIRE MUST BE DISPLACED IN BOTH INSULATION DISPLACEMENT SLOTS AND MUST PROTRUDE THROUGH THE SECONDARY SLOT BY $(1.52)/.060$ MIN. AS SHOWN IN FIGURE 3.

FIGURE 3

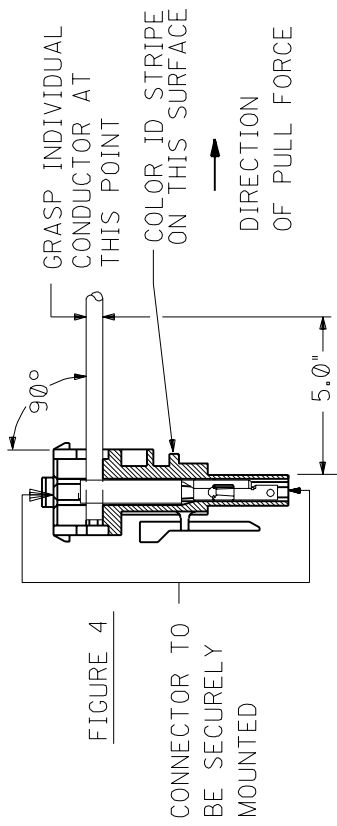


5.3 HORIZONTAL PULL OUT FORCE

THE CONNECTOR MUST MAINTAIN THE FOLLOWING MIN. PULL OUT VALUES WHEN A FORCE IS APPLIED AT A RATE OF 1 INCH PER MINUTE TO THE CABLE IN A DIRECTION PERPENDICULAR TO THE INSULATION DISPLACEMENT SECTION. AS SHOWN IN FIGURE 4. (NOTE CABLE MUST BE SLIT TO FORM INDIVIDUAL CONDUCTORS AFTER TERMINATION BUT PRIOR TO TESTING).

AWG	PULL FORCE
18 AWG	14.0 LBS. MIN.
20 AWG	TBD
22 AWG	TBD
24 AWG	8.0 LBS. MIN.

FIGURE 4

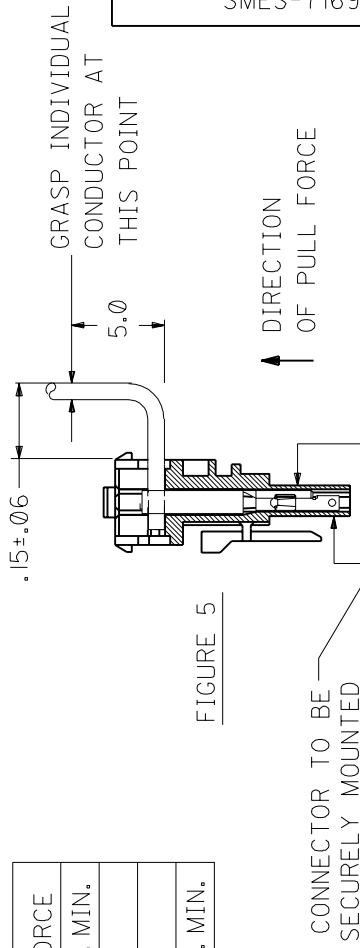


5.4 VERTICAL PULL OUT FORCE

THE CONNECTOR MUST MAINTAIN THE FOLLOWING MIN. PULL OUT VALUES WHEN A FORCE IS APPLIED AT A RATE OF 1 INCH PER MINUTE TO THE CABLE IN A DIRECTION PARALLEL TO THE INSULATION DISPLACEMENT SECTION. AS SHOWN IN FIGURE 5. (NOTE CABLE MUST BE SLIT TO FORM INDIVIDUAL CONDUCTORS AFTER TERMINATION BUT PRIOR TO TESTING).

AWG	PULL FORCE
18 AWG	5.0 LBS. MIN.
20 AWG	TBD
22 AWG	TBD
24 AWG	2.4 LBS. MIN.

FIGURE 5



REV.	FILE NAME	REVISION	REV.	SHT.
	T71690X2	0	A	2
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WIRE TERMINATION SPECIFICATION

5.5 TORSIONAL RESISTANCE:

CONNECTOR MUST WITHSTAND A MAXIMUM TWIST ON A TERMINATED CABLE OF 130° WITHOUT DISTURBING THE INSULATION DISPLACEMENT INTERFACE IN THE PRIMARY OR SECONDARY SLOTS (SEE FIGURE 3) (NOTE CABLE MUST BE SLIT TO FORM INDIVIDUAL CONDUCTORS AFTER TERMINATION BUT PRIOR TO TESTING).

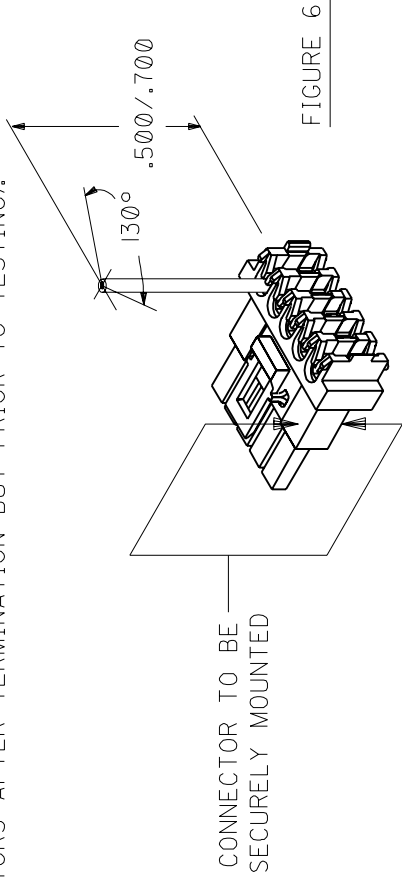


FIGURE 6

5.6 VISUAL INSPECTION:

AFTER TERMINATION, INSULATION DISPLACEMENT SECTION OF THE TERMINAL TO BE FREE OF TOOL MARKS FROM TERMINATION EQUIPMENT.

6.0 TERMINATION EVALUATION PROCEDURE:

STEP 1 - STRAIN RELIEF REMOVAL

REMOVE SHADED PORTION OF THE STRAIN RELIEF USING A RAZOR BLADE

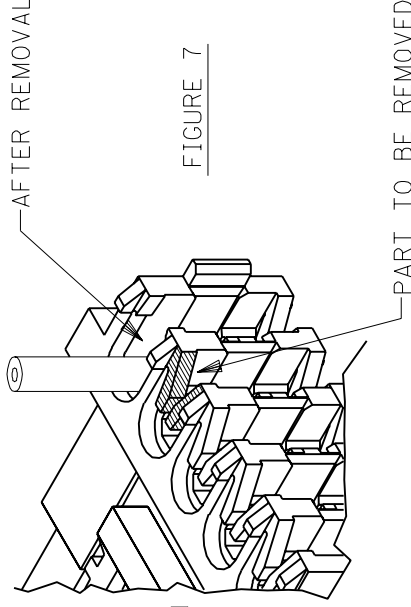


FIGURE 7

STEP 2 - REMOVAL OF TERMINAL

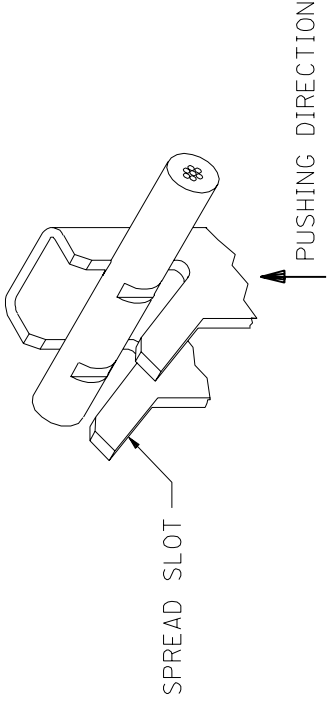
INSERT THE REMOVAL TOOL (#HT60630A) INTO THE FRONT OF OF THE CONNECTOR (AROUND THE TERMINAL) TO DEPRESS LOCK TANGS. PUSH THE TERMINAL/WIRE OUT THE BACK OF THE CONNECTOR.

REV.	REVISE ONLY ON CAD SYSTEM			REV.
SHT.				SHT.
FILE NAME T71690X3	∇ = 0	$\blacktriangle$ = 0		B
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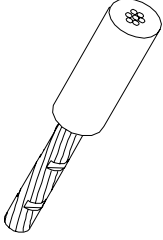


WIRE TERMINATION SPECIFICATION

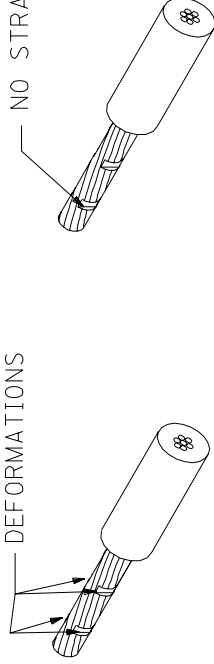
STEP 3 -CONDUCTOR REMOVAL
USING A SMALL PAIR OF PLIERS SPREAD THE I.D.T. SLOT
AND REMOVE CONDUCTOR BY PUSHING IN DIRECTION SHOWN



STEP 4 -REMOVING INSULATION
INSULATION TO BE REMOVED WITHOUT DISTURBING I.D.T. AREA



STEP 5 -CONDUCTOR INSPECTION
FOUR DEFORMATION POINTS MUST BE CLEARLY VISIBLE WHEN
USING 10X MAGNIFICATION



DRWG. NO.
SMES-71690-0000

DRWG. NO.
SMES-71690-0000

REV.

SHT.

FILE NAME
T71690X4

$\nabla = 0$ $\blacktriangle = 0$

REVISE ONLY ON CAD SYSTEM

B

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SHT.

4



WIRE TERMINATION SPECIFICATION

LTR.	REVISIONS
A	RELEASED PER ECR U51189 09/15/95 sas
B	UPDATED PER ECR U70308 ELO 09/20/96

STEP 1 -REMOVAL OF TERMINAL

INSERT THE REMOVAL TOOL(*HT60630A) INTO THE FRONT OF
OF THE CONNECTOR (AROUND THE TERMINAL) TO DEPRESS LOCK TANGS.
PUSH THE TERMINAL/WIRE OUT THE BACK OF THE CONNECTOR.

STEP 2 -WIRE GAGE PER CHART

ID LETTER	WIRE GAGE
D	18 AWG
C	20 AWG
B	22 AWG
A	24 AWG

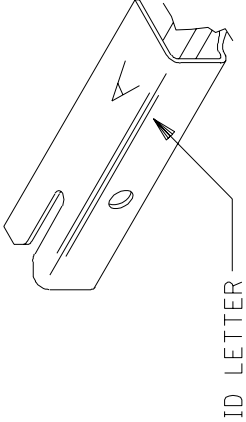


FIGURE 8

REV.
T71690X5
SHT.
5

FILE NAME	REV.	SHT.
T71690X5	B	5

REVISE ONLY ON CAD SYSTEM

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