APPLICATION		REVISIONS			
NEXT ASSY	FINAL ASSY	LTR	DESCRIPTION	DATE	APPROVED
		–	PRODUCTION RELEASE/E.O. 7147	7-27-72	JAV
		A	SEE EO 7440 DWG	5 Jan 73	DGB

SPECIFICATION

117 VAC FILAMENT TRANSFORMER

1 THRU 4 nimo DISPLAYS

-01	AS SHOWN
-02	OBSOLETE

REV	A	–	–	–	–	A	–																				
SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

REVISION STATUS

PROJ NO. 127	CONTRACT		INDUSTRIAL ELECTRONIC ENGINEERS, INC. VAN NUYS, CALIFORNIA
	DRAWN	7-8-72	TRANSFORMER, 117 VAC FILAMENT
	CHECK	7-27-72	
	APPROVED	7-27-72	SIZE A / CODE IDENT NO. 05464 / 21913
	APPROVED		SCALE NONE / SHEET 1 OF 7

1.0 SCOPE:

This specification defines a transformer used to provide filament power for one thru four 64 gun nimo tube filaments (1.75V @ .75amp e

2.0 ELECTRICAL CHARACTERISTICS:

2.1 Primary input voltage @ 50-60 Hz A.C.

Terminals	Primary Voltage
1-2	107
1-3	117
1-4	127

2.2 Secondary output voltage (resistive load)

Terminals	Secondary Voltage
5-6	1.75 ± 3% @ 1.75 amps (nominal)

2.3 Dielectric Withstanding Voltages:

Terminal 1,2,3 and 4 to 5,6 and case - 1500 VRMS @ 60 Hz for 30 seconds

Terminal 1,2,3,4 and case to 5 and 6 - 500 VRMS @ 60 Hz for 30 seconds

3.0 WINDING INFORMATION:

3.1 Material:

3.1.1 Core - .625 E&I laminations 100% interleaved .625 stack. 24 gauge M-45 material.

3.1.2 Mounting Bracket - "A" frame horizontal for .625 E&I with square stack.

3.1.3 Impregnation - Vacuum impregnate with NEMA Class F polyester varnish.

3.2 Coil:

	Primary	Secondary
Wire	#35 HF	#17 HF
Turns	1504	22
Taps	1270 & 1385	-
Turns/layer	90	11
Layers	17	2
Layer Insulation	.001 KRAFT every 2 layers	2 x .007 KRAFT
PRI-SEC. Insulation	.006 KRAFT	
Terminations	1-2-3-4	5-6
Wrap	.010 KRAFT + .025 fish paper for terminals	

3.3 Lead Terminations:

3.3.1 Primary:

All primary leads shall be terminated to solder lugs (Zierick #357 or equivalent) configured as shown in figure 3.

3.3.2 Secondary:

Both secondary terminals shall be hooks formed from the winding wires and tinned - configured as shown in figure 3.

4.0 PHYSICAL PROPERTIES:

4.1 Environmental:

4.1.1 Temperature Range:

Ambient Operating Temperature	$0^{o}C$ to $+75^{o}C$
Storage Temperature	$-40^{o}C$ to $+125^{o}C$

4.1.2 Humidity:

95%

4.1.3 Duty Cycle:

Continuous

4.1.4 Altitude:

Sea level to 10,000 feet

4.2 Case Dimensions:

Shall be in accordance with Figure 2.

4.3 Weight:

0.9 lbs (max)

4.4 Marking:

4.4.1 Part Number: 21913-01

Mark IEE part number in .12 high Gothic characters on the channel bracket top.

4.4.2 Lead Numbers:

Mark lead number below each termination on outer wrap of transformer coil.

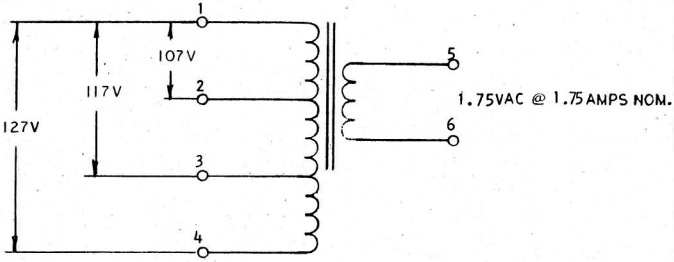

FIGURE 1

SCHEMATIC

INDUSTRIAL ELECTRONIC ENGINEERS, INC.	SIZE A	CODE IDENT NO 05464	21913
VAN NUYS, CALIFORNIA	SCALE	REV —	SHEET 5

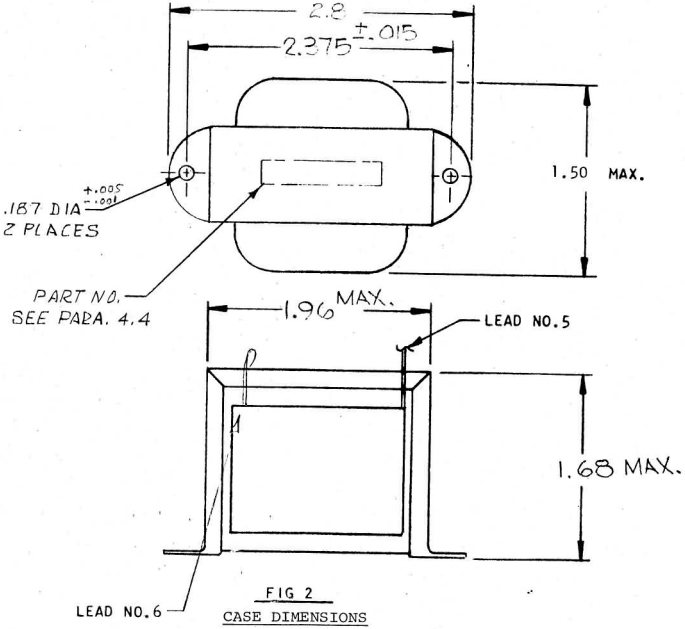

FIG 2
CASE DIMENSIONS

TOLERANCES: .X = ±.06
.XX = ±.030
.XXX = ±.010

INDUSTRIAL ELECTRONIC ENGINEERS, INC. VAN NUYS, CALIFORNIA	SIZE A	CODE IDENT NO 05464	21913
	SCALE	REV A	SHEET 6

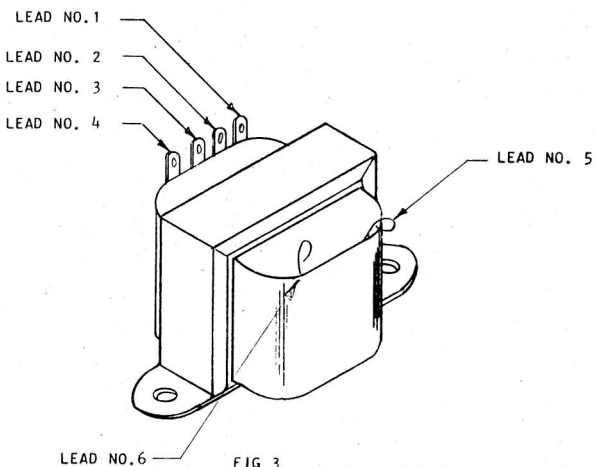

FIG 3

NOTE:

1. TERMINALS 1,2,3 and 4 are No. 375 by Zierick
2. TERMINALS 5 and 6 are self lead hooks 1/2 tinned.

INDUSTRIAL ELECTRONIC ENGINEERS, INC. VAN NUYS. CALIFORNIA	SIZE A	CODE IDENT NO 05464	21913
	SCALE NONE	REV —	SHEET 7