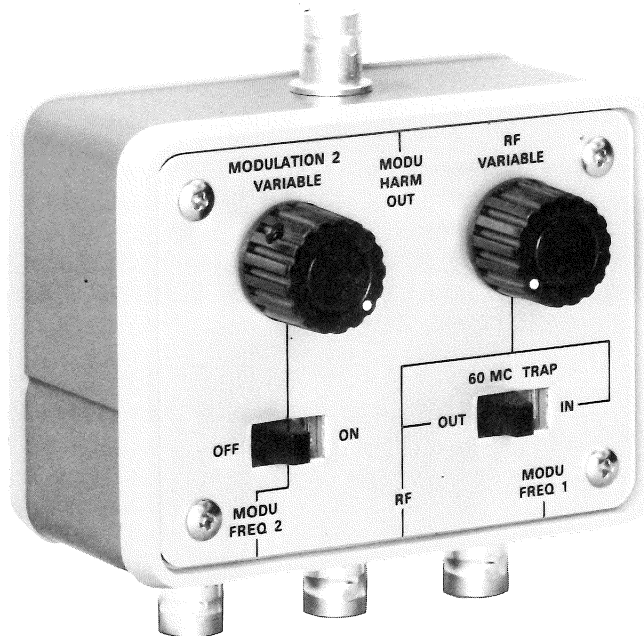



# 067-0518-00 CALIBRATION FIXTURE

Harmonic Modulator



REF. NO.	PART NO.	SERIAL/MODEL NO.		QTY.	DESCRIPTION
		EFF.	DISC.		
	067-0518-00				<p>Permits simultaneous modulation of an R.F. signal with Tektronix Type 105 Square Wave Generator and with an audio generator. Recommended R.F. source is Tektronix Type 180A Time Mark Generator. The unit is designed to provide test signals for Tektronix L10A Spectrum Analyzer (will also be usable with future models). Modulated harmonic frequencies to 900 mc, with amplitudes of a few microvolts, have been produced although this is considerable beyond the normal output requirement. A 60-mc trap may be switched in to attenuate any 60-mc component (center I.F. frequency of L10A is 60-mc). Effective attenuation of this trap depends on the setting of RF VARIABLE control.</p>

**DATA SHEET NO.**  
062-0819-00  
FEBRUARY 1967

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Characteristics

## MODU FREQ 1 &amp; 2 Inputs

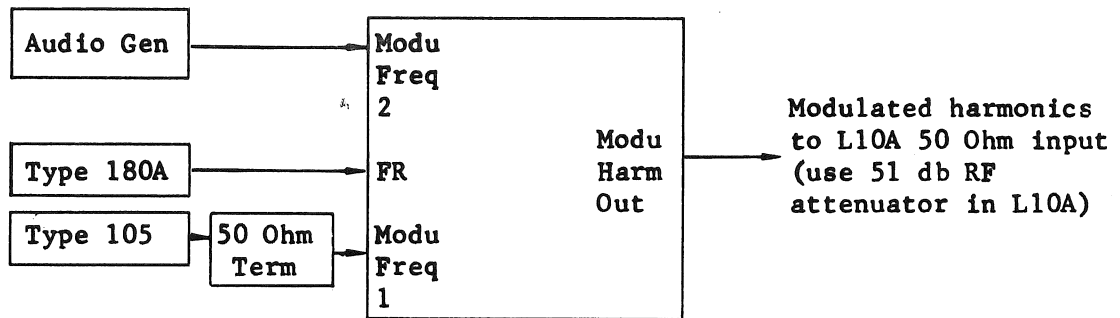
Coupling	DC
Maximum Input Voltage	±10 v

## RF Input

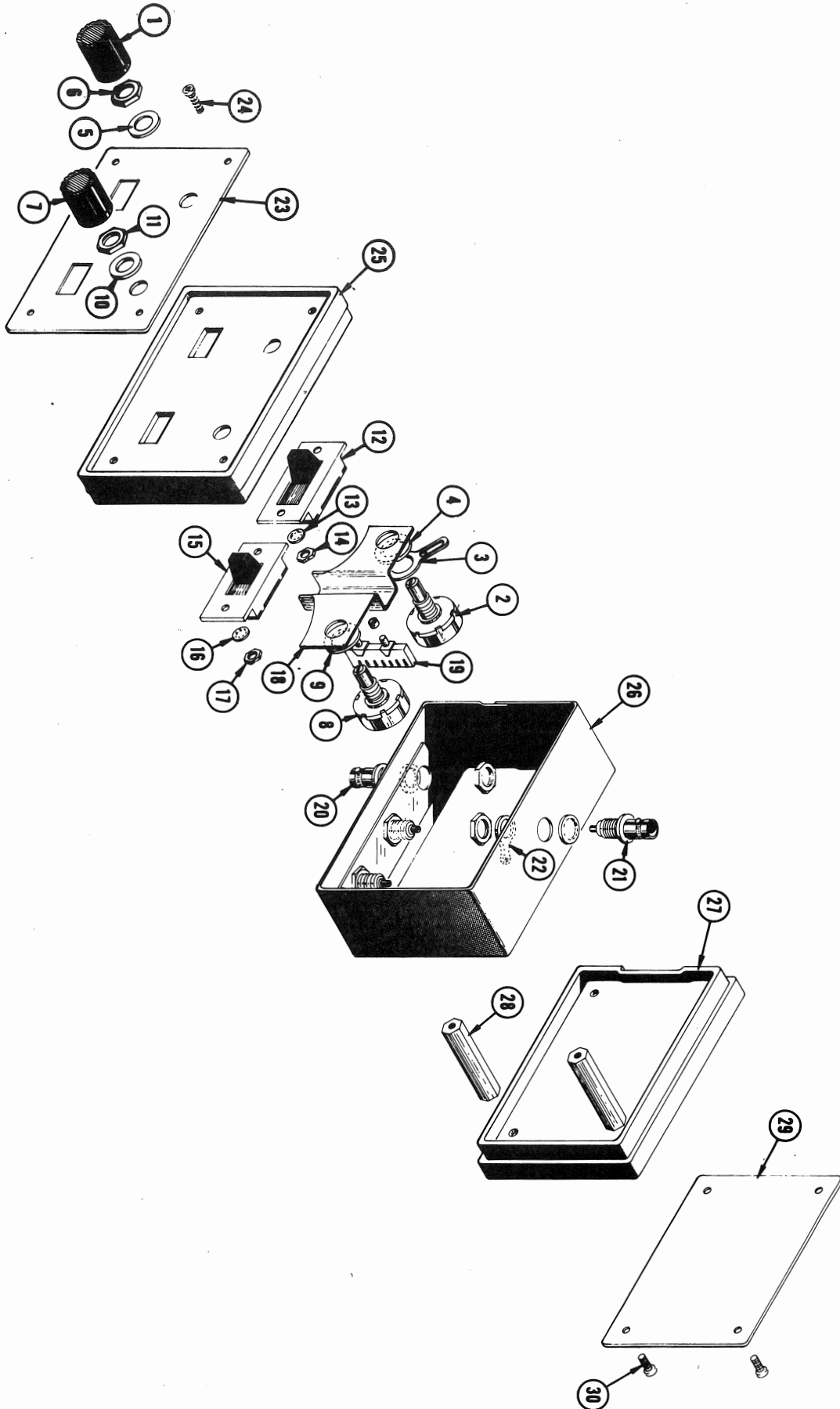
Coupling	AC
Maximum Input Voltage	20 volts p-p

Operating Instructions

Test configuration for displaying modulation on a carrier with Type L10A Spectrum Analyzer.



Set the audio generator and the Type 105 for the desired modulation frequencies. Set Type 180A for  $\mu\text{sec}$ , 5 mc, 10 mc or 50 mc. The mixing ratio is varied by changing the amplitude of the outputs of two modulation generators



MECHANICAL PARTS LIST-067-0518-00

FIG. & INDEX NO.	TEKTRONIX PART NO.	SERIAL/MODEL EFF DISC	Q T Y	DESCRIPTION
1	366-0148-00		1	KNOB, charcoal--MODULATION 2 VARIABLE
	- - - - -		-	knob includes:
	213-0004-00		1	SCREW, set, 6-32 x 3/16 inch, HSS
2	- - - - -		-	RESISTOR, variable
	- - - - -		-	mounting hardware: (not included w/resistor)
3	210-0207-00		1	LUG, solder, 3/8 ID x 5/8 inch OD, SE
4	210-0013-00		1	LOCKWASHER, internal, 3/8 ID x 11/16 inch OD
5	210-0840-00		1	WASHER, flat, 0.390 ID x 9/16 inch OD
6	210-0413-00		1	NUT, hex., 3/8-32 x 1/2 inch
7	366-0148-00		1	KNOB, charcoal--RF VARIABLE
	- - - - -		-	knob includes:
	213-0004-00		1	SCREW, set, 6-32 x 3/16 inch, HSS
8	- - - - -		1	RESISTOR, variable
	- - - - -		-	mounting hardware: (not included w/resistor)
9	210-0013-00		1	LOCKWASHER, internal, 3/8 ID x 11/16 inch OD
10	210-0840-00		1	WASHER, flat, 0.390 ID x 9/16 inch OD
11	210-0413-00		1	NUT, hex., 3/8-32 x 1/2 inch
12	260-0451-00		1	SWITCH, slide--OFF-ON
	- - - - -		-	mounting hardware: (not included w/switch)
13	210-0004-00		2	LOCKWASHER, internal, #4
14	210-0406-00		2	NUT, hex., 4-40 x 3/16 inch
15	260-0447-00		1	SWITCH, slide--OUT-IN
	- - - - -		-	mounting hardware: (not included w/switch)
16	210-0004-00		2	LOCKWASHER, internal, #4
17	210-0406-00		2	NUT, hex., 4-40 x 3/16 inch
18	E407-0202-00		1	BRACKET, ceramic strip mounting
19	124-0158-00		1	STRIP, ceramic, 7/16 inch h, w/7 notches
	- - - - -		-	strip includes:
	355-0082-00		2	STUD, plastic
	- - - - -		-	mounting hardware: (not included w/strip)
	361-0007-00		2	SPACER, plastic, 1/16 inch long
20	131-0106-00		3	CONNECTOR, coaxial, 1 contact, BNC
	- - - - -		-	each connector includes:
	- - - - -		1	LOCKWASHER
	- - - - -		1	NUT

FIG. & INDEX NO.	TEKTRONIX PART NO.	SERIAL/MODEL EFF DISC	Q T Y	DESCRIPTION
21	131-0106-00		1	CONNECTOR, coaxial, 1 contact, BNC
	- - - - -		-	connector includes:
	- - - - -		1	LOCKWASHER
	- - - - -		1	NUT
	- - - - -		-	mounting hardware: (not included w/connector)
22	210-0255-00		1	LUG, solder, 3/8 inch ID
23	E333-0916-00		1	PANEL, front
	- - - - -		-	mounting hardware: (not included w/panel)
24	211-0071-00		4	SCREW, 4-40 x 3/8 inch, PHS
25	E200-0276-01		1	COVER, front
26	E380-0087-00		1	HOUSING, wrap-around
27	E200-0276-02		1	COVER, rear
28	384-0616-00		4	ROD, spacer
29	E333-0917-00		1	PANEL, rear
	- - - - -		-	mounting hardware: (not included w/panel)
30	211-0071-00		4	SCREW, 4-40 x 3/8 inch, PHS

ELECTRICAL PARTS LIST - 067-0518-00

Values are fixed unless marked Variable.

CKT. NO.	TEKTRONIX PART NO.	SERIAL/MODEL NO. EFF DISC	DESCRIPTION
<b>Capacitors</b>			
Tolerance $\pm 20\%$ unless otherwise indicated.			
C2	281-0552-00	25 pF	Cer 500 V 10%
C3	281-0523-00	100 pF	Cer 350 V
C8	281-0518-00	47 pF	Cer 500 V
C10	281-0523-00	100 pF	Cer 350 V
<b>Diodes</b>			
D5	152-0169-00	Tunnel	1N3712 1 mA
D6	152-0129-00	Germanium	1N87A
<b>Connectors</b>			
J1	131-0106-00	Coaxial, 1 contact, female	
J3	131-0106-00	Coaxial, 1 contact, female	
J4	131-0106-00	Coaxial, 1 contact, female	
J10	131-0106-00	Coaxial, 1 contact, female	
<b>Inductors</b>			
L1	*108-0065-00	700 $\mu$ H	
L2	*108-0065-00	700 $\mu$ H	
L4	*108-0065-00	700 $\mu$ H	

CKT. NO.	TEKTRONIX PART NO.	SERIAL/MODEL NO. EFF	DISC	DESCRIPTION
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## Inductors (Cont)

L7	*108-0112-00			0.3 $\mu$ H
L8	*108-0220-00			0.15 $\mu$ H

## Resistors

Resistors are fixed, composition,  $\pm 10\%$  unless otherwise indicated.

R1	316-0152-00			1.5 k $\Omega$	1/4 W
R4	311-0365-00			1 k $\Omega$ , Var	
R9	316-0223-00			22 k $\Omega$	1/4 W
R10	311-0147-00			10 k $\Omega$ , Var	

## Switches

## Unwired

SW4	260-0451-00			Slide, SPST	
SW8	260-0447-00			Slide, DPDT	

**SCHEMATIC**

