

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)	
	7		71694-1803	20		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)	TIN OVERALL
	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)	
	7		71694-1809	20		1.317	(33.45)	1.205	(30.60)	0.9924	(25.20)	15 GOLD
	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)	
	8		71694-1901	18		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)	
	8		71694-1903	20		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)	TIN OVERALL
	8		71694-1904	22		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)	
H	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)	
	8		71694-1909	20		1.482	(37.65)	1.370	(34.80)	1.1578	(29.40)	15 GOLD
	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)	
	9		71694-2001	18		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)	
	9		71694-2003	20		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)	TIN OVERALL
	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)	
	9		71694-2007	18		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)	
	9		71694-2009	20		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)	15 GOLD
	9		71694-2010	22		1.648	(41.85)	1.535	(39.00)	1.3232	(33.60)	
F	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)	
	10		71694-2103	20		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)	TIN OVERALL
	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)	
	10		71694-2109	20		1.813	(46.05)	1.701	(43.20)	1.4886	(37.80)	15 GOLD
	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)	
	11		71694-2203	20		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)	TIN OVERALL
	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)	
	11		71694-2209	20		1.978	(50.25)	1.866	(47.40)	1.6540	(42.00)	15 GOLD
	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	
5 PLACE ± .010	---	MINI-FIT IDT SINGLE ROW RECEPTACLE SALES ASSEMBLY			
2 PLACE ± .014	± 0.25	PART NO. SEE CHART		SHEET NO. 3	
1 PLACE ---	± 0.36	MOLEX INCORPORATED U.S.A.		DATE 03/10/93	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWG. NO. SDA-71694-****		DIV. TC	
DRWG. BY RWB	CHK'D. BY SAS	FILE NAME ST1694X3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.	
APP'D. BY	SCALE :	MFG. SH.		REV. LTR. REVISIONS	

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

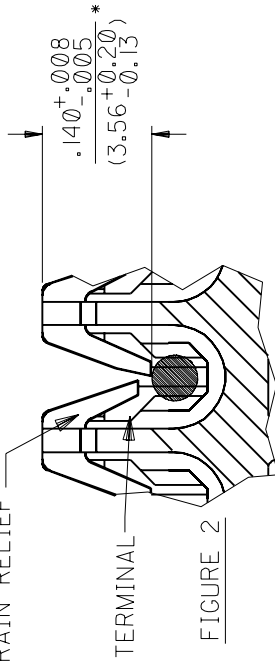


FIGURE 2

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

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T71690X1

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SHT.

1 OF 5

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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.

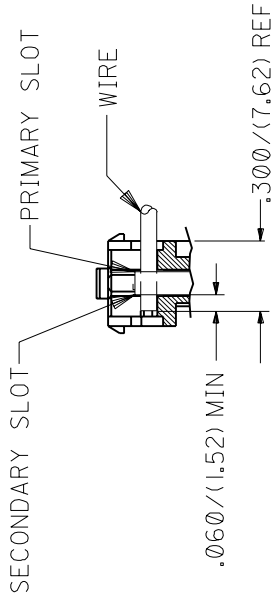


FIGURE 3

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.

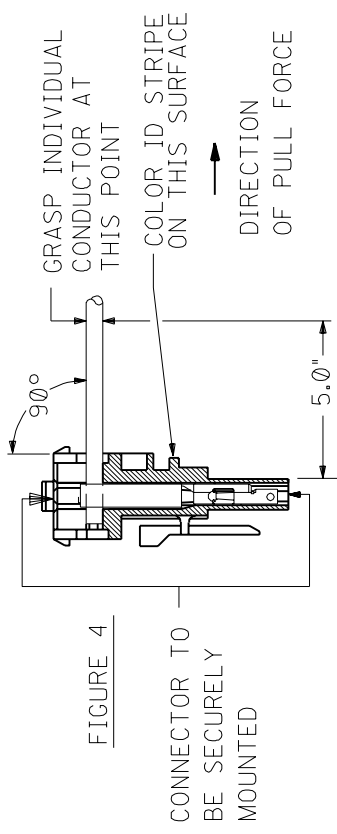


FIGURE 4

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.

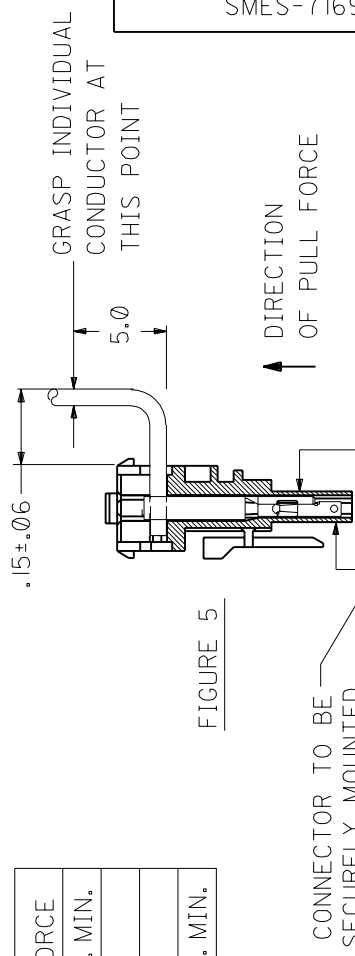


FIGURE 5

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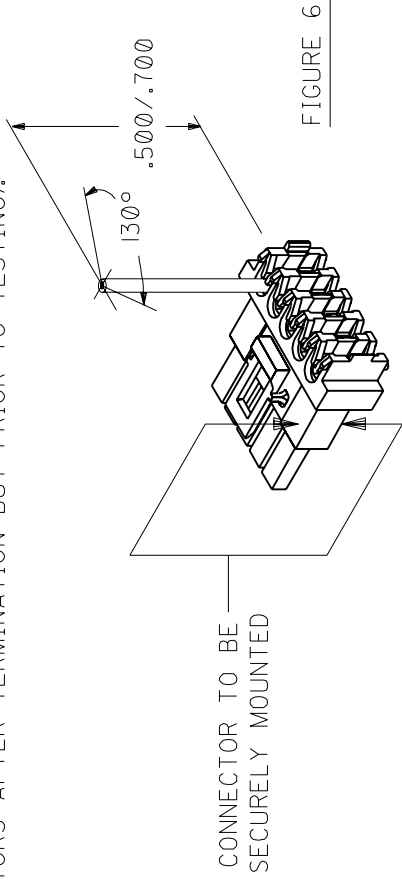


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WIRE TERMINATION SPECIFICATION

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).

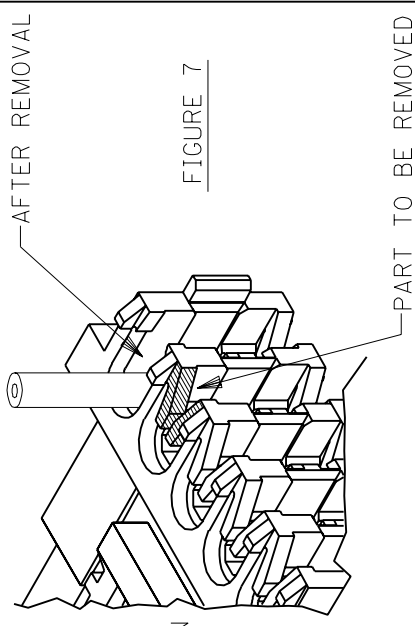


5.6 VISUAL INSPECTION:

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.

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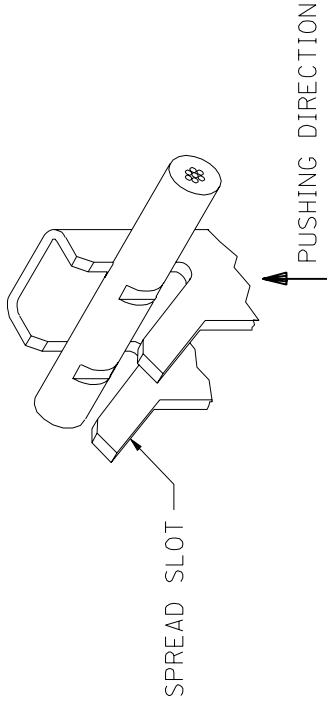
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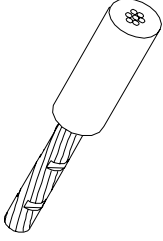
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WIRE TERMINATION SPECIFICATION

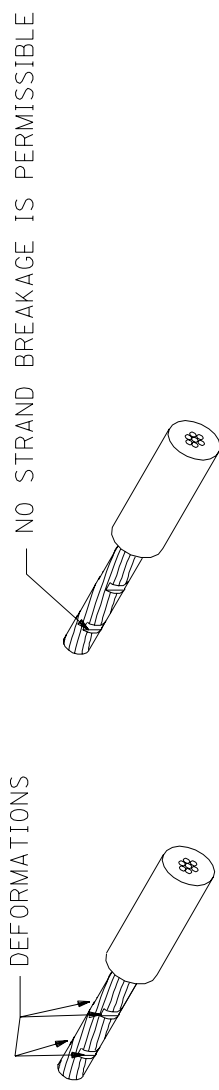
STEP 3 -CONDUCTOR REMOVAL
USING A SMALL PAIR OF PLIERS SPREAD THE I.D.T. SLOT
AND REMOVE CONDUCTOR BY PUSHING IN DIRECTION SHOWN



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



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SHT. 4



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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

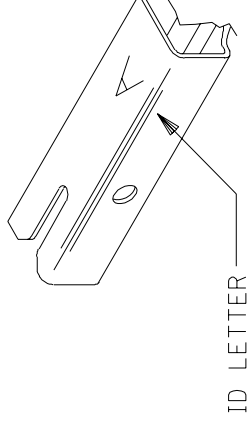


FIGURE 8

DRWG. NO. SMES-71690-0000

DRWG. NO. SMES-71690-0000

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