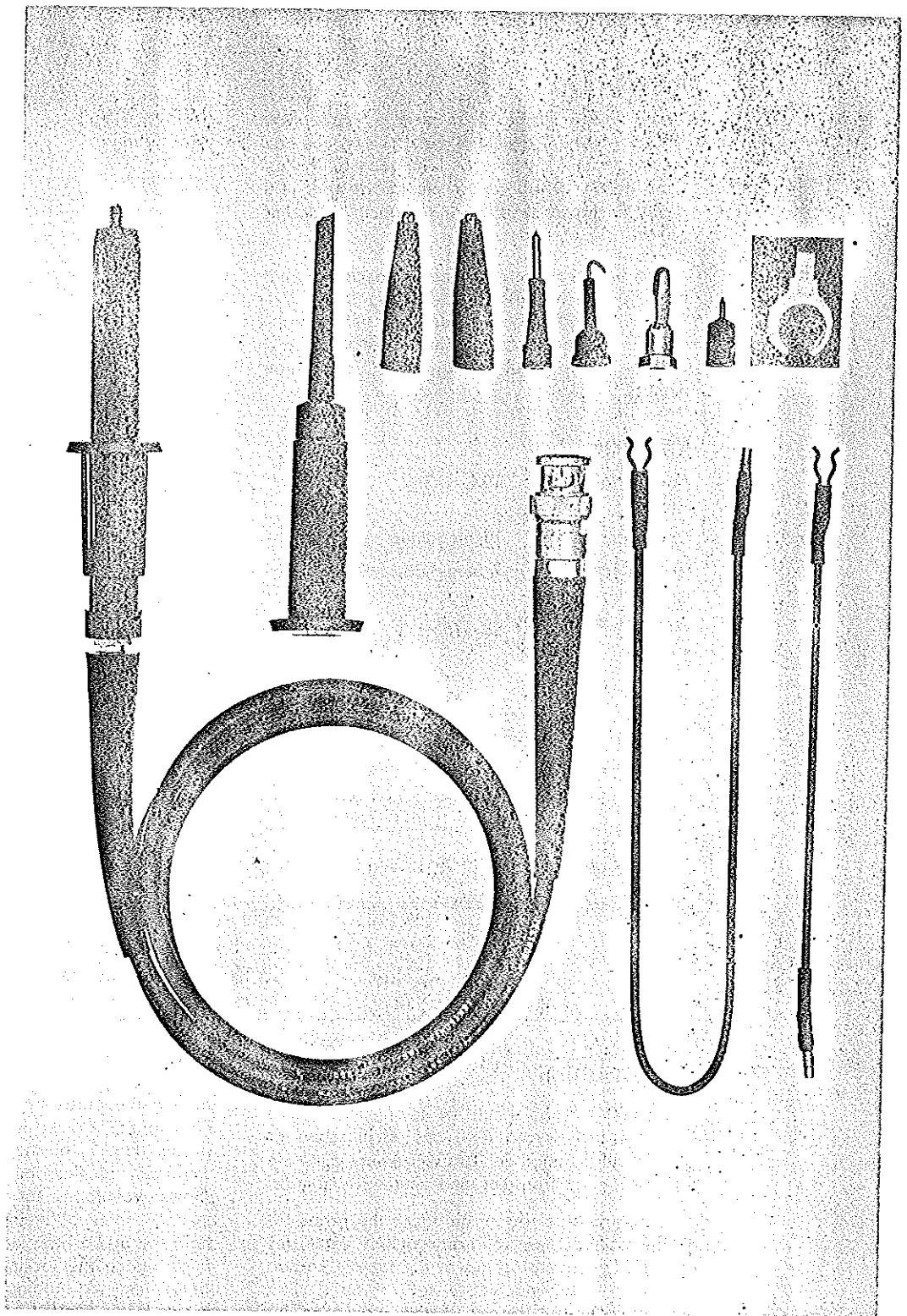


P37.3

Instruction Manual



**P6006
PROBE**



P6006

P6006 Probe

®

Derating Curves

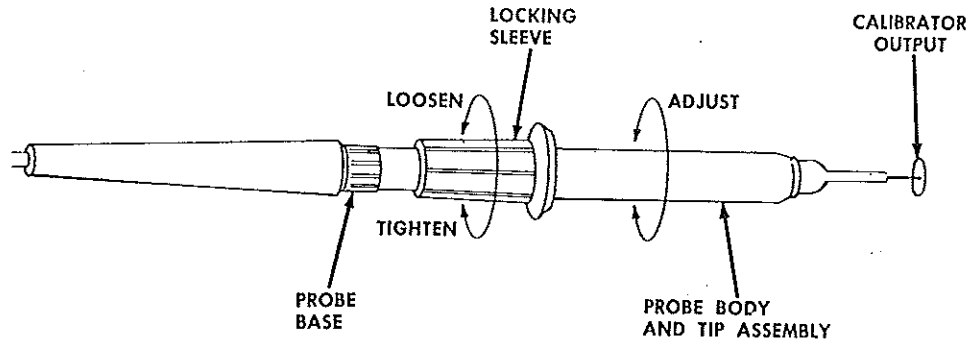
The derating curves show the maximum continuous-wave voltages that can be applied to the P6006 Probe at higher frequencies. To observe pulses with a given duty cycle and repetition rate, use the following information to determine the maximum peak voltage of the probe.

Maximum applied voltage at a particular frequency, E:

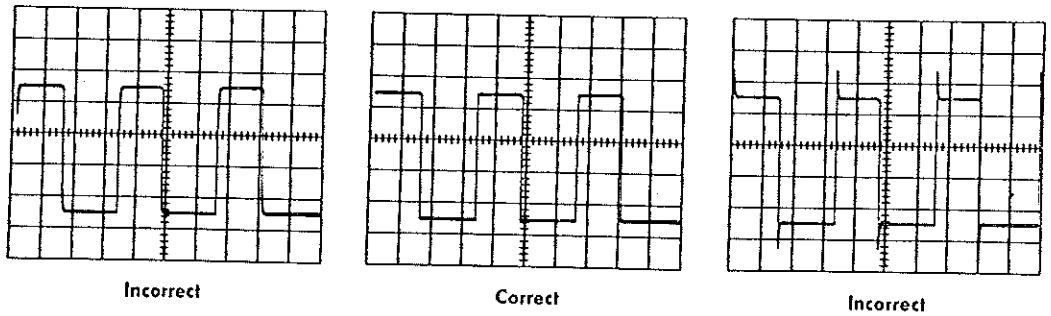
$$E = \frac{\text{Voltage from curve at CW frequency}}{\sqrt{\text{Duty Factor}}}$$

where: Duty Factor = $\frac{\text{pulse duration}}{\text{pulse period}}$

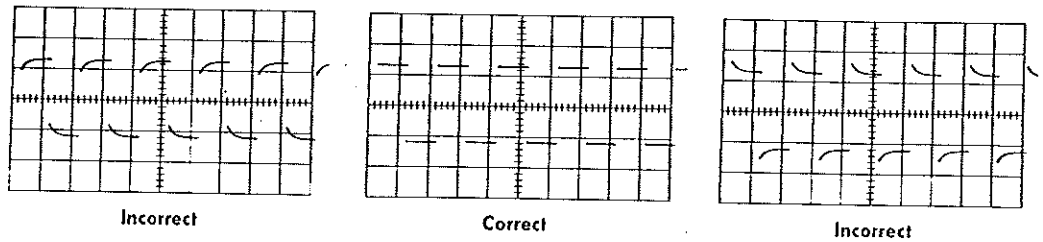
For pulse durations longer than 1 second, consider the signal as dc.



(a) Probe adjustments



(b) Waveforms from line-frequency oscilloscope calibrator



(c) Waveforms from 1-kc oscilloscope calibrator

Fig. 1. Probe compensation.

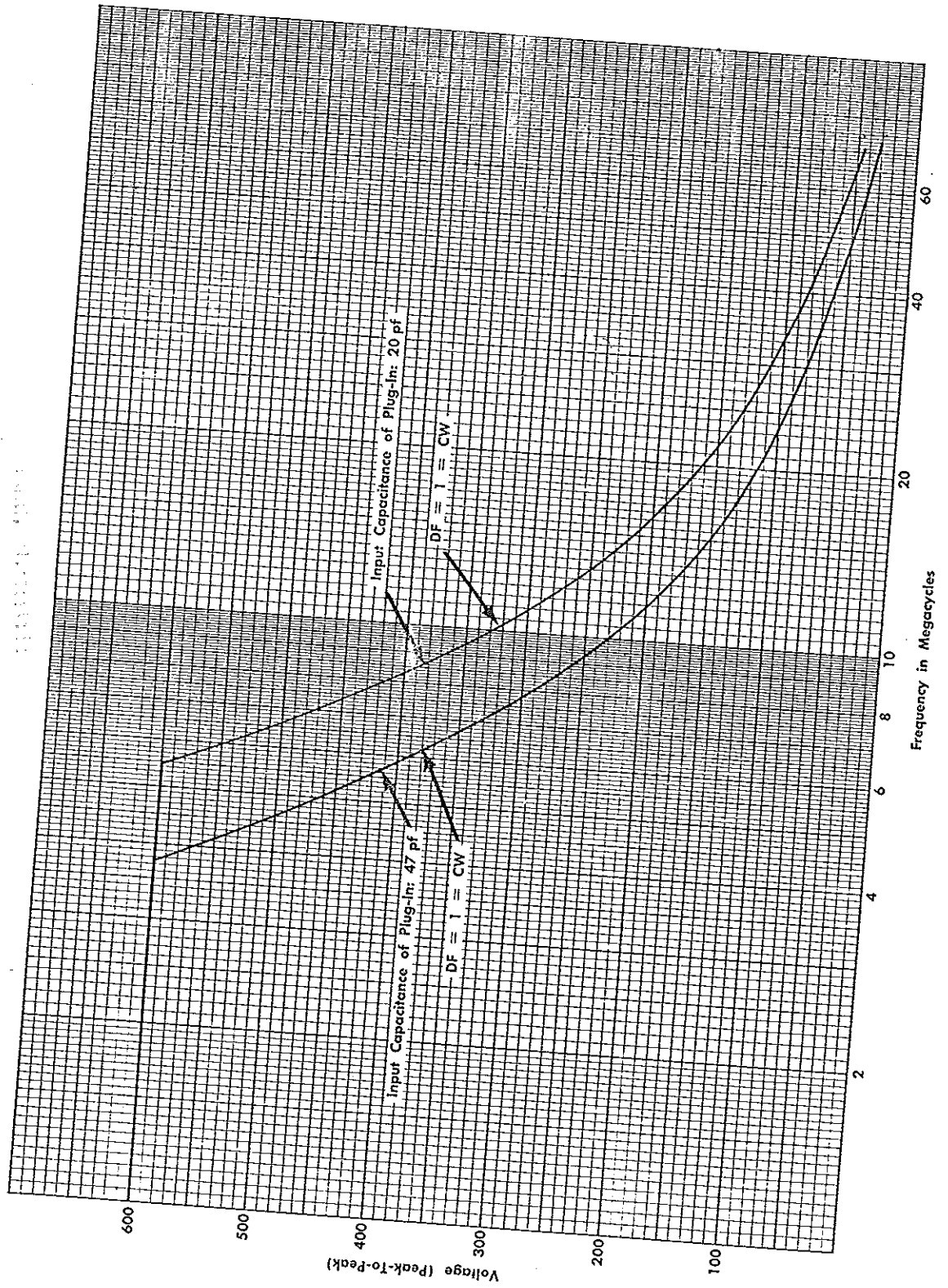


Fig. 3. P6006 derating curves (6-ft csh/a)

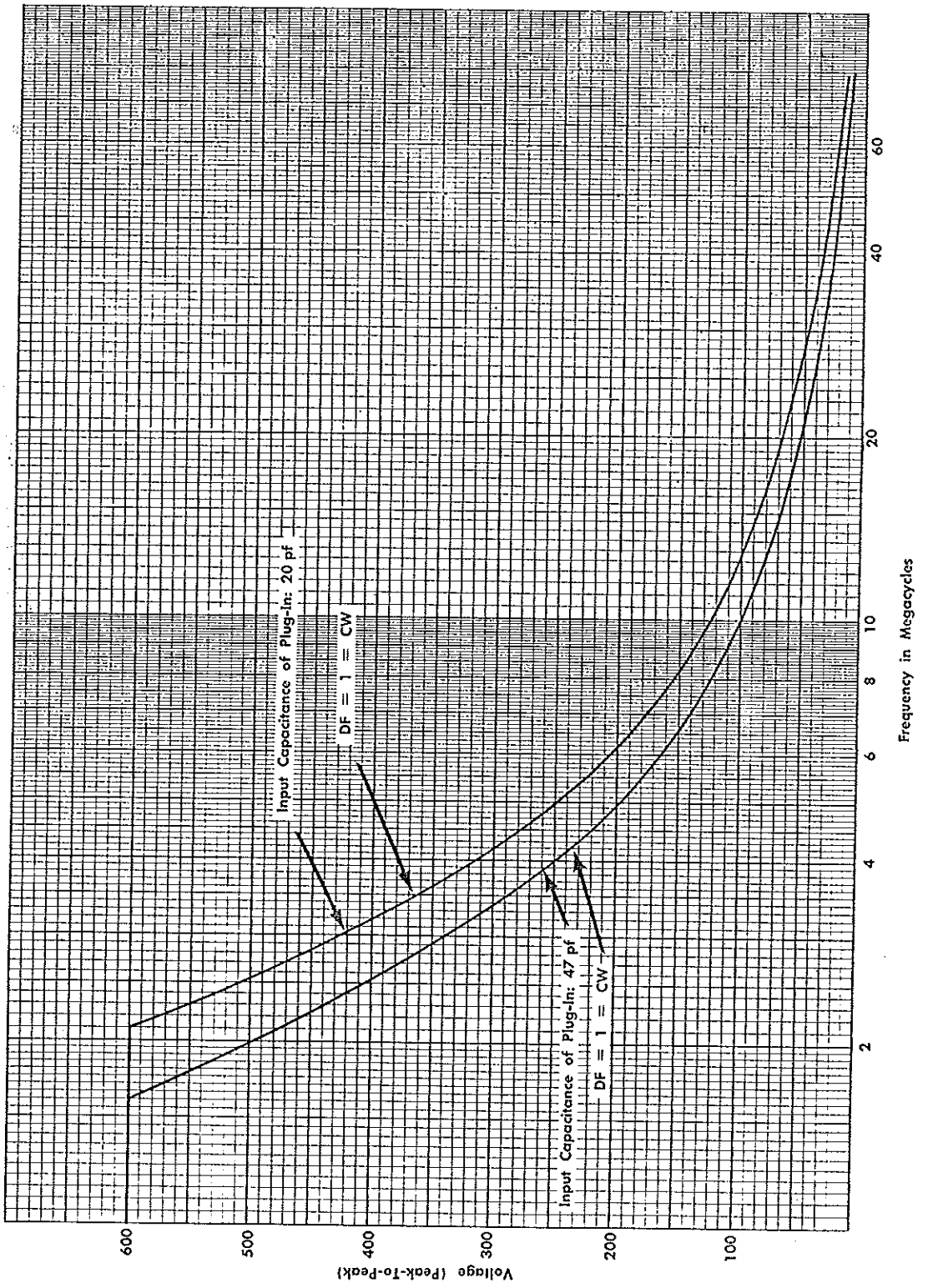


Fig. 5. P6006 derating curves (12-ft cable).

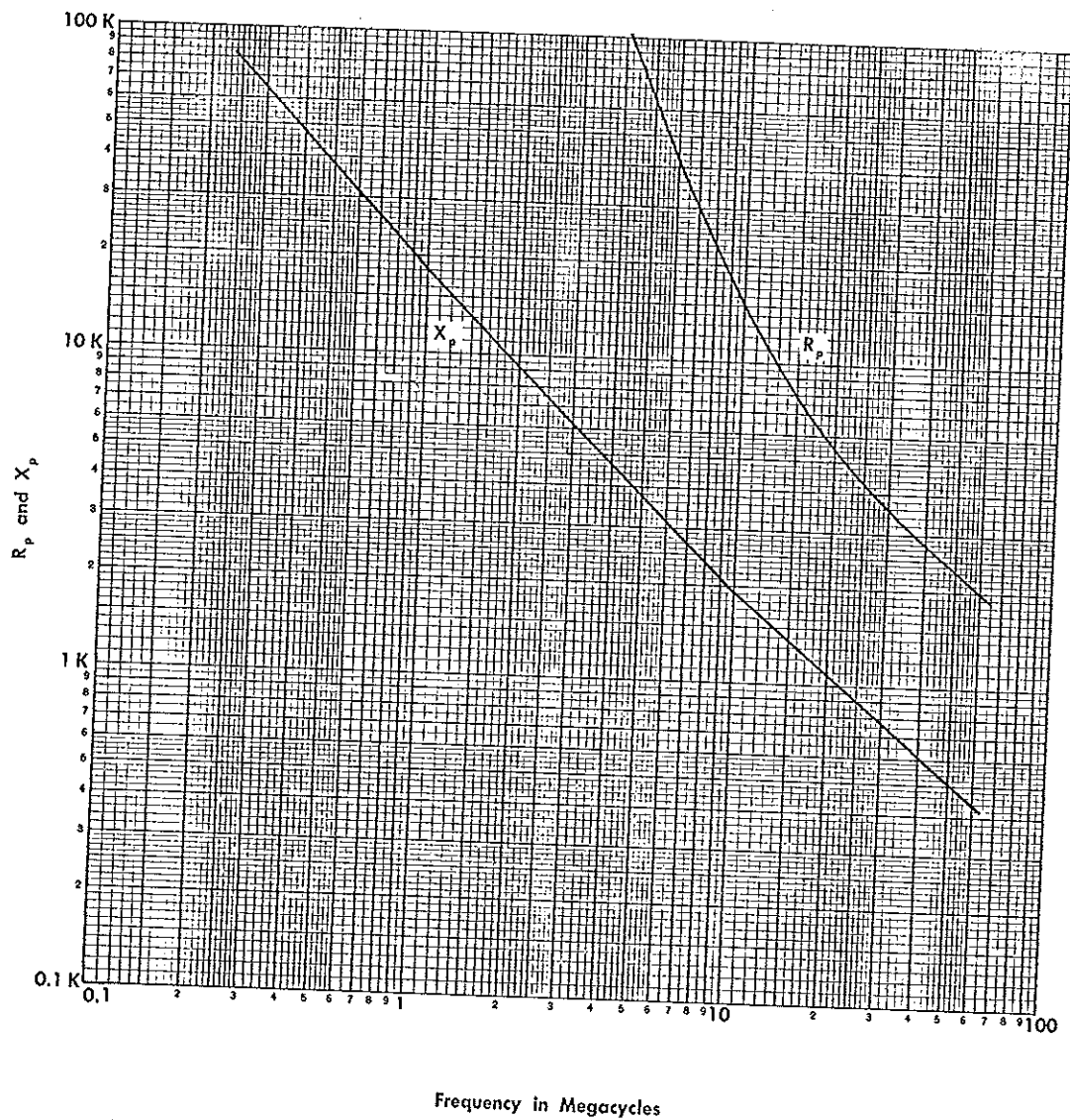


Fig. 7. P6006 input R_p and X_p vs frequency curves (6-ft cable).

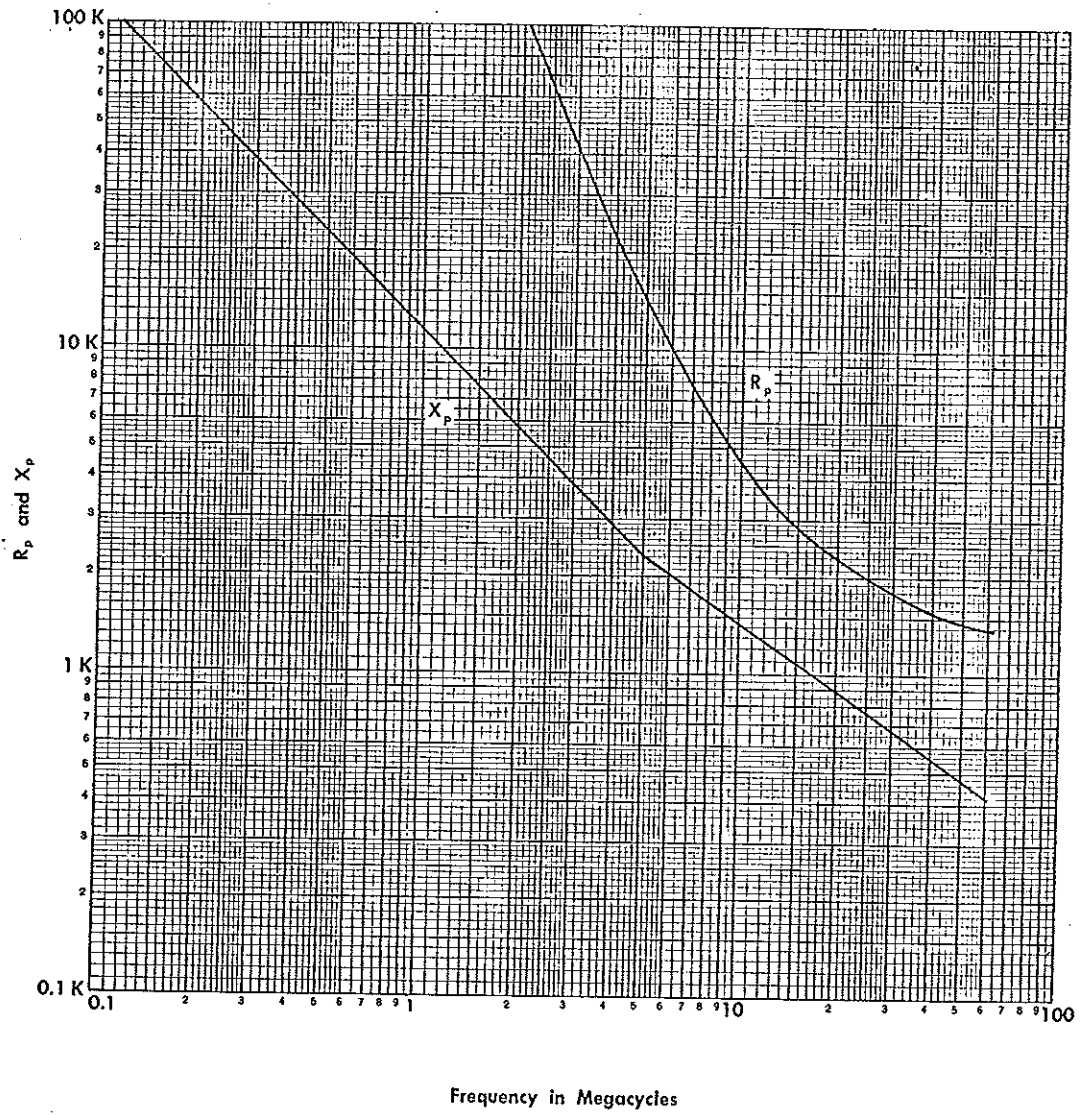
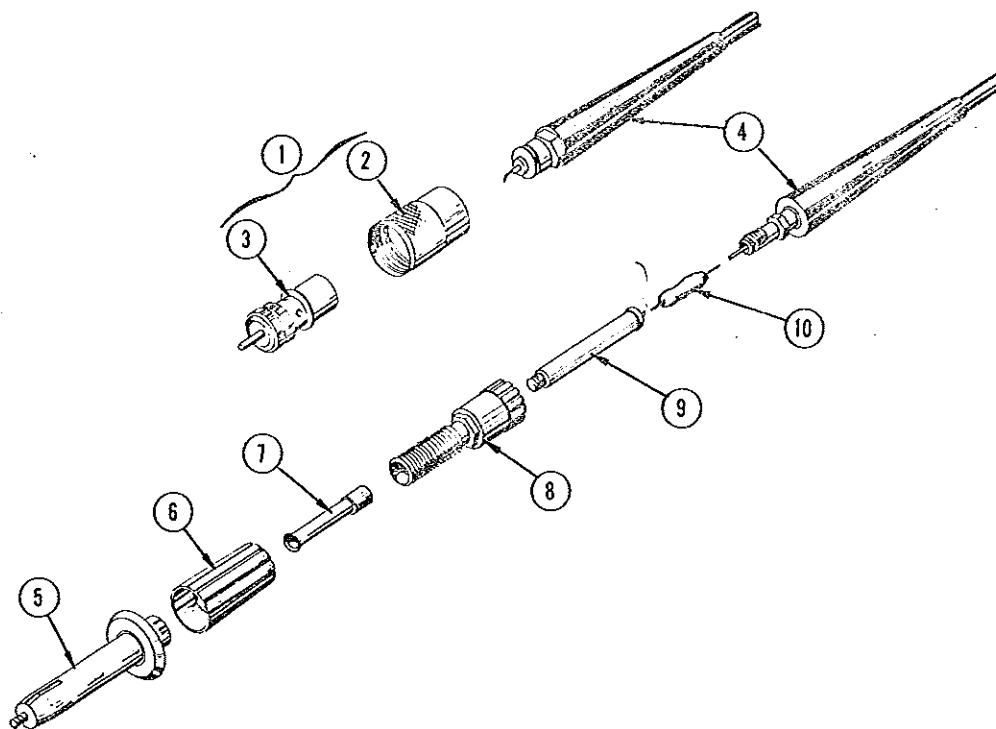


Fig. 9. P6006 input R_p and X_p vs frequency curves (12-ft cable).

REPLACEABLE PARTS



NO. REF.	TEKTRONIX PART NO.	SERIAL/MODEL NO.		Q					DESCRIPTION	
		EFF.	DISC.	Y.	1	2	3	4		5
	010-0126-00				1					PROBE, P6006 (3.5 ft, UHF)
				-					probe includes:
1	131-0058-00				1					CONNECTOR, coaxial
				-					connector includes:
2	200-0026-00				1					COVER, connector
3	131-0196-00				1					CONNECTOR, male
4	175-0261-00				1					CABLE ASSEMBLY
5	204-0143-00				1					BODY ASSEMBLY
				-					body includes:
				1					RESISTOR (R1)
6	164-0285-00				1					SLEEVE, locking
7	164-0282-00				1					SLEEVE
8	358-0194-00				1					BUSHING, base
9	358-0192-00				1					BUSHING, inner base
10	301-0361-00				1					RESISTOR, 360 Ω, 1/2 W, 5% (R2)