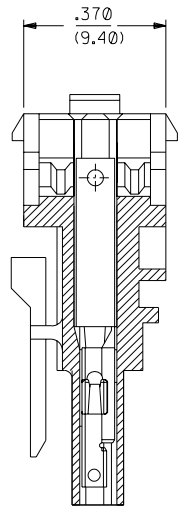
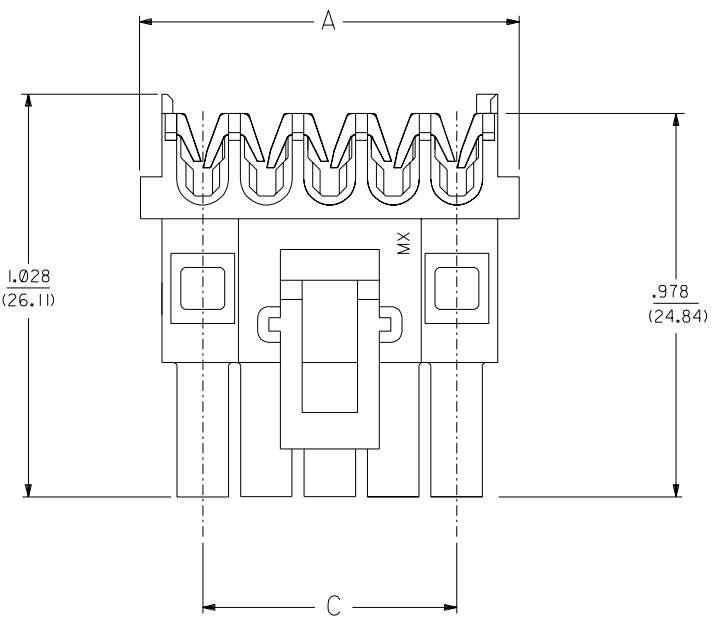
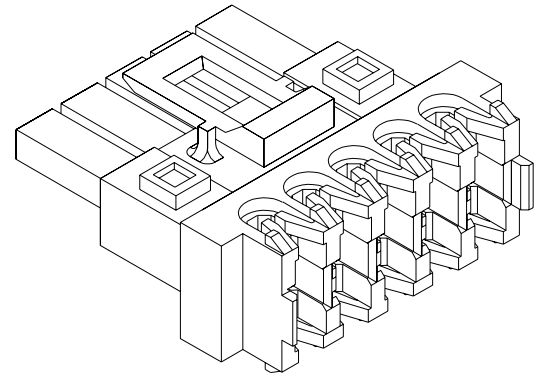
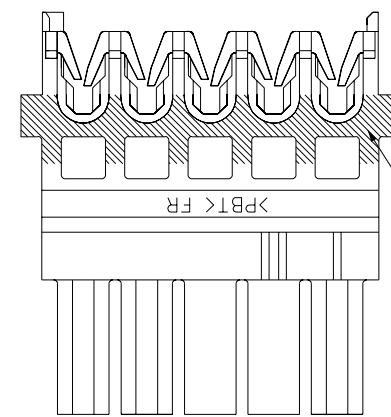


HOUSING MATERIAL: 94V-0 UNFILLED POLYESTER MATERIAL COLOR: WHITE



TERMINAL MATERIAL: PHOSPHOR BRONZE



SEE NOTE 9

SECTION A-A

SECTION B-B

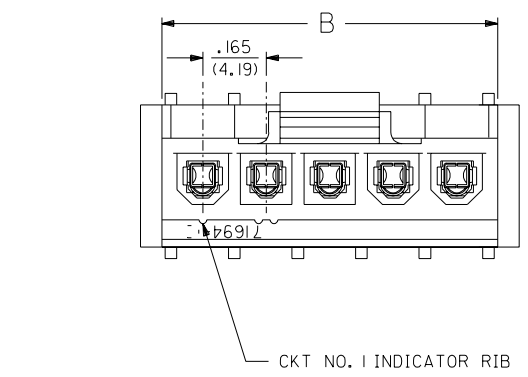
NOTES:

1. ASSEMBLY NO. 71694-15** 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

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	DESCRIPTION
N	04/04/21	LEAD FREE CONV ECN UCP2004-2042 ADAMS
M	09/22/2000	CHANGE PROD SPEC ECR UDT2001-0195 KMS
L	09/19/15	ADD 6 CKT MIXED UDT2000-0266 RFOX
K	08/12/15	ADD .010 MAX RADIUS UDT1999-0448 KAS
J	08/11/11	ADD VOIDS, MIXED AWG UDT1999-0310 SCHAFFER
II	07/17/25	CUST 5; NO STRIPE PER ECN U80368 ELO
I	07/16/16	ADD CUSTOM COLOR PER ECN U71576 ELO
H	07/22/26	MAT'L COLOR CHANGE PER ECN U71026 ELO
G	10/23/96	18 AWG CLR CHANGE PER ECN U70413 ELO
F1	05/01/96	REVISED U61366 TSE
3		
2		
N	09/03/05	ADD WHITE MAT'L, EAGLES ECN U61098 BMS
1		

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°		REVISIONS	
3 PLAGE ± .010	---	REVISE ONLY ON CAD SYSTEM	
2 PLAGE ± .014	± 0.25		
1 PLAGE ---	± 0.36		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		TITLE: MINI-FIT IDT SINGLE ROW RECEPTACLE SALES ASSEMBLY	
DRAWN BY: RWB		MOLEX INCORPORATED	
CHECKED BY: SAS		SHEET NO. 1 OF 5	
DATE: 01/28/93		DATE: 01/28/93	
SCALE: 4:1		U.S.A.	
FILE NAME: 571694X1.DGN		DRWG. NO.: SDA-71694-****	
APP'D BY:		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.	

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.

J	CKT SIZE	ST A T	ASSEMBLY ITEM NUMBER	WIRE AWG	WIRE DESCRIPTION	DIMENSION A		DIMENSION B		DIMENSION C		PLATING SEE NOTE 4	
						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)	TIN OVERALL	
	7		71694-1803	20		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)		
	7		71694-1804	22		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)		
	7		71694-1805	24		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)		
I	7		71694-1807	18		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)	15 GOLD	
	7		71694-1809	20		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)		
	7		71694-1810	22		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)		
	7		71694-1811	24		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)		
H	8		71694-1901	18		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)	TIN OVERALL	
	8		71694-1903	20		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)		
	8		71694-1904	22		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)		
	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)	15 GOLD
		8		71694-1909	20		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)	
		8		71694-1910	22		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)	
		8		71694-1911	24		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)	
G	9		71694-2001	18		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)	TIN OVERALL	
	9		71694-2003	20		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)		
	9		71694-2004	22		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)		
	9		71694-2005	24		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)		
F	9		71694-2007	18		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)	15 GOLD	
	9		71694-2009	20		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)		
	9		71694-2010	22		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)		
	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)		TIN OVERALL
10		71694-2103	20		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)			
10		71694-2104	22		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)			
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)	15 GOLD		
10		71694-2109	20		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)			
10		71694-2110	22		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)			
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)		TIN OVERALL	
11		71694-2203	20		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)			
11		71694-2204	22		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)			
11		71694-2205	24		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)			
D	11		71694-2207	18		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)	15 GOLD	
	11		71694-2209	20		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)		
	11		71694-2210	22		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)		
	11		71694-2211	24	SOLID, FUSED, STRANDED	1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)		

71694 4 3 2 1

71694	
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

DIMENSIONS SHOWN (METRIC) INCH		UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°		TITLE		REVISE ONLY ON CAD SYSTEM	
5 PLACE ± .010	---	INCH	METRIC	MINI-FIT IDT SINGLE ROW RECEPTACLE SALES ASSEMBLY		SHEET NO. DATE	
2 PLACE ± .014	± 0.25			MOLEX INCORPORATED U.S.A.		3	03/10/93
1 PLACE ---	± 0.36	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		PART NO. DRWG. NO.		SEE CHART SDA-71694-*****	
DRWG. BY: RWB	CHK'D. BY: SAS	SCALE: :		FILE NAME: ST1694X3		DIV. SIZE: TC C	
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13 12 11 10 9 8 7 6 5 4 3 2 1



MOLEX INCORPORATED
LISLE, ILL. 60532 U.S.A.

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

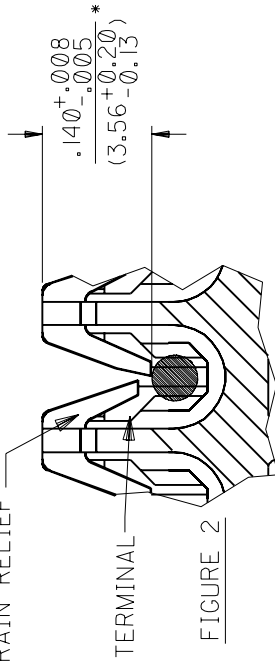


FIGURE 2

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

FILE NAME
T71690X1

▽ = 0

◼ = 0

REVISE ONLY ON CAD SYSTEM

REV. B

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SHT. 1 OF 5

DRWG. NO. SMES-71690-0000

DRWG. NO. SMES-71690-0000



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.

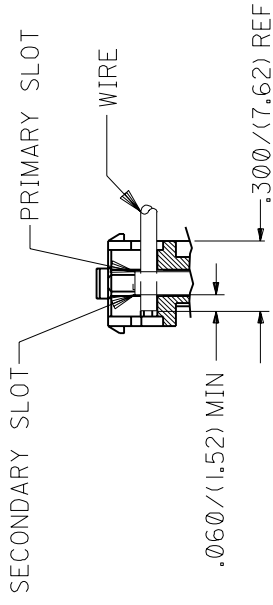


FIGURE 3

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.

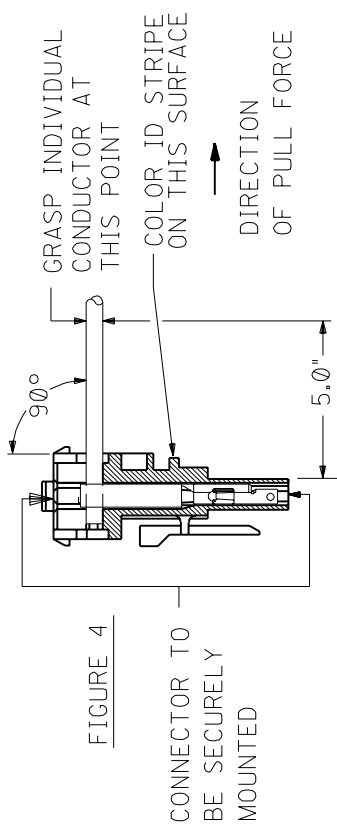


FIGURE 4

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.

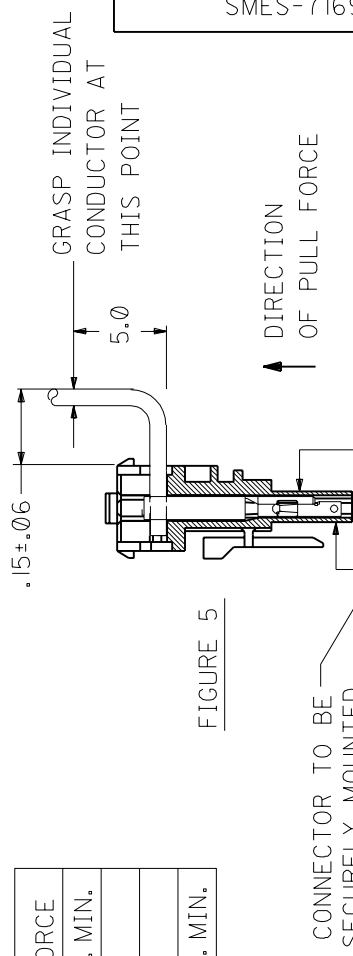


FIGURE 5

REV.

SHT.

FILE NAME
T71690X2

▽C = 0

▲ = 0

CONNECTOR TO BE SECURELY MOUNTED

REVISE ONLY ON CAD SYSTEM

REV.

A

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SHT.

2

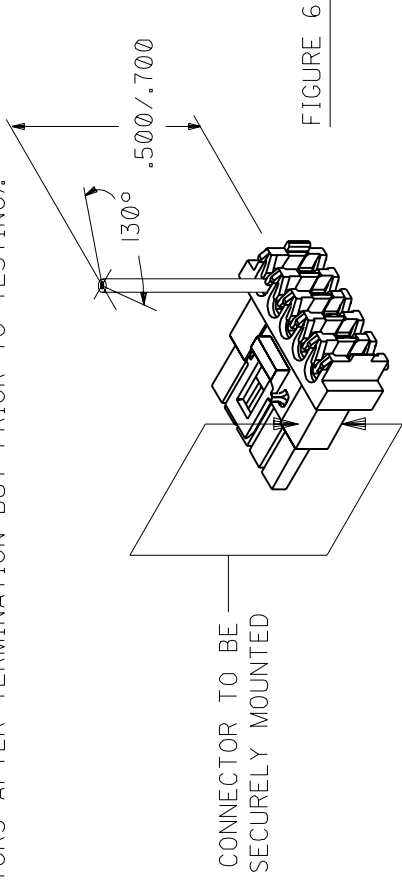


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WIRE TERMINATION SPECIFICATION

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).

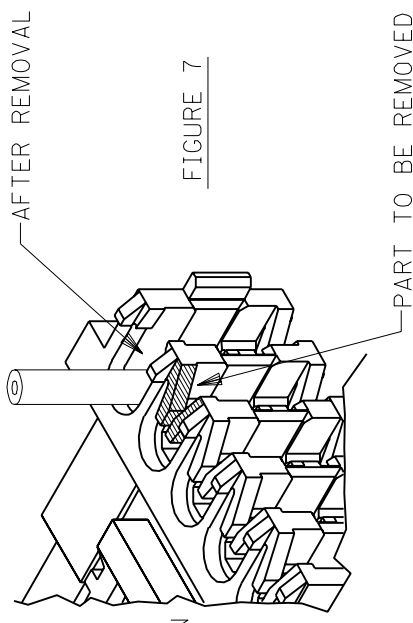


5.6 VISUAL INSPECTION:

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



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.

DRWG. NO. SMES-71690-0000

DRWG. NO. SMES-71690-0000

REV.

SHT.

FILE NAME
T71690X3



= 0



= 0

REVISE ONLY ON CAD SYSTEM

REV.

B

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SHT.

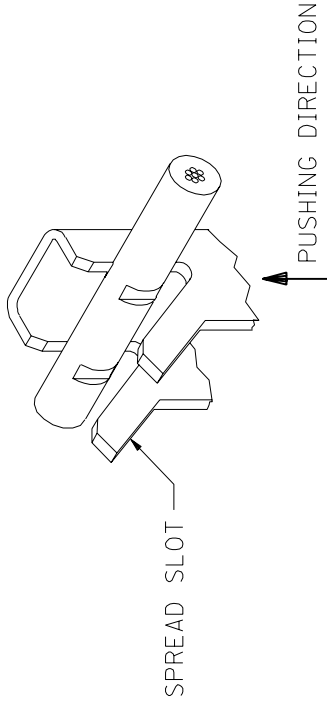
3



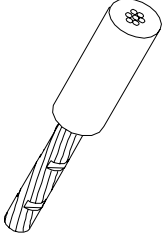
MOLEX INCORPORATED
LISLE, ILL. 60532 U.S.A.

WIRE TERMINATION SPECIFICATION

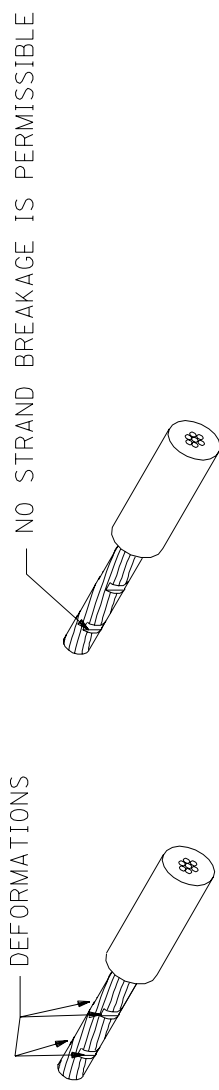
STEP 3 -CONDUCTOR REMOVAL
USING A SMALL PAIR OF PLIERS SPREAD THE I.D.T. SLOT
AND REMOVE CONDUCTOR BY PUSHING IN DIRECTION SHOWN



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

□ = 0 ▲ = 0

REVISE ONLY ON CAD SYSTEM

REV. B

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SHT. 4



MOLEX INCORPORATED
LISLE, ILL. 60532 U.S.A.

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

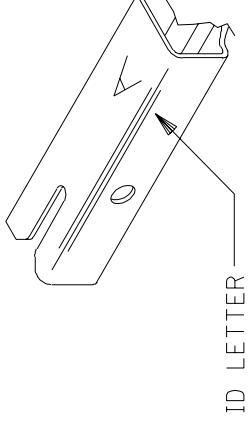


FIGURE 8

DRWG. NO. SMES-71690-0000

DRWG. NO. SMES-71690-0000

REV.

SHT.

FILE NAME
T71690X5

□ = 0 ▲ = 0

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REV. B

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SHT. 5