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9011 9012 9013 9014 9015 9016 9017 9018 9019

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9060 9061 9062 9063

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9001 thru 9019

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### Adjustable Wide Range Inductors

Dimensions: Max. dia. 7/8" x 2 1/4" long. Mtg. hole 3/16"

\*Inductance calculated at frequency shown.

\*\*Minimum self resonant frequency measured at maximum inductance.

Due to the wide range of these coils they will find immediate application in many prototype designs where the exact value of the required inductance is not known.

Miller Part Number	Minimum Core Position			Maximum Core Position			R Ohms Max.	Max. Current Ma.	Min. <sup>oo</sup> Fo. MHz.	Dia. over Winding	Total Turns
	Inductance Maximum	Q Min.	Test Frequency	Inductance Minimum	Q Min.	Test Frequency					
9001	40. uh	85	2.5 MHz	.240 mh	220	790. kHz	2.04	250	6.0	.40	102
9002	.180 mh	80	790. kHz	.800 mh	170	790. kHz	4.08	250	4.0	.45	204
9003	.570 mh	73	790. kHz	2.80 mh	110	250. kHz	8.52	250	.90	.58	376
9004	2.10 mh	72	250. kHz	8.00 mh	88	250. kHz	15.4	250	.62	.68	608
9005	6.00 mh	69	250. kHz	16.0 mh	105	79. kHz	33.6	200	.40	.80	1000
9006	12.0 mh	43	79. kHz	40.0 mh	72	79. kHz	91.2	125	.26	.75	1480
9007	30.0 mh	43	79. kHz	105. mh	76	50 kHz*	148.	75	.14	.68	2480
9008	78.0 mh	36	79. kHz	240. mh	61	20 kHz*	264.	75	.10	.75	3860
9009	180. mh	20	20. kHz*	750. mh	41	20 kHz*	620.	50	.03	.75	6100

### Adjustable Wide Range Tapped Inductors

Dimensions: Max. dia. 7/8" x 2 1/4" long. Mtg. hole 3/16"

\*Inductance calculated at frequency shown.

\*\*Minimum self resonant frequency measured at maximum inductance.

An inexpensive series of adjustable inductors that feature large inductance change, excellent Q, and a tap at one third the total turns. These coils should find application in many prototype designs.

Miller Part Number	Minimum Core Position			Maximum Core Position			R Ohms Max.	Max. Current Ma.	Min. <sup>o</sup> Fo. MHz.	Dia. over Winding	Total Turns	Turns to Tap
	Inductance Maximum	Q Min.	Test Frequency	Inductance Minimum	Q Min.	Test Frequency						
9011	40. uh	85	2.5 MHz	.240 mh	220	790 kHz	2.04	250	6.0	.40	102	34
9012	.180 mh	80	790. kHz	.800 mh	170	790 kHz	4.08	250	4.0	.45	204	68
9013	.570 mh	73	790. kHz	2.80 mh	110	250 kHz	8.52	250	.90	.58	376	128
9014	2.10 mh	72	250. kHz	8.00 mh	88	250 kHz	15.4	250	.62	.68	608	203
9015	6.00 mh	69	250. kHz	16.0 mh	105	79 kHz	33.6	200	.40	.80	1000	333
9016	12.0 mh	43	79. kHz	40.0 mh	72	79 kHz	91.2	125	.26	.75	1480	493
9017	30.0 mh	43	79. kHz	105. mh	76	50 kHz*	148.	75	.14	.68	2480	827
9018	78.0 mh	36	79. kHz	240. mh	61	20 kHz*	264.	75	.10	.75	3860	1286
9019	180. mh	20	20. kHz*	750. mh	41	20 kHz*	620.	50	.03	.75	6100	2030

USED ON: <b>STOCK</b>	<b>J. W. MILLER COMPANY</b>		STANDARD PART NO.
DWG. BY <b>W. E. K.</b>			<b>9001 THRU 9019</b>
APP. BY <b>W. R. C.</b>	19070 REYES AVENUE	P.O. BOX 5825 COMPTON, CALIF. 90224	
DATE: <b>7-10-66</b>	SCALE: <b>N. T. S.</b>	DWG. NO. <b>9001-19</b>	

# 9050 thru 9063



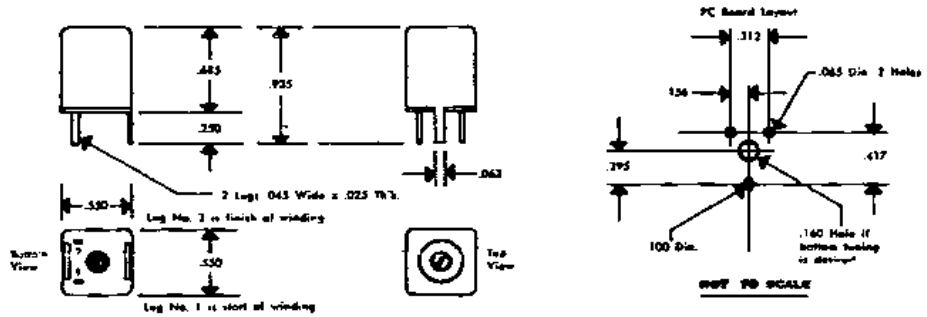
## Shielded Subminiature Adjustable R.F. Coils

These compact adjustable coils offer a minimum two to one inductance range with relatively small changes in Q. The tuning adjustment is accessible from either the top or bottom of the coil assembly. Magnetic shielding is achieved through the use of cup cores while the metal shield offers effective electrostatic shielding. Printed circuit terminals on base and shield.

Dimension 1/2" sq x 5/8" high. \*Minimum self resonant frequency measured at maximum inductance.

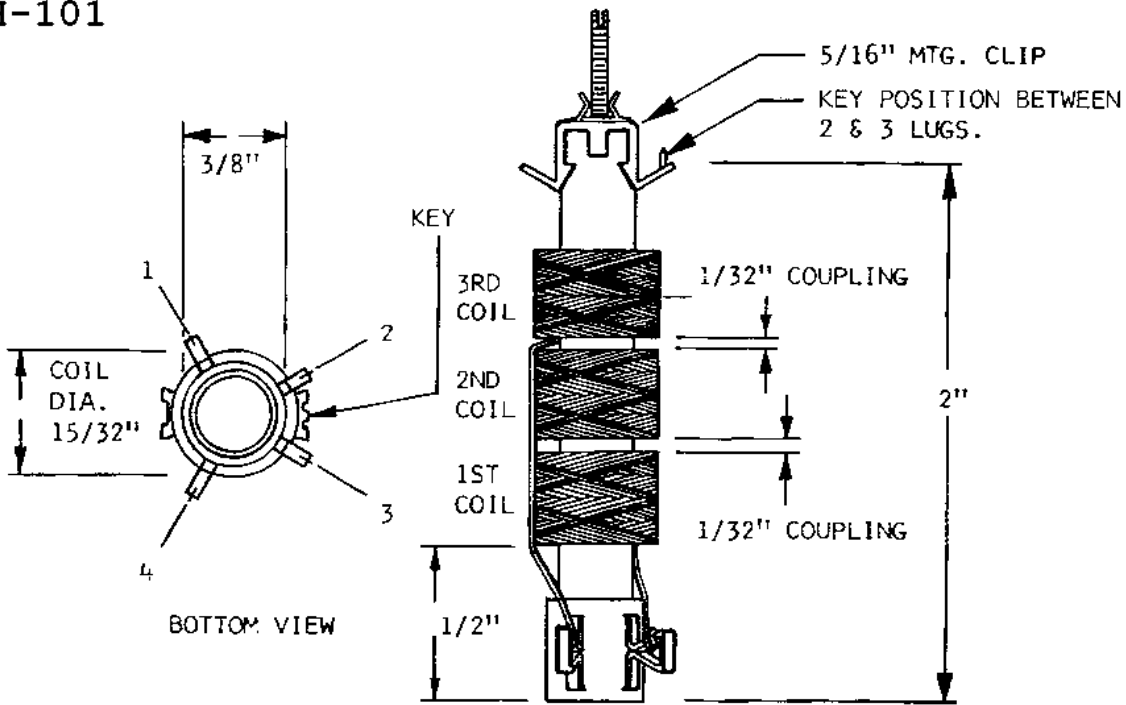
www.33audio.com

Miller Part Number	Maximum Core Position			Minimum Core Position			R Ohms Max.	Max. Current Ma.	Min.° Fo. MHz
	Inductance Maximum	Q Min.	Test Frequency	Inductance Minimum	Q Min.	Test Frequency			
9050	1.5 uh	40	7.9 MHz	3.0 uh	41	7.9 MHz	.66	80	39.
9051	3.0 uh	46	7.9 MHz	7.0 uh	45	7.9 MHz	.85	125	23.
9052	7.0 uh	40	7.9 MHz	14.0 uh	62	2.5 MHz	1.38	80	12.
9053	14.0 uh	48	2.5 MHz	28.0 uh	66	2.5 MHz	2.10	80	7.2
9054	28.0 uh	48	2.5 MHz	60.0 uh	45	2.5 MHz	3.00	100	4.9
9055	60.0 uh	40	2.5 MHz	120. uh	69	790. kHz	4.00	100	3.6
9056	120. uh	52	790. kHz	280. uh	68	790. kHz	5.75	80	2.5
9057	280. uh	52	790. kHz	650. uh	62	790. kHz	12.0	80	1.7
9058	650. uh	36	790. kHz	1.3 mh	58	250. kHz	15.0	100	1.2
9059	1.3 mh	43	250. kHz	3.0 mh	53	250. kHz	23.0	100	.57
9060	3.0 mh	32	250. kHz	10.0 mh	32	79. kHz	76.0	30	.48
9061	8.0 mh	35	250. kHz	20.0 mh	38	79. kHz	110.	30	.33
9062	15.0 mh	25	79. kHz	40.0 mh	40	79. kHz	150.	30	.24
9063	20.0 mh	36	79. kHz	60.0 mh	60	79. kHz	175.	25	.09

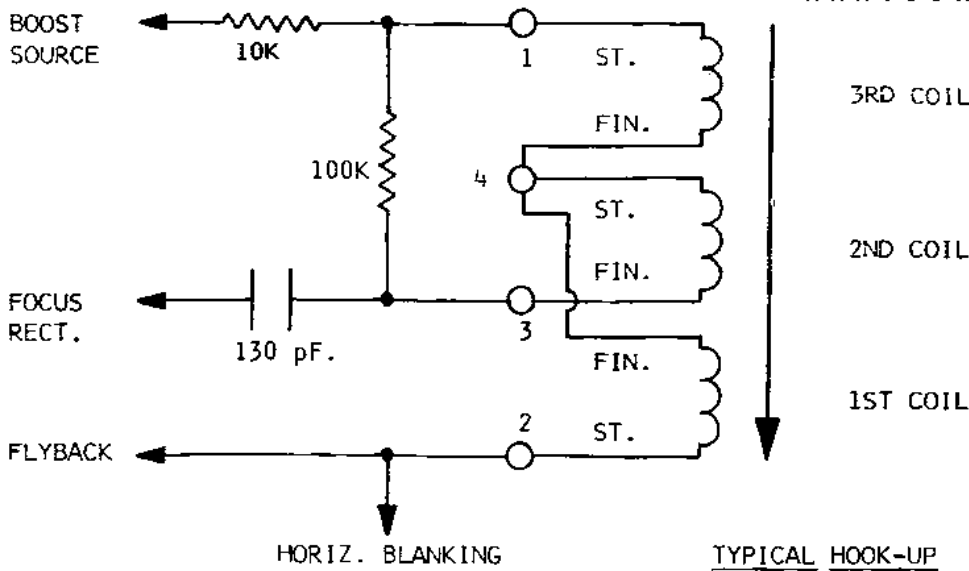


USED ON: <b>STOCK</b>	<b>J. W. MILLER COMPANY</b> 19070 REYES AVENUE   P.O. BOX 5825 COMPTON, CALIF. 90224	STANDARD PART NO.
DWG. BY <b>W. E. K.</b>		<b>9050 THRU 9063</b>
APP. BY <b>W. R. C.</b>	SCALE: <b>N. T. S.</b>	
DATE: <b>7-10-66</b>		

# H-101



www.33audio.com



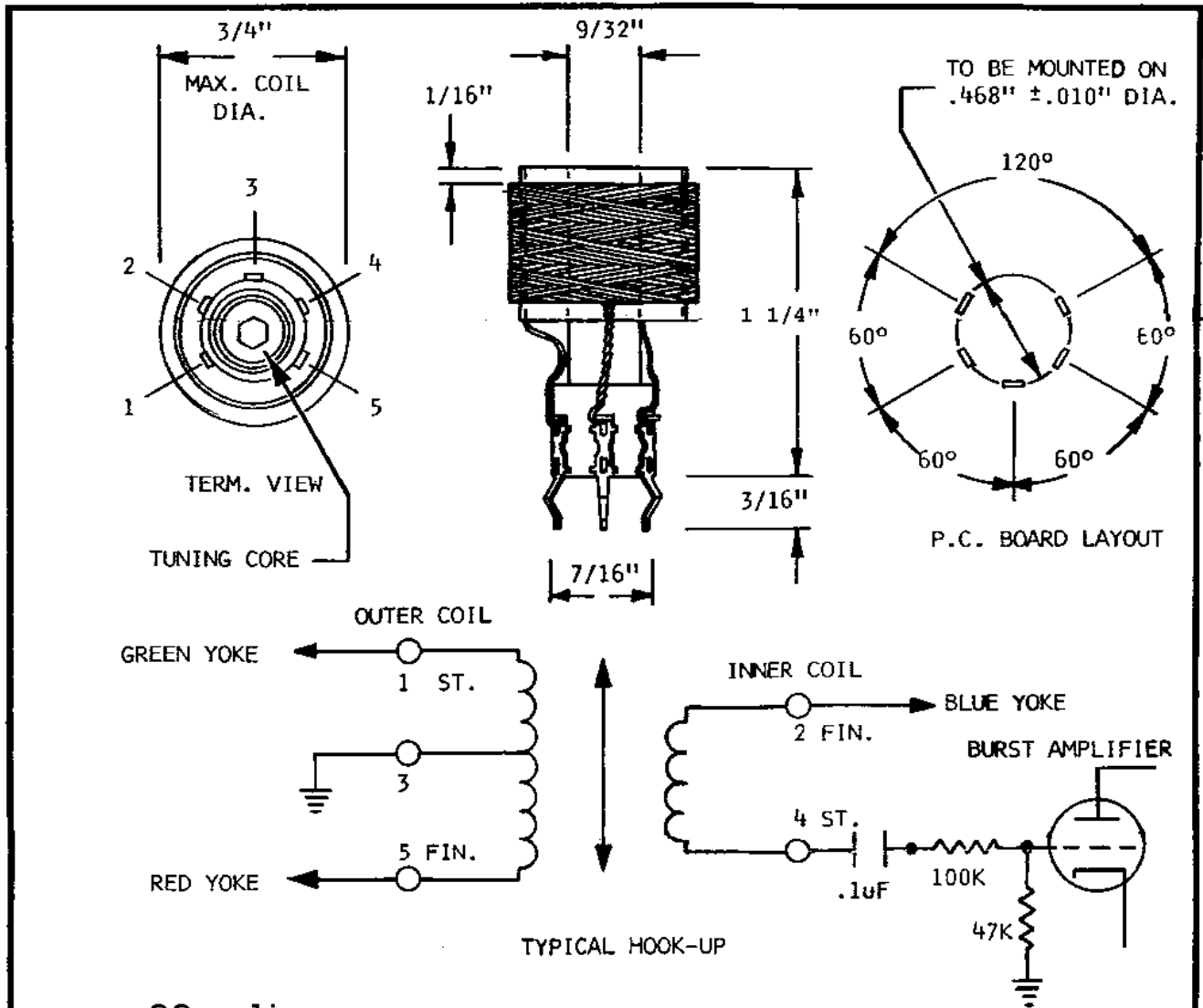
Part function: Focus Coil

TEST FOR EACH COIL	L ± 5% LESS CORE	Q MIN.	TEST FREQ.	OHMS MAX.	mA. MAX.	WIRE SIZE	WIRE TURNS
	2.85 MH	40	250 kHz.	48	81	37	730

IMPREGNATION: Q-MAX OR EQUIVALENT

USED ON: STOCK	<b>J. W. MILLER COMPANY</b> 19070 REYES AVENUE   P.O. BOX 5825 COMPTON, CALIF. 90224	STANDARD PART NO.
DWG. BY: W. E. K.		<b>H-101</b>
APP. BY: J. H. B.		
DATE: 3-27-67		
SCALE: N. T. S.	DWG. NO. H-101	

# H-102



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PART FUNCTION: DYNAMIC CONVERGENCE

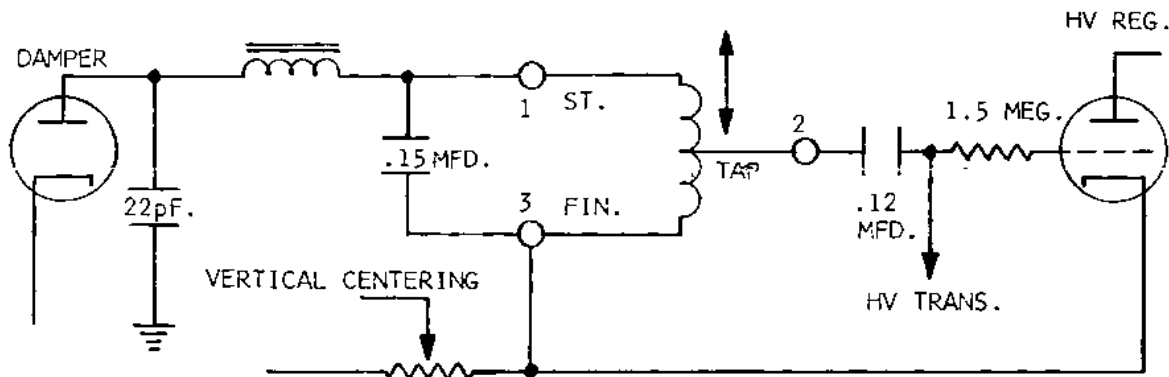
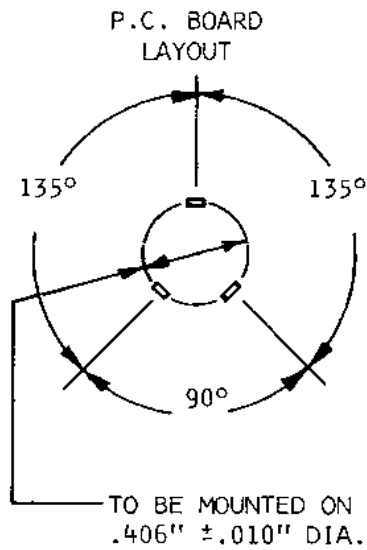
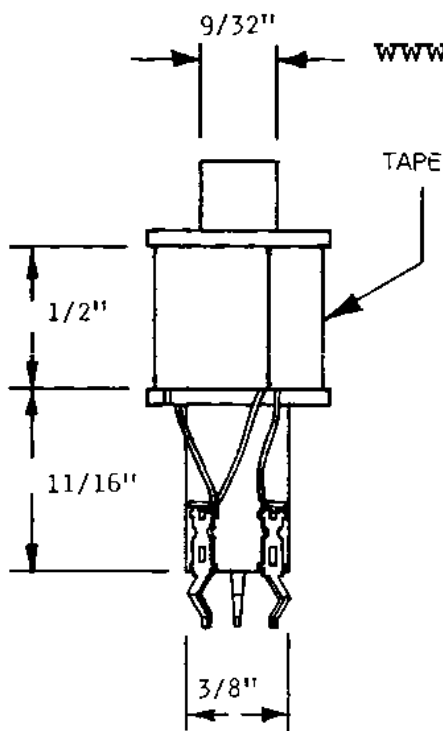
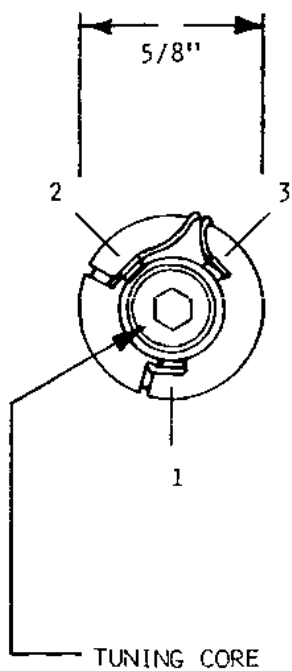
TERM:	MIN. CORE POSITION			MAX. CORE POSITION			Rdc.	I	WIRE	WIRE
PRI. SEC.	L MAX.	Q MIN.	TEST FREQ.	L MIN.	Q MIN.	TEST FREQ.	OHMS MAX.	mA. MAX.	SIZE	URNS
2&4	4.7 MH	14	250 KHZ	9.3 MH	52	79 KHZ	20	256	32	820
1&3	-	-	-	-	-	-	1.25	256	32	32-1/2
3&5	-	-	-	-	-	-	1.75	256	32	47-1/2

IMPREGNATION: Q-MAX OR EQUIVALENT

USED ON: STOCK	<b>J. W. MILLER COMPANY</b> 19070 REYES AVENUE   P.O. BOX 5825 COMPTON, CALIF. 90224	STANDARD PART NO.
DWG. BY W. E. K.		H - 102
APP. BY J. H. B.		
DATE: 4-3-67		
SCALE: N. T. S.	DWG. NO. H-102	

**H-103**

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PART FUNCTION: HORIZ. LIN. COIL

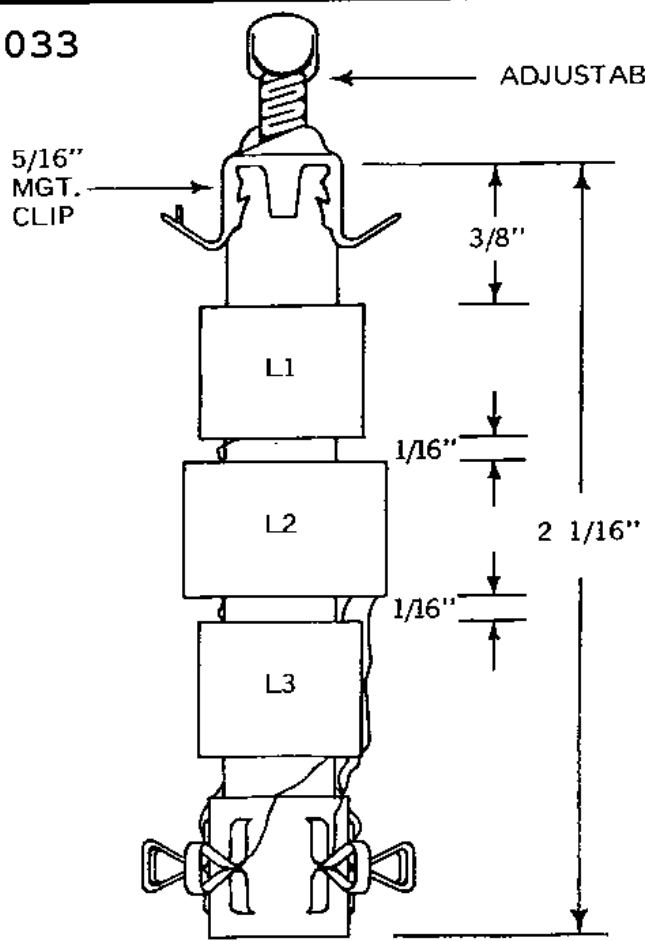
TERMINAL	INDUCTANCE RANGE	TEST FREQ	OHMS MAX.	Ma. MAX.	WIRE SIZE	WIRE TURNS
1 & 3	.19MH - .9 MH	1 kHz.	.88	1300	25	190
2 & 3	-	-	.44	1300	25	95

IMPREGNATION: Q-MAX OR EQUIVALENT

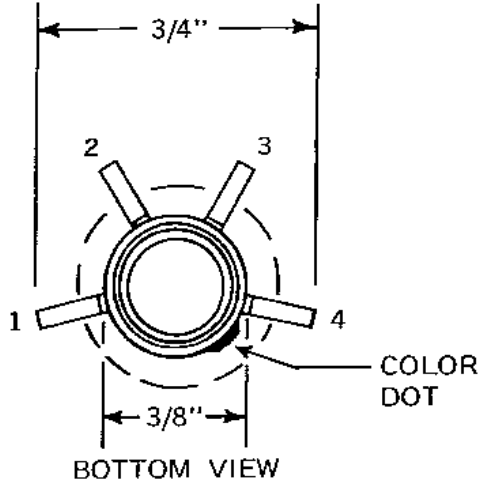
USED ON: STOCK	<b>J. W. MILLER CO.</b> 5917 SO. MAIN LOS ANGELES, CALIF.	STANDARD PART NO.
DWG. BY W. E. K.		<b>H-103</b>
APP. BY J. H. B.		
DATE: 3-23-67		
SCALE: N. T. S.	DWG. NO. H-103	

H-1033

H-1033

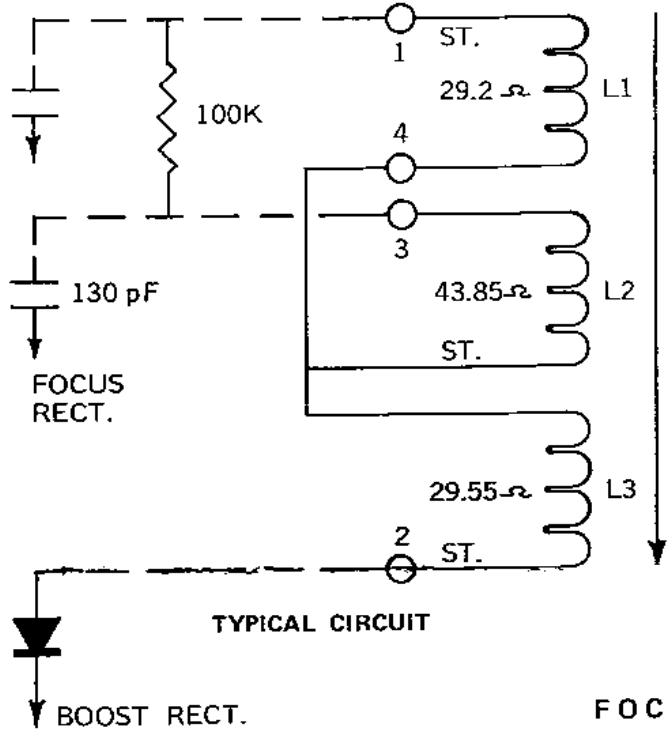


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PLEASE NOTE:

This spec. sheet is not intended to be an engineering standard but as an aid to replacing the original coil. The circuit shown is typical, but in all cases the original set circuitry should be adhered to. Measurements shown are nominal and may vary as well as being a little different to the original in some cases.



USED ON:	STOCK
DWG. BY:	F.F.
APP. BY:	J.H.B.
DATE:	AUG. 1975

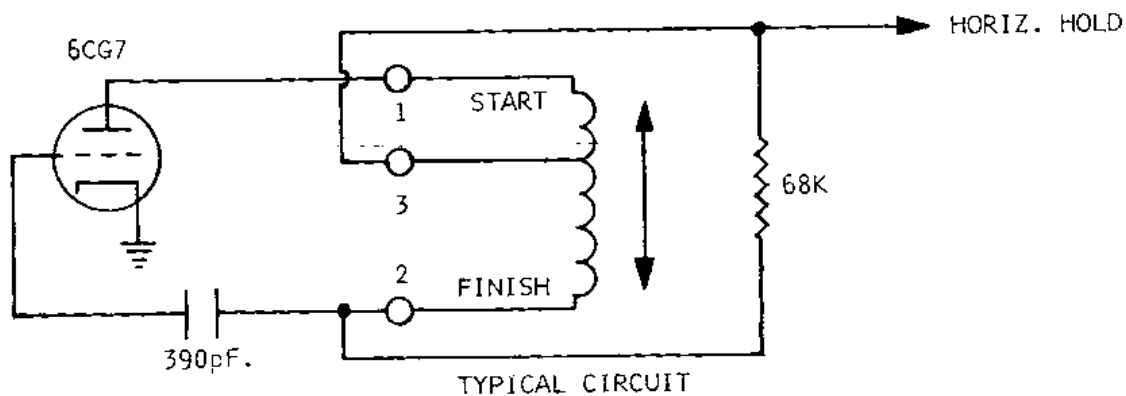
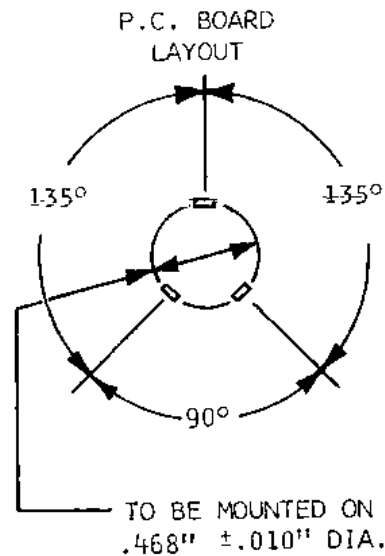
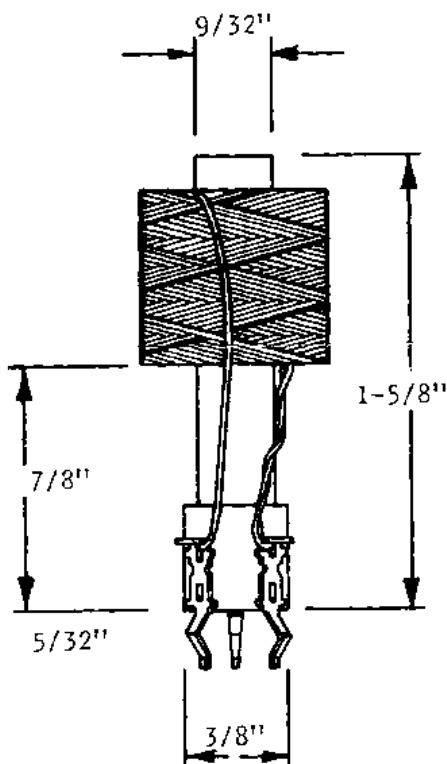
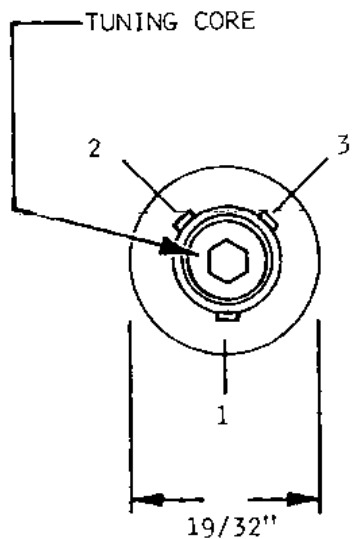
**BELL INDUSTRIES**  
**J. W. Miller Division**  
 19070 Reyes Avenue P.O. Box 5825  
 Compton, California 90224

SCALE: N.T.S.      DWG. NO. H-1033

STANDARD PART NO.
<b>H-1033</b>

H-104

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PART FUNCTION: HORIZONTAL OSCILLATOR

CENTER FREQUENCY: 15,750 Hz.

TERM:	MIN. CORE POSITION			MAX. CORE POSITION			Rdc.	I	WIRE	WIRE
	L MAX.	Q MIN.	TEST FREQ.	L MIN.	Q MIN.	TEST FREQ.				
1-2	16.5 mH	40	79 kHz.	80 mH	78	79 kHz.	118	100	36	1820
1-3	-	-	-	-	-	-	38	100	36	728

COIL IMPREGNATION: Q-MAX OR EQUIVALENT

USED ON: STOCK	<b>J. W. MILLER CO.</b> 5917 SO. MAIN LOS ANGELES, CALIF.	STANDARD PART NO.
DWG. BY W.E.K.		<b>H-104</b>
APP. BY J.H.B.		
DATE: 6-26-67	SCALE: N. T. S.	DWG. NO. H-104



J.W. MILLER  
H-1060

MAGNAVOX REPLACEMENT PART  
INSTALLATION NOTE

NOTE:  
MILLER H-1060 is exact replacement  
for Magnavox 171409-1

171409-1 HORIZONTAL FREQUENCY COIL

This coil is a replacement for type 361269-1 and 361269-2 coils used in T936, T956 and T957 chassis. Note that the original coil may be either type 361269-1 (Figure 1) or 361269-2 (Figure 2). T936, T956 and T957 chassis circuit boards are designed to accept both types. For improved horizontal frequency stability use only the 171409-1 type part (Figure 1) in T936, T956 and T957 chassis.

1. Install 171409-1 coil exactly as illustrated in Figure 1.
2. Replace 6GH8A Horizontal Oscillator (V102) with a "PRE-HEATED" type.
3. Remove capacitor C120 (0.1 mfd., 400V) located on Horizontal Circuit Board midway between Horizontal Frequency Coil L102 and Horizontal Oscillator Tube V102. NOTE: Certain chassis versions do not include this part. See Figure 3 for schematic diagram of circuit including C120.

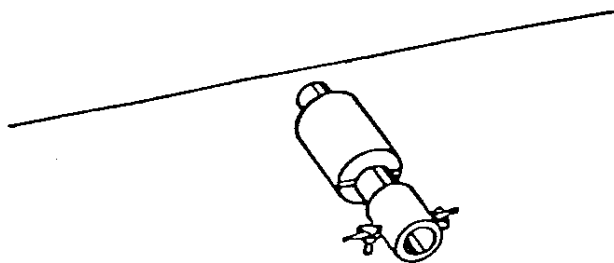


FIGURE 1  
(171409-1  
& 361269-1)

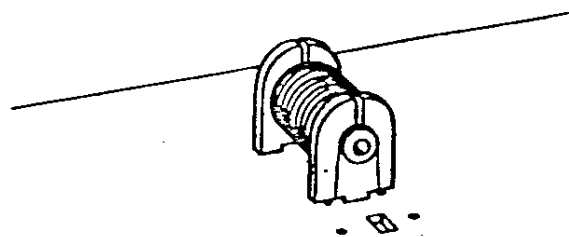


FIGURE 2  
(361269-2)

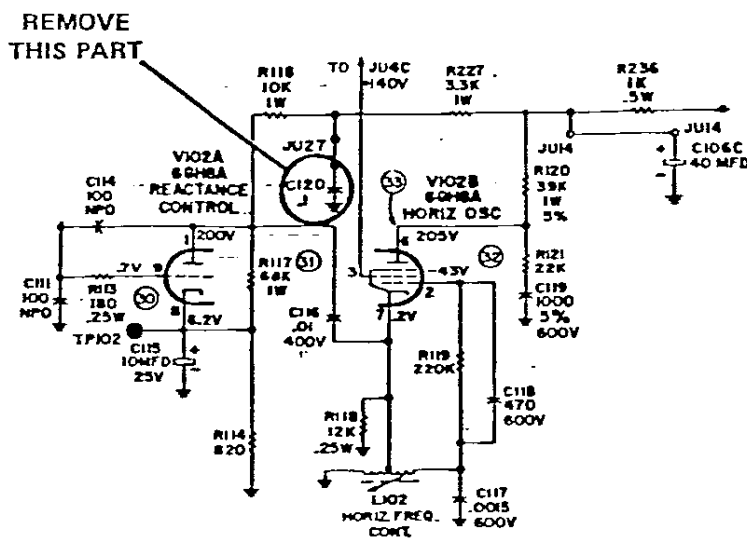
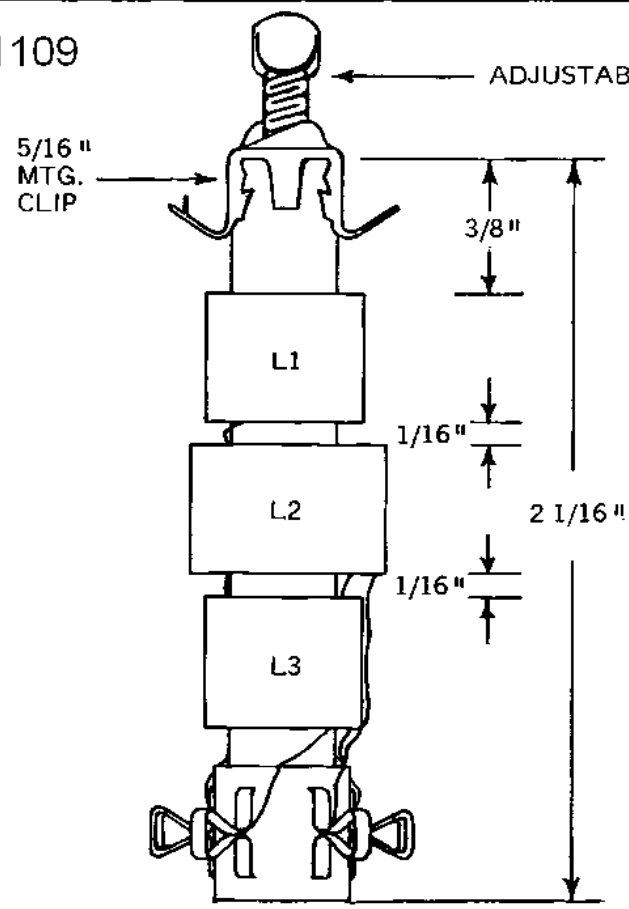


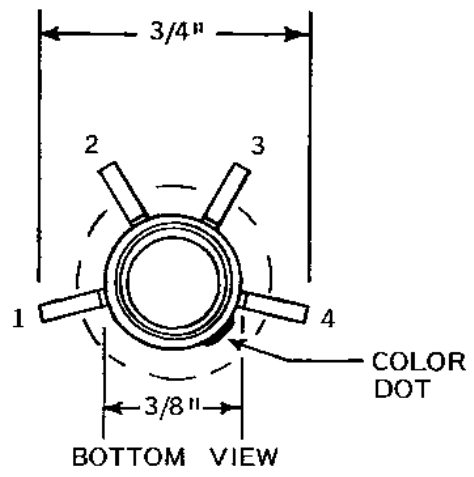
FIGURE 3  
(Circuit Including  
C120)

H-1109

H-1109

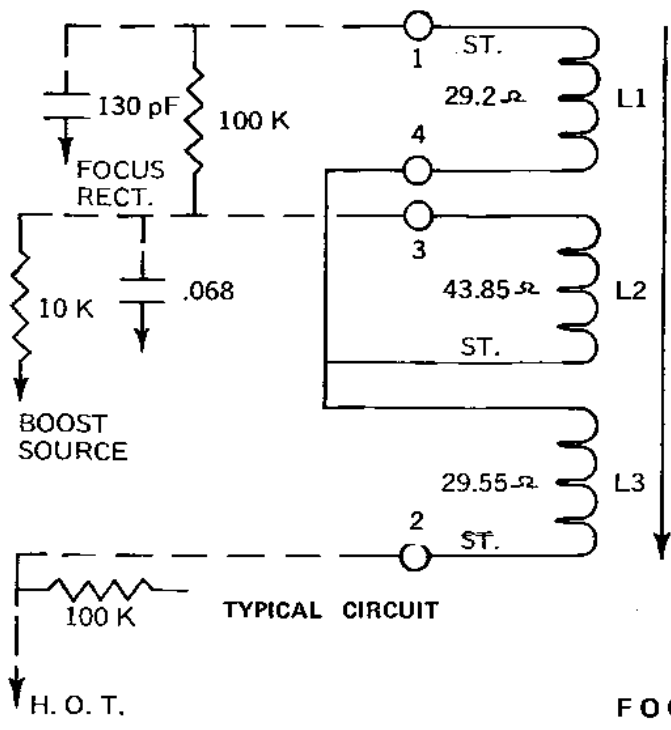


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**\* PLEASE NOTE**

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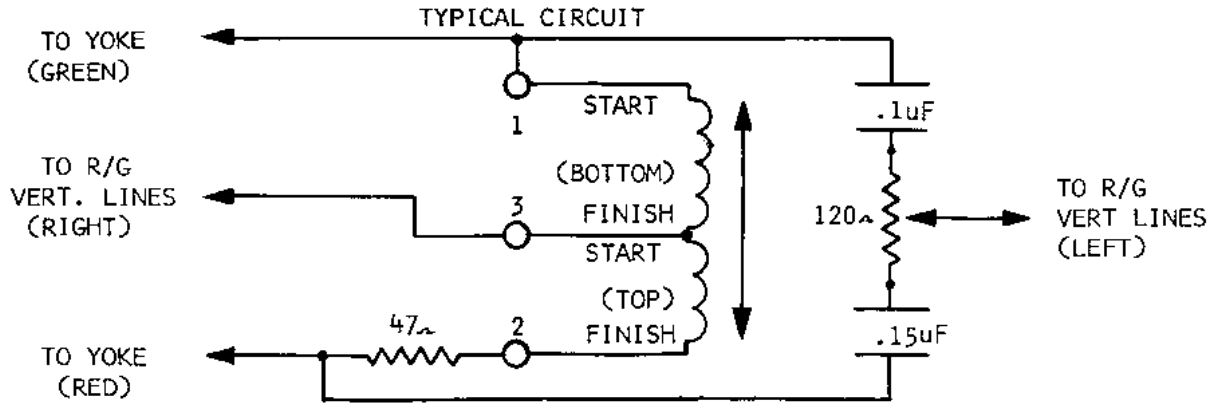
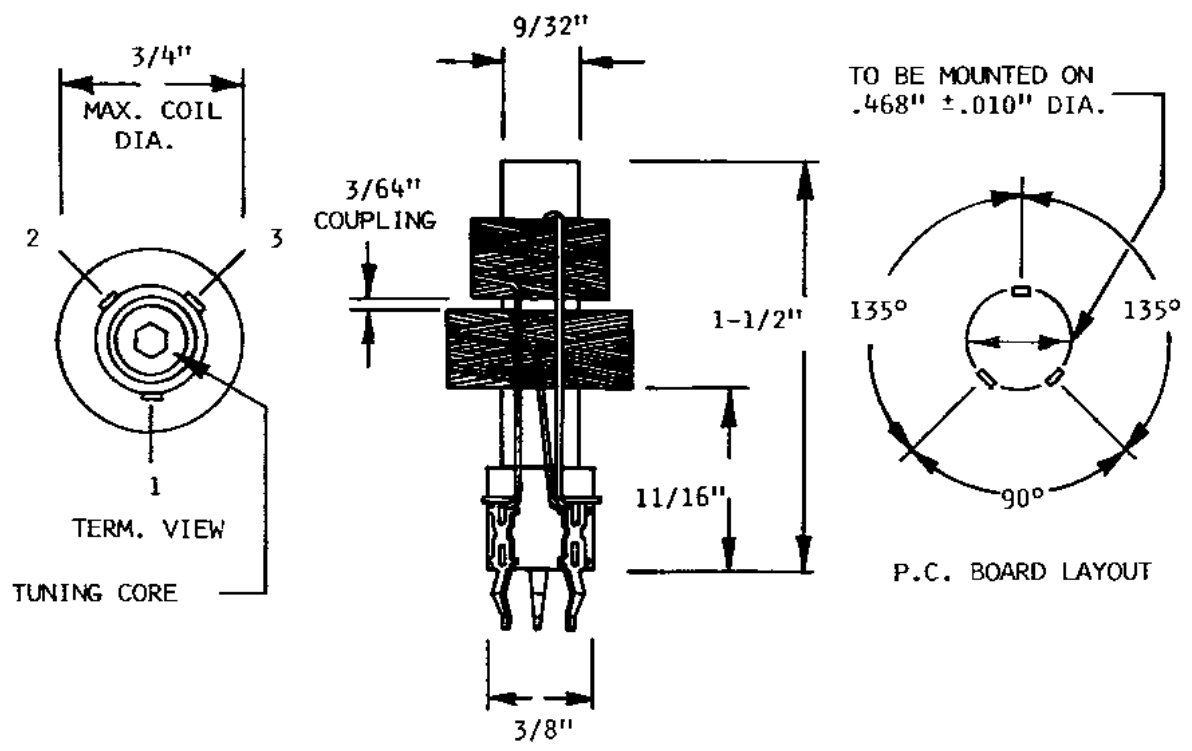
USED ON:	STOCK
DWG. BY	F. F.
APP. BY	J. H. B.
DATE:	AUG. 1975

**BELL INDUSTRIES**  
**J. W. Miller Division**  
 19070 Reyes Avenue P.O. Box 5825  
 Compton, California 90224

SCALE: N. T. S.      DWG. NO. H-1109

STANDARD PART NO.
<b>H-1109</b>

H-139 www.33audio.com



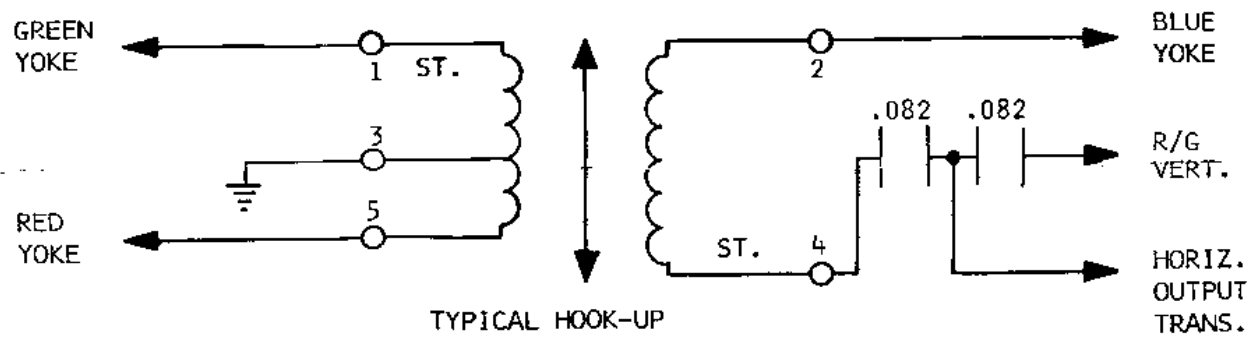
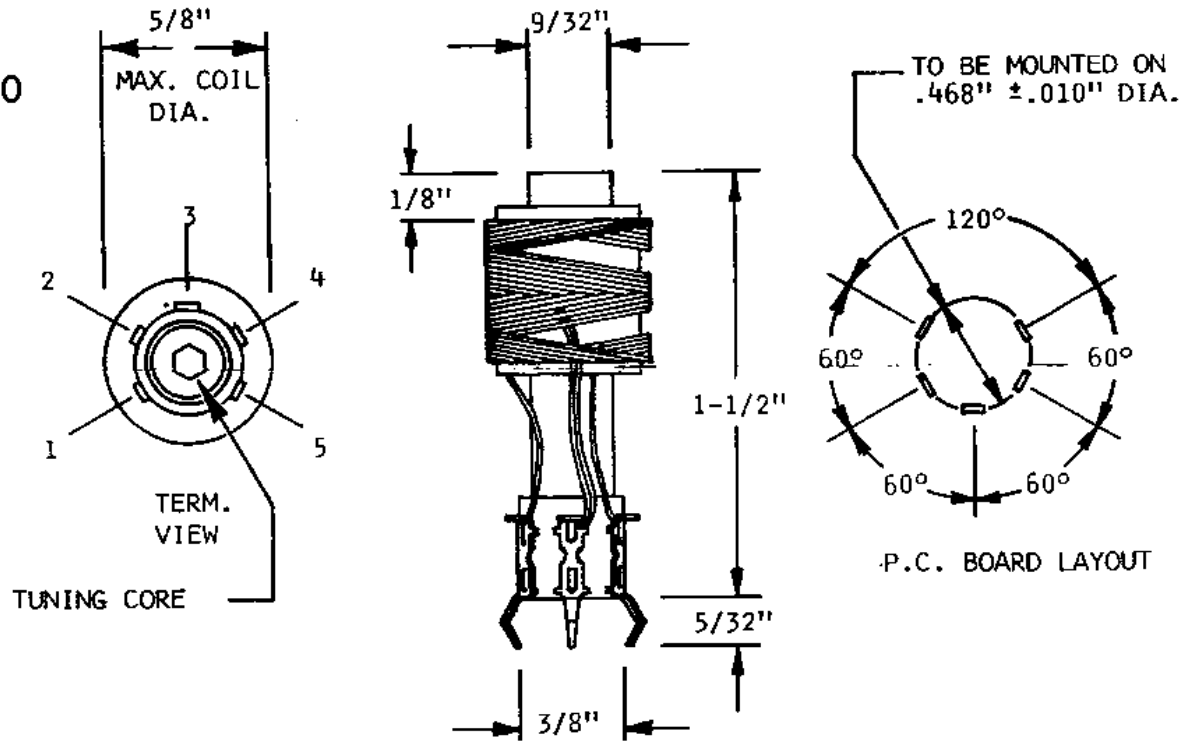
PART FUNCTION: DYNAMIC CONVERGENCE

TERM:	MIN. CORE POSITION			MAX. CORE POSITION			Rdc. OHMS MAX.	I mA. MAX.	WIRE SIZE	WIRE TURNS
	L MAX.	Q MIN.	TEST FREQ.	L MIN.	Q MIN.	TEST FREQ.				
1 & 2	2 MH	9	250 kHz.	7 MH	15	250 kHz.	9.9	400	30	617
2 & 3	-	-	-	-	-	-	3.4	400	30	385
1 & 3	-	-	-	-	-	-	6.5	400	30	232

IMPREGNATION: Q-MAX OR EQUIVALENT

USED ON: STOCK	<b>J. W. MILLER COMPANY</b> 19070 REYES AVENUE   P.O. BOX 5825 COMPTON, CALIF. 90224	STANDARD PART NO.
DWG. BY: W. E. K.		<b>H - 139</b>
APP. BY: J. H. B.		
DATE: 6-26-67		
SCALE: N. T. S.	DWG. NO. H-139	

**H-140**



PART FUNCTION: DYNAMIC CONVERGENCE

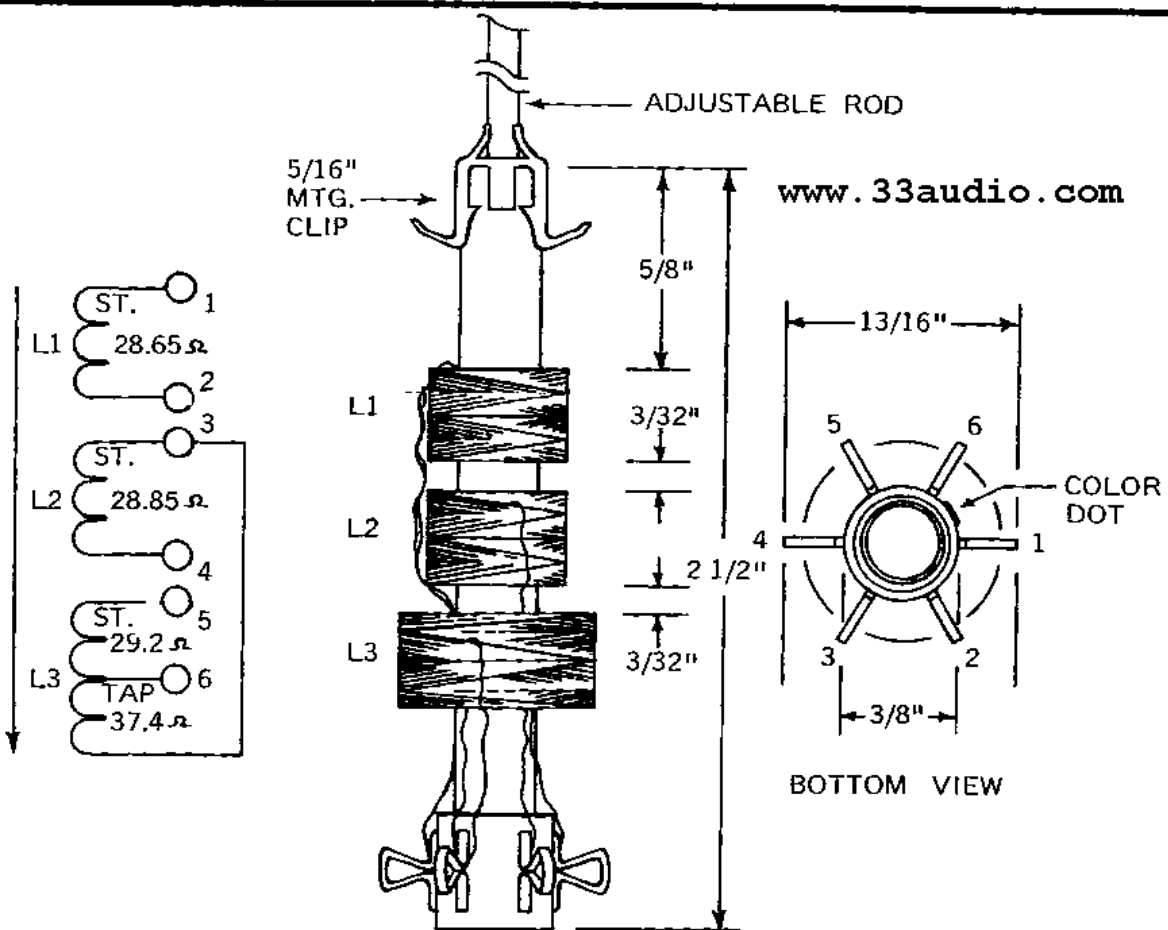
TERM	MIN. CORE POSITION			MAX. CORE POSITION			Rdc. OHMS MAX.	I mA. MAX.	WIRE SIZE	WIRE TURNS
	L MAX.	Q MIN.	TEST FREQ.	L MIN.	Q MIN.	TEST FREQ.				
2&4	2.35 MH.	16	250 kHz.	9.8 MH.	22	250 kHz.	15	256	32	630
1&3	-	-	-	-	-	-	.91	256	32	26-1/2
3&5	-	-	-	-	-	-	.75	256	32	21-1/2

IMPREGNATION: Q-MAX OR EQUIVALENT

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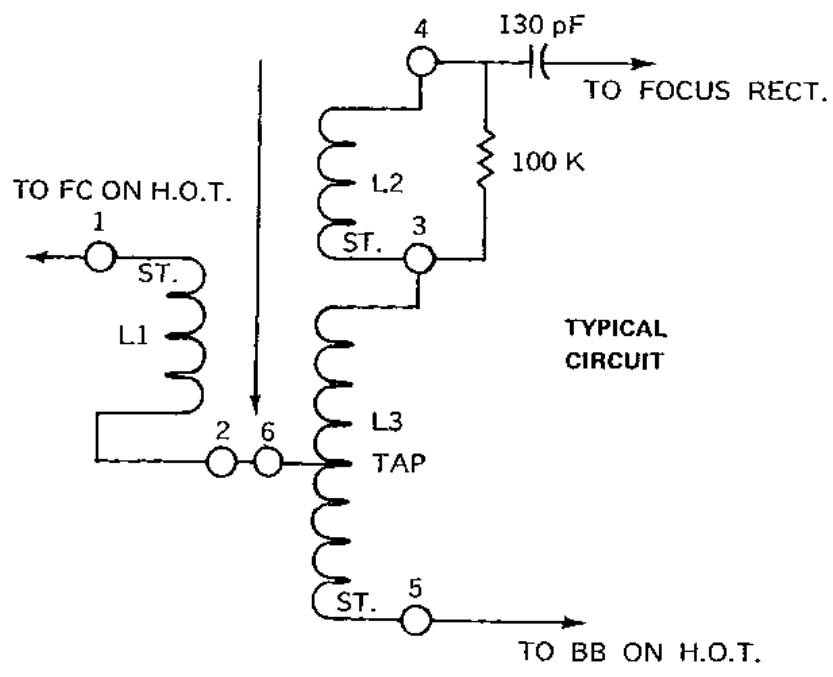
USED ON: STOCK	<b>J. W. MILLER COMPANY</b>	STANDARD PART NO.
DWG. BY: W. E. K.		<b>H-140</b>
APP. BY: J. H. B.	19070 REYES AVENUE   P.O. BOX 5825 COMPTON, CALIF. 90224	
DATE: 11-7-67	SCALE: N. T. S.   DWG. NO. H-140	

H-214



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BOTTOM VIEW




TYPICAL CIRCUIT

\* PLEASE NOTE

This spec. sheet is not intended to be an engineering standard but as an aid to replacing the original coil. The circuit shown is typical, but in all cases the original set circuitry should be adhered to. Measurements shown are nominal and may vary as well as being a little different to the original in some cases.

FOCUS COIL

USED ON: STOCK	 <b>BELL INDUSTRIES</b> J. W. Miller Division 19070 Reyes Avenue P.O. Box 5825 Compton, California 90224	STANDARD PART NO.
DWG. BY F. F.		H-214
APP. BY J. H. B.		
DATE: AUG. 1975		
SCALE: N. T. S.	DWG. NO. H-214	

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KHZ262

KHZ455



*Miller*  
RADIO PRODUCTS



# UNIVERSAL I. F. TRANSFORMERS

POINT-TO-POINT

INPUT

INTERSTAGE

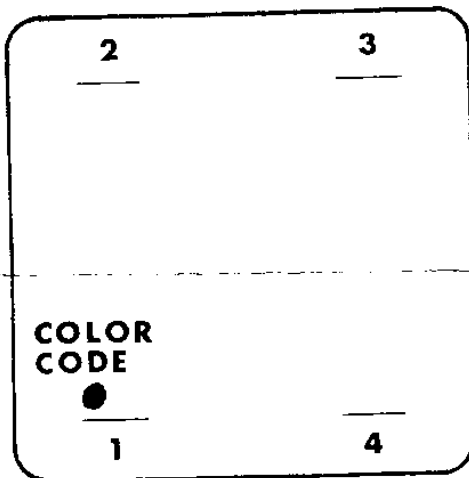
OUTPUT

**KHZ 262**

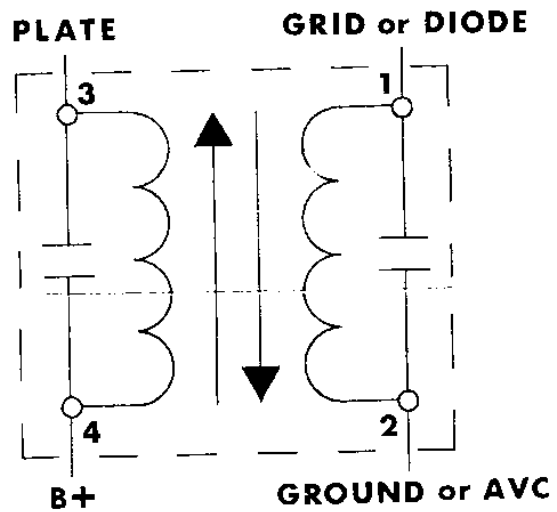
NOMINAL FREQ. 262 KHz  
RANGE: 250 - 275 KHz

**KHZ 455**

NOMINAL FREQ. 455 KHz  
RANGE: 450 - 475 KHz



BASE TERMINAL VIEW



STEP-UP CAP AIDING

BELL INDUSTRIES

19070 REYES AVENUE

P.O. BOX 5825,

COMPTON, CALIF. 90224

KHZ-262 CG 10M 6-77

PRINTED IN U.S.A.

KHZ262-PC KHZ455-PC

www.33audio.com



# UNIVERSAL I.F. TRANSFORMERS

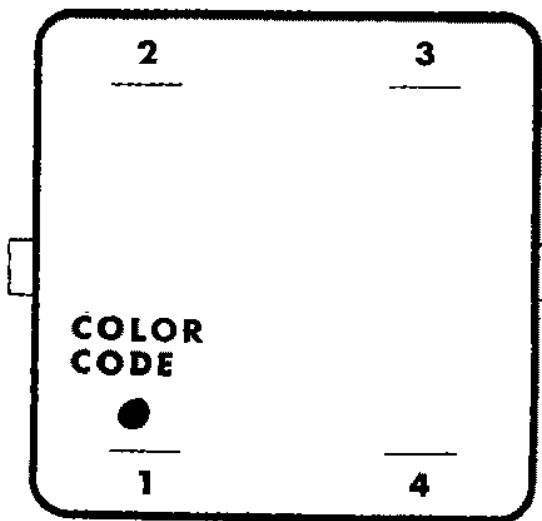
## PRINTED CIRCUIT

INPUT	INTERSTAGE	OUTPUT
<b>KHZ 262-PC</b>	NOMINAL FREQ. 262 KHz RANGE: 250 - 275 KHz	
<b>KHZ 455-PC</b>	NOMINAL FREQ. 455 KHz RANGE: 450 - 475 KHz	

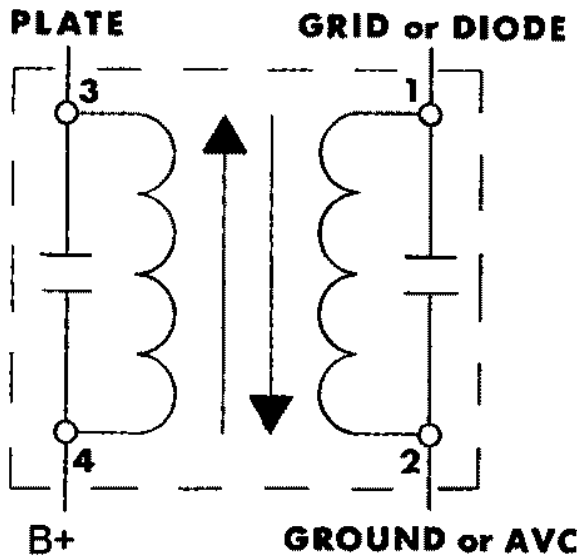
KHZ262-PC

KHZ455-PC

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BASE TERMINAL VIEW



STEP-UP CAP AIDING

J. W. MILLER COMPANY

19070 REYES AVENUE

P.O. BOX 5825,

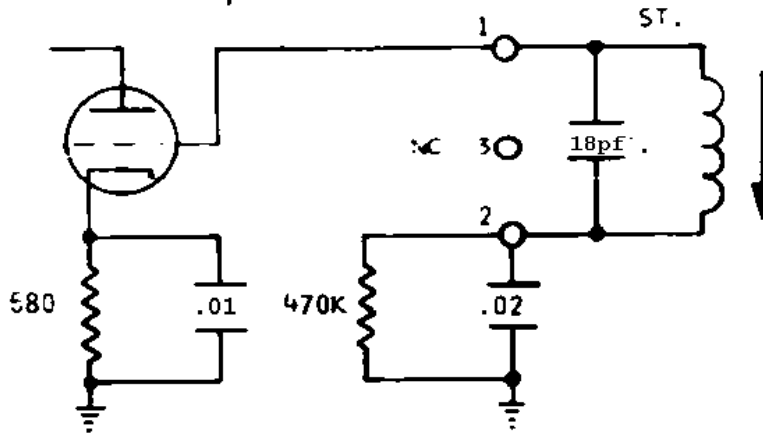
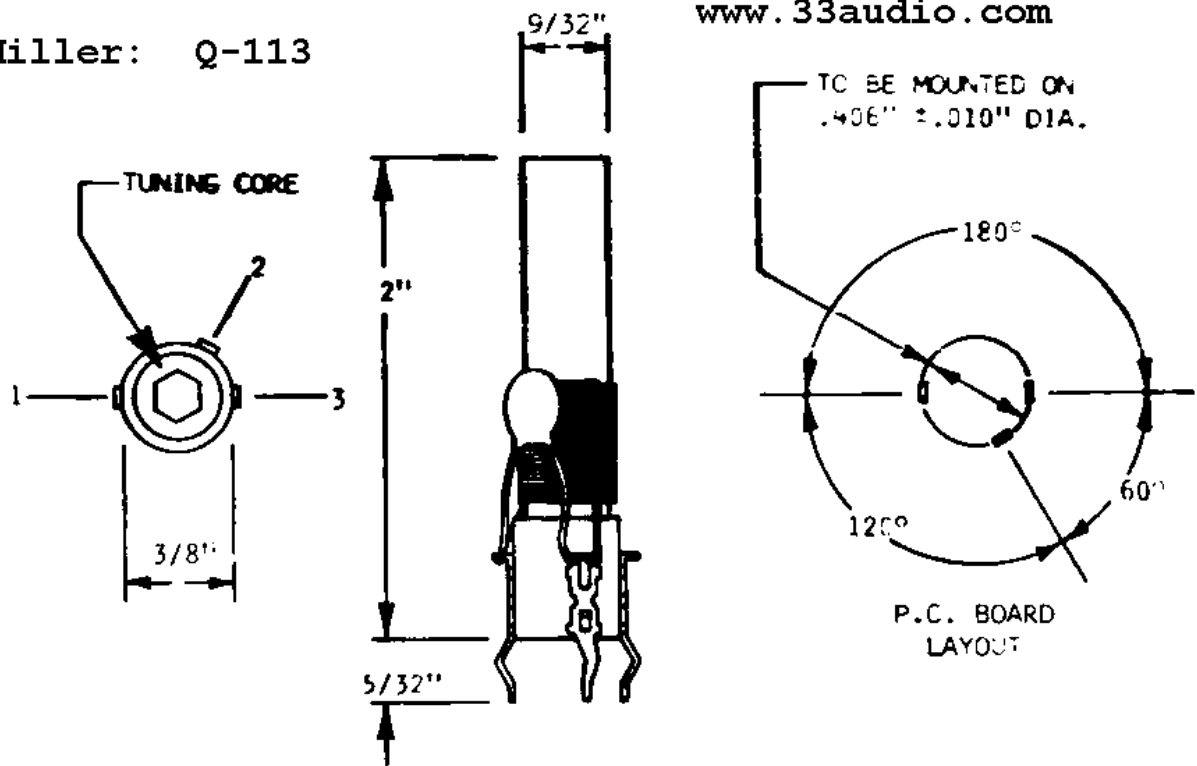
COMPTON, CALIF. 90224

KHZ 262 PC CG 25M 2-72

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Miller: Q-113



TYPICAL CIRCUIT

PART FUNCTION: QUADRATURE COIL

CENTER FREQUENCY: 4.5 MHz.

MIN. CORE POSITION			MAX. CORE POSITION			Rdc.	I	WIRE	WIRE
L MAX.	Q MIN.	TEST FREQ.	L MIN.	Q MIN.	TEST FREQ.	OHMS MAX.	mA. MAX.	SIZE	TURNS
36 uH	57	2.5MHz	90 uH	30	2.5 MHz.	5.6	.064	#38	90

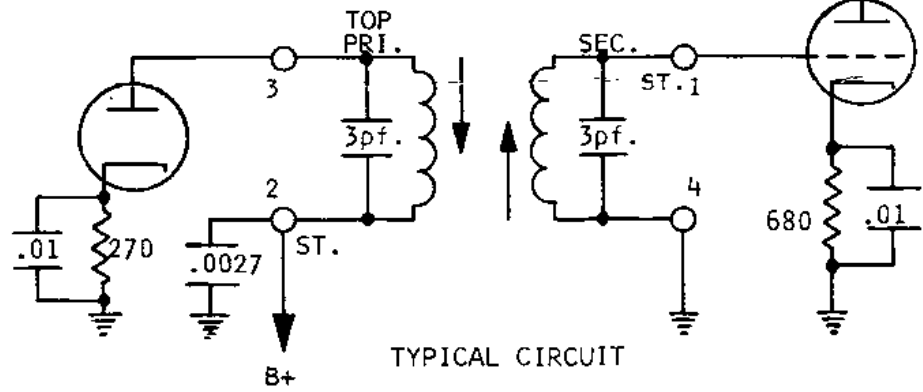
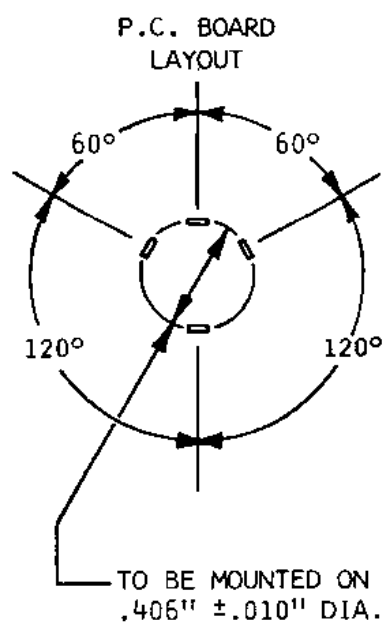
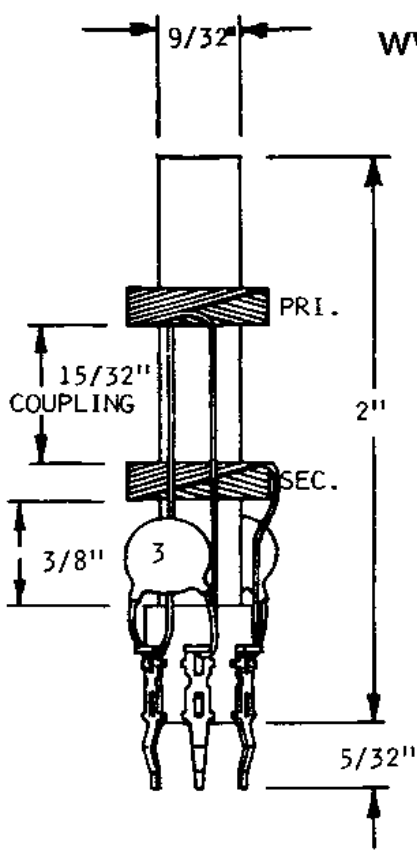
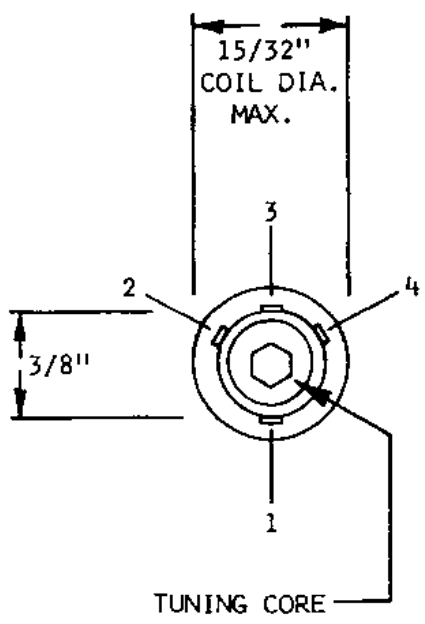
IMPREGNATION: Q-MAX OR EQUIVALENT

USED ON	STOCK	<b>J. W. MILLER COMPANY</b>		STANDARD PART NO.
DES. BY	W. E. K.			<b>Q-113</b>
APP. BY	J. H. S.	19070 REYES AVENUE   P.O. BOX 5825 COMPTON, CALIF. 90224		
DATE:	9-30-66	SCALE: N. T. S.	Q-113	



# Miller: SI-144

MPR  
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PART FUNCTION: SOUND I.F.

CENTER FREQUENCY: 4.5 MHz.

TERM:	MIN. CORE POSITION			MAX. CORE POSITION			Rdc.	I	WIRE	WIRE
	L MAX.	Q MIN.	TEST FREQ.	L MIN.	Q MIN.	TEST FREQ.				
PRI. & SEC.	82 uH	28	2.5 MHz.	115 uH	74	790 kHz.	4.7	100	#36	88
	82 uH	28	2.5 MHz.	115 uH	74	790 kHz.	4.7	100	#36	88

IMPREGNATION: Q-MAX OR EQUIVALENT

USED ON: STOCK	<b>J. W. MILLER COMPANY</b> 19070 REYES AVENUE   P.O. BOX 5825 COMPTON, CALIF. 90224	STANDARD PART NO.
DWG. BY W. E. K.		<b>SI-144</b>
APP. BY J. H. B.		
DATE: 9-2-66		
SCALE: N. T. S.	DWG. NO. SI-144	