

Instruction Manual

Tektronix

P6009

120 MHz 100X Probe

070-0401-02

Instrument Serial Numbers

Each instrument manufactured by Tektronix has a serial number on a panel insert or tag, or stamped on the chassis. The first letter in the serial number designates the country of manufacture. The last five digits of the serial number are assigned sequentially and are unique to each instrument. Those manufactured in the United States have six unique digits. The country of manufacture is identified as follows:

B010000	Tektronix, Inc., Beaverton, Oregon, USA
E200000	Tektronix United Kingdom, Ltd., London
J300000	Sony/Tektronix, Japan
H700000	Tektronix Holland, NV, Heerenveen, The Netherlands

Instruments manufactured for Tektronix by external vendors outside the United States are assigned a two digit alpha code to identify the country of manufacture (e.g., JP for Japan, HK for Hong Kong, IL for Israel, etc.).

Tektronix, Inc., P.O. Box 500, Beaverton, OR 97077

Printed in U.S.A.

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WARRANTY

Tektronix warrants that this product will be free from defects in materials and workmanship for a period of one (1) year from the date of shipment. If any such product proves defective during this warranty period, Tektronix, at its option, either will repair the defective product without charge for parts and labor, or will provide a replacement in exchange for the defective product.

In order to obtain service under this warranty, Customer must notify Tektronix of the defect before the expiration of the warranty period and make suitable arrangements for the performance of service. Customer shall be responsible for packaging and shipping the defective product to the service center designated by Tektronix, with shipping charges prepaid. Tektronix shall pay for the return of the product to Customer if the shipment is to a location within the country in which the Tektronix service center is located. Customer shall be responsible for paying all shipping charges, duties, taxes, and any other charges for products returned to any other locations.

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care. Tektronix shall not be obligated to furnish service under this warranty a) to repair damage resulting from attempts by personnel other than Tektronix representatives to install, repair or service the product; b) to repair damage resulting from improper use or connection to incompatible equipment; or c) to service a product that has been modified or integrated with other products when the effect of such modification or integration increases the time or difficulty of servicing the product.

THIS WARRANTY IS GIVEN BY TEKTRONIX WITH RESPECT TO THIS PRODUCT IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED. TEKTRONIX AND ITS VENDORS DISCLAIM ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TEKTRONIX' RESPONSIBILITY TO REPAIR OR REPLACE DEFECTIVE PRODUCTS IS THE SOLE AND EXCLUSIVE REMEDY PROVIDED TO THE CUSTOMER FOR BREACH OF THIS WARRANTY. TEKTRONIX AND ITS VENDORS WILL NOT BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IRRESPECTIVE OF WHETHER TEKTRONIX OR THE VENDOR HAS ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

P6009 PROBE

CHARACTERISTICS

General Information

The P6009 is a low-input-capacitance, high-voltage passive probe with a signal attenuation of 100X. It is designed for use with wide-band, real-time oscilloscopes, and may be used with any plug-in unit or oscilloscope having a 1-megohm input resistance and an input capacitance of 15 to 47 pF.

The probe is available with a standard BNC output connector or with a special BNC connector for readout oscilloscopes. The readout version is recommended for use only with a TEKTRONIX 7000-Series Mainframe (with readout) or the TEKTRONIX 485 Oscilloscope. When used with these instruments, the special connector on the probe causes the oscilloscope readout to switch, automatically correcting for attenuation of the probe.

The P6009 consists of a probe-body assembly, a 9-foot cable, and a compensating-box assembly with a BNC connector. The compensating box houses adjustments for optimizing the high-frequency response of the probe.

SPECIFICATIONS

Electrical

Attenuation: 100X within 3% (including 1 M Ω , \pm 2% amplifier input).

Input Resistance: 10 M Ω within 2% (includes input R of amplifier). See X_p, R_p vs. Frequency curves.

Input Capacitance: Approximately 2.5 pF.

Compensation Range: 8 pF or less to at least 47 pF.

Bandwidth (–3 dB): At least 120 MHz (with a 7A16 Amplifier and a 7704 Mainframe).

Maximum Input Voltage: 1.5 kV (DC or RMS), derated with frequency. See derating curve.

Physical

Weight: Approximately 8 oz., net.

Dimensions:

PROBE BODY: \approx 4 inches, length; \approx 0.8 inch, maximum outside diameter.

CABLE: \approx 9 feet between strain relief bases.

COMPENSATION BOX: \approx 2.9 inches, length; \approx 1.2 inches, maximum outside diameter.

Environmental

Probe will operate within specifications over the following ranges:

Temperature: –15°C to +75°C.

Altitude: To 15,000 feet.

OPERATING INSTRUCTIONS

Introduction

The P6009 Probe provides a means of connecting an oscilloscope to a test point with minimum loading and without need for impedance matching. Tip accessories supplied with the P6009 Probe Package adapt the probe tip for a variety of signal connections.

Probe Compensation

Input capacitance of amplifiers varies from unit to unit (even of the same type). This variation makes it necessary to compensate the probe whenever it is transferred from one instrument to another, or from one channel to another of multi-trace units. Improper compensation will produce waveshape distortion and/or amplitude measurement error of the display. See Compensation Procedure for method of adjustment.

Circuit Loading

Any high-impedance circuit will be loaded to some extent by connecting a probe, even though the DC input

P6009 Probe

resistance of the probe is 10 MΩ. At relatively low frequencies, the input capacitance of a probe causes greater loading than the DC input resistance. For example, the input impedance of the P6009 drops to approximately 50 kΩ at 1 MHz.

Circuit loading may cause signal distortion or amplitude measurement error. To minimize this loading effect, select the lowest impedance points to check waveforms.

Fig. 1 shows R_p and X_p as a function of frequency. These curves should be referred to when making measurements of AC signals, especially in high-impedance circuits.

Maximum Input Voltage

The maximum safe input voltage for the P6009 Probe is 1.5 kV (DC or RMS) at low frequencies. As signal frequency increases, input capacitive reactance decreases, reducing the maximum safe input voltage. Fig. 2 shows a typical maximum input voltage vs. frequency curve.

Signal Connections

The probe may be connected to the signal source by means of the tip adapters and ground leads supplied. Generally, select the adapter and lead that is best suited physically for the particular type of test point. When measuring high-frequency signals, use the shortest ground lead possible. Long ground leads tend to cause ringing due to the inductance of the lead. Similarly, extensions to the

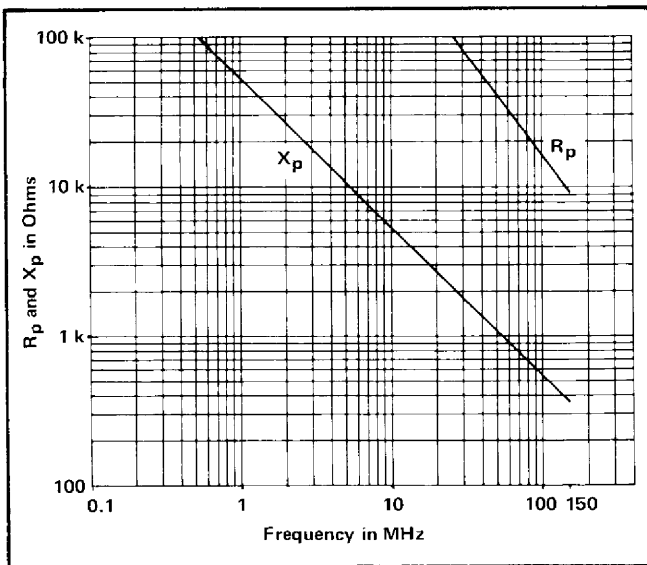
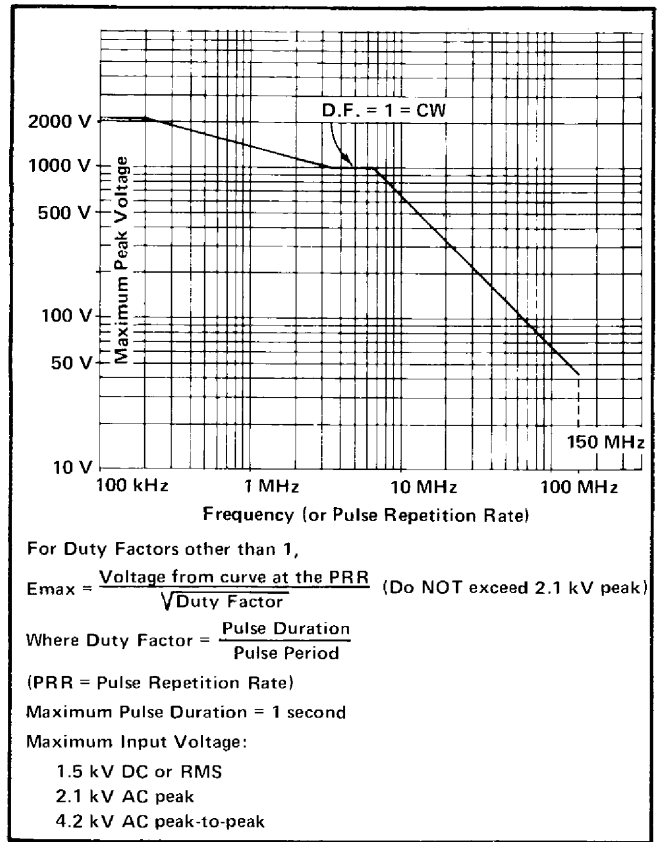


Fig. 1. P6009 Probe, typical X_p and R_p versus frequency curves.



For Duty Factors other than 1,

$$E_{max} = \frac{\text{Voltage from curve at the PRR}}{\sqrt{\text{Duty Factor}}} \text{ (Do NOT exceed 2.1 kV peak)}$$
 Where Duty Factor = $\frac{\text{Pulse Duration}}{\text{Pulse Period}}$
 (PRR = Pulse Repetition Rate)
 Maximum Pulse Duration = 1 second
 Maximum Input Voltage:
 1.5 kV DC or RMS
 2.1 kV AC peak
 4.2 kV AC peak-to-peak

Fig. 2. P6009 Probe, maximum input voltage versus frequency.

probe tip must be held to a minimum for high-frequency measurements.

Always provide some form of ground connection between the circuit under test and the probe ground to prevent hum pickup, ringing, and other spurious signals. The 5-inch and 12-inch ground leads clip to the bushing at the rear of the probe body. The 3-inch ground lead is used with bayonet ground assembly. See Fig. 3.

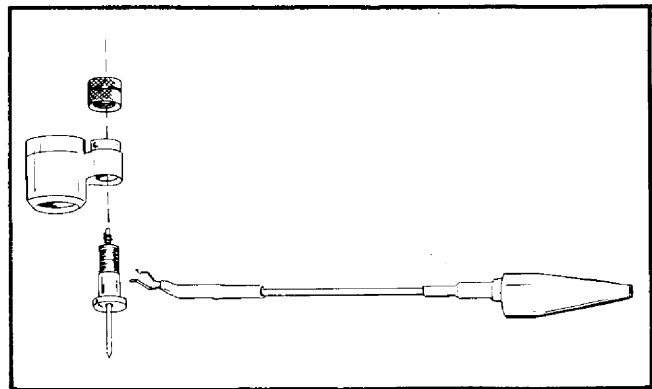


Fig. 3. Connecting 3-inch ground lead to bayonet ground assembly.

COMPENSATION PROCEDURE

Introduction

The P6009 Probe is inherently stable and does not require frequent re-compensation once it has been adjusted to the oscilloscope that it is being used with. However, if the probe is transferred from one instrument or input channel to another, the low-frequency compensation will usually require readjustment. If the probe is to be used in observing or measuring sinewaves or pulses with frequency components above 3 or 4 MHz, high-frequency compensation should also be checked and adjusted as necessary.

Since the P6009 may be used with a broad variety of oscilloscopes and plug-in units, the following procedure is stated in general terms with regard to settings of test instrument controls, etc.

Equipment and Test Fixtures Required

All items on the following list (or equivalents) are required to perform the complete compensation procedure.

If only the low-frequency compensation is to be adjusted, just the test oscilloscope is required. For convenience in connecting the probe tip, the probe tip-to-BNC adapter (item no. 8) is also recommended.

1. Test oscilloscope (and plug-in unit, if appropriate) of the same type that the P6009 will be used with.

2. Pulse or Squarewave Generator. Risetime should be less than any signal to be measured with the oscilloscope/P6009. TEKTRONIX Type 106 Squarewave Generator or Type 109 Pulse Generator recommended.

3. Cable, 5 ns, 50 Ω coaxial Type RG58C/U with GR connectors; TEKTRONIX Part No. 017-0512-00.

4. Attenuator, 10X, 50 Ω with GR connectors; TEKTRONIX Part No. 017-0078-00. (Two required.)

5. Termination Adapter, 50 Ω thru-line, GR-to-BNC male; TEKTRONIX Part No. 017-0083-00.

6. Adapter, GR-to-BNC female; TEKTRONIX Part No. 017-0063-00.

7. Termination, 50 Ω feedthrough with BNC connectors; TEKTRONIX Part No. 011-0049-01.

8. Adapter, Probe tip-to-BNC; TEKTRONIX Part No. 013-0054-00.

9. Small non-conducting screwdriver.

Preliminary Procedure

a. Install the P6009 Probe on the oscilloscope input connector.

b. Turn the test oscilloscope and associated test equipment power on and allow enough warmup time for the equipment to stabilize.

1. Adjust Low-Frequency Compensation

a. Connect the probe tip to the test oscilloscope calibrator output, using the Probe tip-to-BNC Adapter.

b. Set the test oscilloscope Volts/Div fully clockwise. The calibrator amplitude should be set to provide a display amplitude of several divisions. Set the Time/Div and triggering controls to display several cycles of the square-wave signal.

c. Hold the probe body and tip assembly and loosen the locking sleeve several turns (Fig. 4).

d. Hold the base bushing and turn the probe body and tip assembly to obtain a flat-topped squarewave display, free of overshoot or rounding at the leading corner (see Fig. 4).

e. Hold the probe body and tip assembly and carefully tighten the locking sleeve while observing the display.

If the probe changes adjustment while tightening the locking sleeve, continue turning the sleeve until it is just tight. The final adjustment may be accomplished by

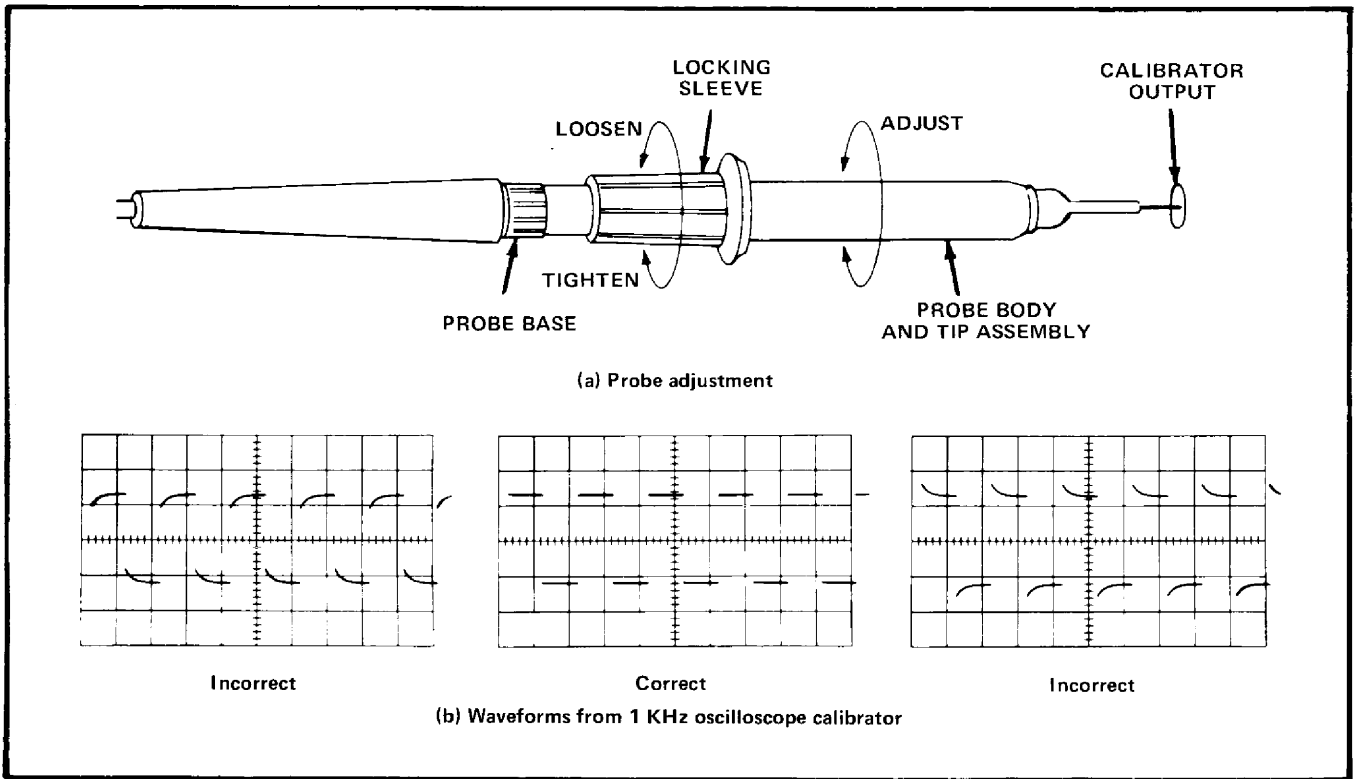


Fig. 4. Probe L.F. Compensation

holding the probe body and the locking sleeve and then turning the base bushing slightly to obtain the correct display.

2. Check/Adjust High-Frequency Compensation

a. Step 1 (Low-Frequency Compensation) should be performed before starting this step. Then, check the pulse response of the test oscilloscope. Use a 10X attenuator (item no. 4) at each end of the cable which connects the pulse generator to the oscilloscope input. This will provide the same attenuation as the probe (100X), resulting in a similar display amplitude. A termination adapter (item no. 5) should be used at the oscilloscope input.

Set the test oscilloscope Time/Div to 50 ns and note the pulse shape and aberrations. Change the Time/Div to 200 ns and note the level of the first few millimeters of the pulse with respect to the rest of the pulse.

b. Disconnect the cable, attenuators, and termination adapter from the test oscilloscope and the pulse generator. Install the P6009 Probe on the oscilloscope input connector.

c. Connect the probe tip to the pulse generator output, using Fig. 5 as a guide.

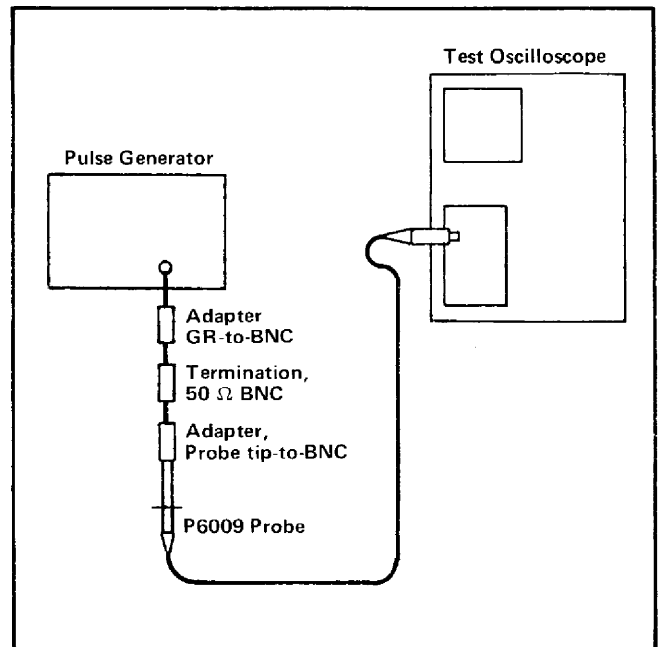


Fig. 5. Equipment connections for checking pulse response of the P6009 Probe.

d. Check the pulse response of the probe at 50 ns/Div and 200 ns/Div, comparing with the pulse shape noted in Part a. Aberrations should not typically exceed $\pm 5\%$ of the

pulse amplitude (from the reference response noted in Part a).

If aberrations are excessive, continue with the following steps.

e. Loosen the Locking Nut and slide the Compensating Box Cover back onto the cable.

f. Connect the probe tip to the test oscilloscope calibrator output, using the Probe tip-to-BNC Adapter. Set the calibrator to provide a display amplitude of several divisions. Set the Time/Div to display several cycles of the squarewave signal.

g. Set C114 (see Fig. 6) for maximum rolloff on the leading corners of the squarewave.

h. Adjust the probe low-frequency compensation (per Step 1) for a square leading corner on the display.

i. Disconnect the probe from the calibrator output and connect as shown in Fig. 5. Set the oscilloscope Time/Div to 50 ns.

j. Adjust R110, R114, and R116 for the best overall flat response. Check for proper level with Time/Div at 200 ns, readjusting as necessary. Fig. 6 shows the location of adjustments in the compensating box.

k. Replace the cover on the compensating box and tighten the locking nut.

l. Readjust the probe low-frequency compensation (using the calibrator squarewave signal).

This completes the compensation procedure for the P6009 Probe.

MAINTENANCE

General Information

The P6009 Probe is designed to withstand normal operation and handling and should give many hours of continuous use without failure. However, if the probe fails or suffers physical damage, replacement parts are available. See mechanical and electrical parts lists at the rear of this manual.

Probe Body Assembly

The Probe Body Assembly includes the five components shown in the exploded view (rear of this manual) identified as Ref Nos. 12 through 16. If the 9.9 M Ω resistor (R100) fails, replace the Body and Tip Assembly, Ref. No. 12. The resistor is factory-installed in this assembly.

Compensating-Box Assembly

To obtain access to components within the compensating-box assembly, turn the locking nut (located at the rear of the box) counterclockwise until it is free. Then, slide the box cover and the locking nut back on the cable.

All electrical components in the compensating box are mounted on the circuit board. The complete circuit board with electrical components may be ordered under the indicated part number, or the individual electrical components may be ordered, using part numbers from the electrical parts list.

The output BNC connector is shown in two versions. One is the standard BNC connector, and the other is the special BNC for readout. The readout resistor (R118) is located within the connector.

Cable Assembly Replacement

If the coaxial cable between the probe body and the compensating box should fail, the Cable Assembly is available, complete with fittings and cable reliefs.

Replace the cable assembly as follows:

1. Remove the Compensating Box Cover by unscrewing the Locking Nut that holds it in place (see Fig. 6).
2. Unsolder the bare wire from the center terminal of the Cable Assembly (next to R114).
3. Use thin 7/16-inch and 9/16-inch open-end wrenches to remove the Cable Assembly from the Compensating Box.
4. Turn the Locking Sleeve to unlock the Probe Body and Tip Assembly and remove both by unscrewing from the end of the Base Bushing Assembly (see exploded view in rear of manual).
5. Unscrew the Tube Sleeve from the plastic Inner Base Bushing.

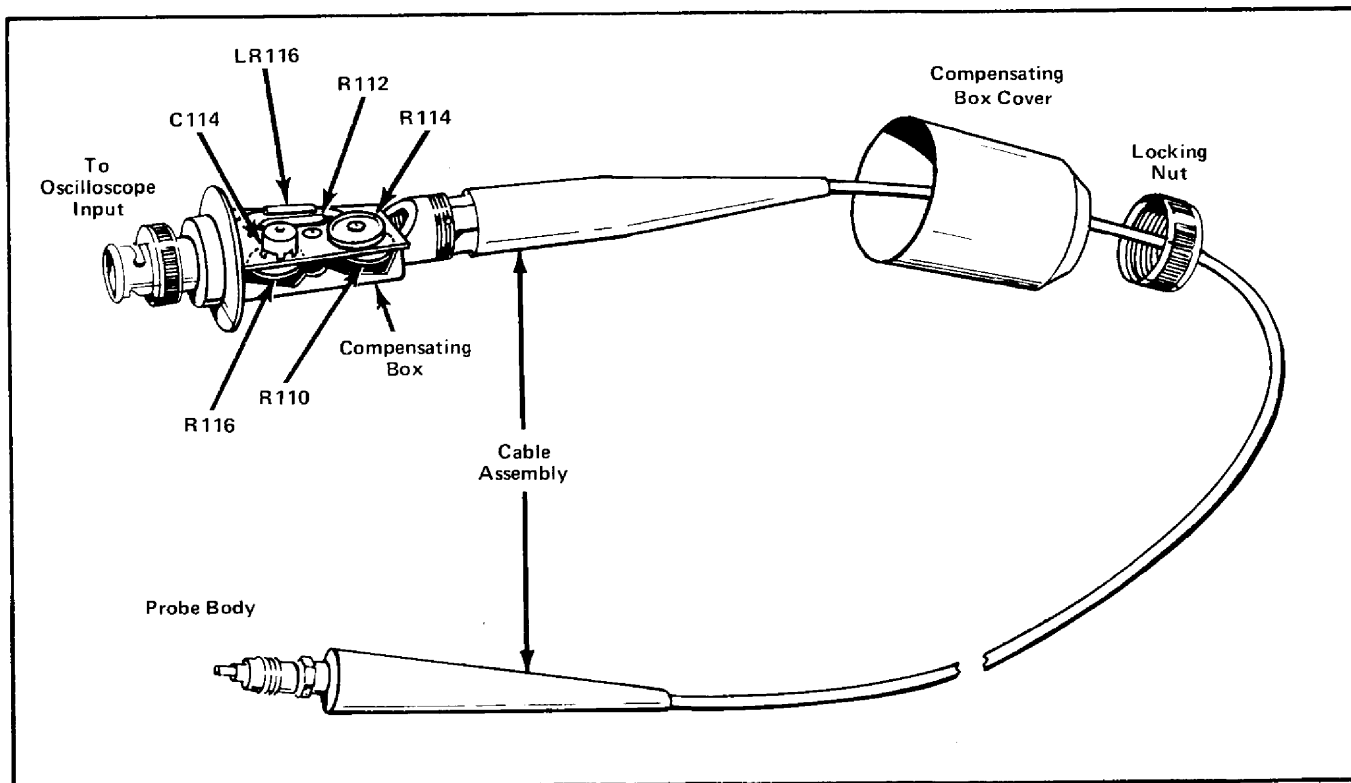


Fig. 6. P6009 Probe, H.F. compensating assembly.

6. Use thin 11/32-inch and 3/8-inch open-end wrenches to remove the Base Bushing from the end of the Cable Assembly.

7. Use a scribe to lift the wire from the thread groove of the Inner Base Bushing and remove the bushing.

8. Unsolder the bare wire from the center terminal of the Cable Assembly.

9. To install the new Cable Assembly, perform steps 1 through 8 in reverse order.

REPLACEABLE PARTS

PARTS ORDERING INFORMATION

Replacement parts are available from or through your local Tektronix, Inc. Field Office or representative.

Changes to Tektronix instruments are sometimes made to accommodate improved components as they become available, and to give you the benefit of the latest circuit improvements developed in our engineering department. It is therefore important, when ordering parts, to include the following information in your order: Part number, instrument type or number, serial number, and modification number if applicable.

If a part you have ordered has been replaced with a new or improved part, your local Tektronix, Inc. Field Office or representative will contact you concerning any change in part number.

Change information, if any, is located at the rear of this manual.

ITEM NAME

In the Parts List, an Item Name is separated from the description by a colon (:). Because of space limitations, an Item Name may sometimes appear as incomplete. For further Item Name identification, the U.S. Federal Cataloging Handbook H6-1 can be utilized where possible.

FIGURE AND INDEX NUMBERS

Items in this section are referenced by figure and index numbers to the illustrations.

INDENTATION SYSTEM

This mechanical parts list is indented to indicate item relationships. Following is an example of the indentation system used in the description column.

```

1 2 3 4 5           Name & Description
Assembly and/or Component
Attaching parts for Assembly and/or Component
    ....END ATTACHING PARTS....
Detail Part of Assembly and/or Component
Attaching parts for Detail Part
    ....END ATTACHING PARTS....
Parts of Detail Part
Attaching parts for Parts of Detail Part
    ....END ATTACHING PARTS....

```

Attaching Parts always appear in the same indentation as the item it mounts, while the detail parts are indented to the right. Indented items are part of, and included with, the next higher indentation.

Attaching parts must be purchased separately, unless otherwise specified.

ABBREVIATIONS

#	INCH	ELCTRN	ELECTRON	IN	INCH	SE	SINGLE END
ACTR	NUMBER SIZE	ELEC	ELECTRICAL	INCAND	INCANDESCENT	SECT	SECTION
ADPTR	ACTUATOR	ELCTLT	ELECTROLYTIC	INSUL	INSULATOR	SEMICON	SEMICONDUCTOR
ALIGN	ADAPTER	ELEM	ELEMENT	INTL	INTERNAL	SHLD	SHIELD
AL	ALIGNMENT	EPL	ELECTRICAL PARTS LIST	LPHLDR	LAMPHOLDER	SHLDR	SHOULDERED
ASSEM	ALUMINUM	EQPT	EQUIPMENT	MACH	MACHINE	SKT	SOCKET
ASSY	ASSEMBLED	EXT	EXTERNAL	MECH	MECHANICAL	SL	SLIDE
ATTEN	ASSEMBLY	FIL	FILLISTER HEAD	MTG	MOUNTING	SLFLKG	SELF-LOCKING
AWG	ATTENUATOR	FLEX	FLEXIBLE	NIP	NIPPLE	SLVG	SLEEVING
BD	AMERICAN WIRE GAGE	FLH	FLAT HEAD	NON WIRE	NOT WIRE WOUND	SPR	SPRING
BRKT	BOARD	FLTR	FILTER	OBD	ORDER BY DESCRIPTION	SO	SQUARE
BRS	BRACKET	FR	FRAME or FRONT	OD	OUTSIDE DIAMETER	SST	STAINLESS STEEL
BRZ	BRASS	FSTNR	FASTENER	OVH	OVAL HEAD	STL	STEEL
BSHG	BRONZE	FT	FOOT	PH BRZ	PHOSPHOR BRONZE	SW	SWITCH
CAB	BUSHING	FXD	FIXED	PL	PLAIN or PLATE	T	TUBE
CAP	CABINET	GSKT	GASKET	PLSTC	PLASTIC	TERM	TERMINAL
CER	CAPACITOR	HDL	HANDLE	PN	PART NUMBER	THD	THREAD
CHAS	CERAMIC	HEX	HEXAGON	PNH	PAN HEAD	THK	THICK
CKT	CHASSIS	HEX HD	HEXAGONAL HEAD	PWR	POWER	TNSN	TENSION
COMP	CIRCUIT	HEX SOC	HEXAGONAL SOCKET	RCPT	RECEPTACLE	TPG	TAPPING
CONN	COMPOSITION	HLCPS	HELICAL COMPRESSION	RES	RESISTOR	TRH	TRUSS HEAD
COV	CONNECTOR	HLEXT	HELICAL EXTENSION	RGD	RIGID	V	VOLTAGE
CPLG	COVER	HV	HIGH VOLTAGE	RLF	RELIEF	VAR	VARIABLE
CRT	COUPLING	IC	INTEGRATED CIRCUIT	RTNR	RETAINER	W/	WITH
DEG	CATHODE RAY TUBE	ID	INSIDE DIAMETER	SCH	SOCKET HEAD	WSHR	WASHER
DWR	DEGREE	IDENT	IDENTIFICATION	SCOPE	OSCILLOSCOPE	XFMR	TRANSFORMER
	DRAWER	IMPLR	IMPELLER	SCR	SCREW	XSTR	TRANSISTOR

CROSS INDEX - MFR. CODE NUMBER TO MANUFACTURER

Mfr. Code	Manufacturer	Address	City, State, Zip Code
02660	AMPHENOL CORP COMMERCIAL AND INDUSTRIAL OPNS	4300 COMMERCE CT	LISLE IL 60532
24931	SPECIALTY CONNECTOR CO INC	2100 EARLYWOOD DR PO BOX 547	FRANKLIN IN 46131
34736	CONTINENTAL SWISS PRECISION PRODUCTS INC		SOUTH HACKENSACK NJ
73743	FISCHER SPECIAL MFG CO	111 INDUSTRIAL RD	COLD SPRING KY 41076-9749
74970	JOHNSON E F CO	299 10TH AVE S W	WASECA MN 56093-2539
76854	OAK SWITCH SYSTEMS INC AN OAK INDUSTRIES INC CO	100 S MAIN ST PO BOX 517	CRYSTAL LAKE IL 60014-6201
77900	ILLINOIS TOOL WORKS SHAKEPROOF DIV	ST CHARLES RD	ELGIN IL 60120
80009	TEKTRONIX INC	14150 SW KARL BRAUN DR PO BOX 500	BEAVERTON OR 97707-0001
93907	TEXTRON INC CAMCAR DIV	600 18TH AVE	ROCKFORD IL 61108-5181
TK0433	PORTLAND SCREW CO	6520 N BASIN	PORTLAND OR 97217-3920
01295	TEXAS INSTRUMENTS INC SEMICONDUCTOR GROUP	13500 N CENTRAL EXPY PO BOX 655012	DALLAS TX 75265
32997	BOURNS INC TRIMPOT DIV	1200 COLUMBIA AVE	RIVERSIDE CA 92507-2114
33095	SPECTRUM CONTROL INC	2185 W WEIGHT ST	ERIE PA 16505

Component No.	Tektronix Part No.	Serial/Assembly No. Effective Dscont	Name & Description	Mfr. Code	Mfr. Part No.
C114	281-0060-00		CAP, VAR, CER DI:2-8PF,350V	33095	53-717-013A2-8
LR116	108-0425-00		COIL, RF: FIXED, 181NH	80009	108-0425-00
R100	-----		(PART OF PROBE BODY ASSY)		
R110	311-0436-00		RES, VAR, NONWV: TRMR, 1K OHM, 0.1W	32997	3352T-CK5-102
R112	318-0006-00		RES, FXD, FILM: 111K OHM, 1%, 0.125W	01295	CD1-8R1113F
R114	311-0436-00		RES, VAR, NONWV: TRMR, 1K OHM, 0.1W	32997	3352T-CK5-102
R116	311-0411-00		RES, VAR, NONWV: TRMR, 200 OHM, 0.1W	32997	3352 (ADVISE)
R118	-----		(PART OF READOUT CONNECTOR)		

P6009 SCHEMATIC

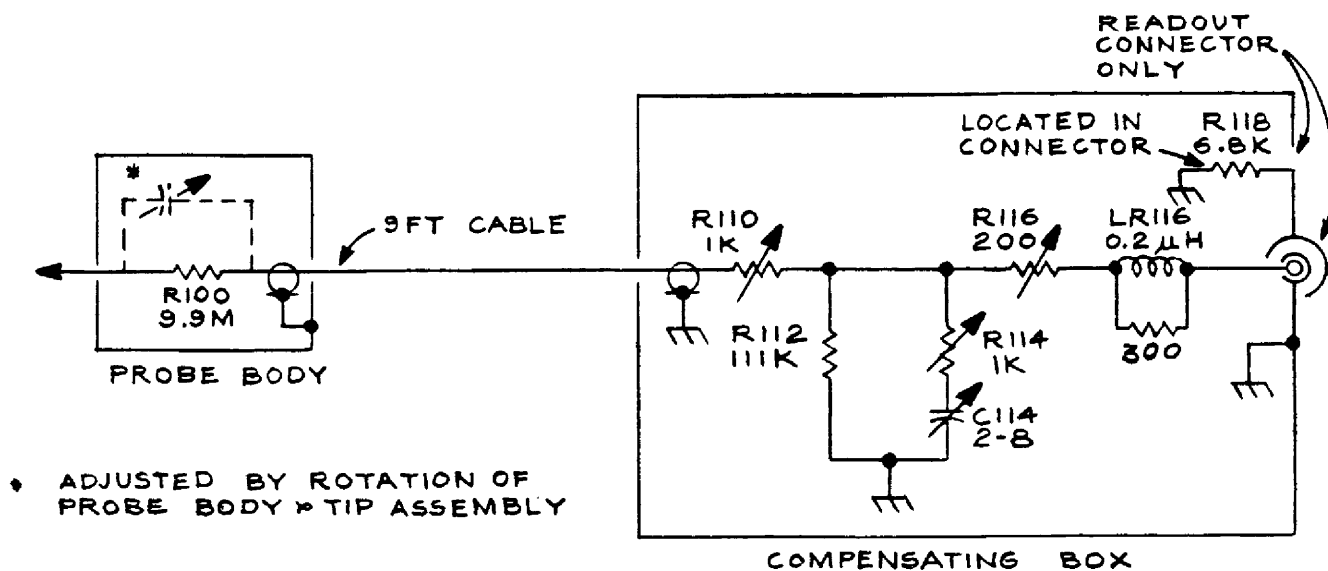


Fig. & Index No.	Tektronix Part No.	Serial/Assembly No. Effective	Dscont	Qty	12345 Name & Description	Mfr. Code	Mfr. Part No.
1-1	134-0044-00			1	.SHELL,ELEC CONN:BNC	02660	31-202-1002
-2	358-0072-00			1	..INSULATOR,BSHG:0.192 ID X 0.192 OD X 0.323	80009	358-0072-00
-3	214-0109-00		8340	1	..CONTACT,ELEC:CONN CTR CONT	24931	C-1174
	214-0109-01	8341		1	..CONTACT,ELEC:CONN CTR CONT,BRS SIL PL	34736	ORDER BY DESCR
-4	166-0217-00			1	..INSULATOR,BSHG:0.101 ID X 0.312 OD X 0.625	80009	166-0217-00
-5	132-0081-00			1	..BSHG,MACH THD:0.437-28 X 0.433 HEX X 0.312, ..BRS SIL PL	24931	N101-2
-6	213-0020-00			1	.SETScrew:6-32 X 0.125,STL	TK0433	ORDER BY DESCR
-7	670-8359-00			1	.CIRCUIT BD ASSY:PROBE .(ATTACHING PARTS)	80009	670-8359-00
	211-0014-00			1	.SCREW,MACHINE:4-40 X 0.5,PNH,STL	93907	ORDER BY DESCR
	210-0004-00			1	.WASHER,LOCK:#4 INTL,0.015 THK,STL	77900	1204-00-00-0541C
	210-0406-00			1	.NUT,PLAIN,HEX:4-40 X 0.188,BRS CD PL	73743	12161-50
	166-0233-00			1	.SPACER,SLEEVE:0.312 L X 0.129 ID,BRS .(END ATTACHING PARTS)	76854	3-5156-263
-8	204-0178-00			1	BODY,COMP BOX:	80009	204-0178-00
-9	205-0046-00			1	COVER,COMP BOX:	80009	205-0046-00
-10	210-0576-00			1	NUT,PLAIN,KNURL:0.625-27 X 0.75,AL ANDZ	80009	210-0576-00
-11	175-0268-00			1	CABLE ASSY,RF:50 OHM COAX,108.0 L	80009	175-0268-00
-12	204-0545-01			1	BODY,PROBE:	80009	204-0545-01
-13	166-0285-00			1	SLEEVE,LOCKING:	80009	166-0285-00
-14	166-0349-00			1	SLEEVE,PROBE:0.169 ID X 0.24 OD X 1.25 L,SS T	80009	166-0349-00
-15	358-0194-00			1	BUSHING,PROBE:GRAY ABS	80009	358-0194-00
-16	358-0192-00			1	BUSHING,PROBE:10-32 EXT THD X 0.3 OD X 1.66 L,DELFIN	80009	358-0192-00
-17	131-0944-00		8825	1	CONN,PLUG,ELEC:BNC,MALE	80009	131-0944-00
	131-0428-02	8826		1	CONN,RCPT,ELEC:BNC,MALE ASSY	80009	131-0428-02

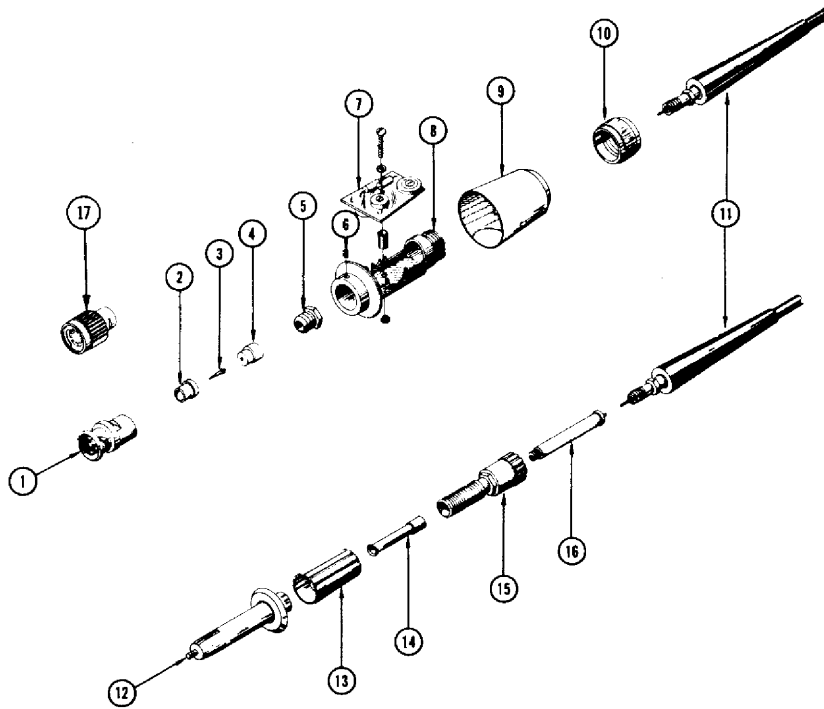


Fig. & Index No.	Tektronix Part No.	Serial/Assembly No. Effective Dscont	Qty	12345	Name & Description	Mfr. Code	MFR. Part No.
2-1	—		1		PROBE W/ACCESSORIES		
					STANDARD ACCESSORIES		
-2	013-0071-00		1		TIP,PROBE:RETRACTABLE HOOK	80009	013-0071-00
-3	196-3120-01		1		LEAD ELECTRICAL:23 AWG,6.0 L,GROUND	80009	196-3120-01
-4	206-0015-00		1		TIP,PROBE	80009	206-0015-00
-5	134-0013-00		1		PLUG, TIP: BANANA,6-32 INT THD END	74970	108-753-17
-6	206-0105-00		1		TIP, PROBE:HOOK	80009	206-0105-00
-7	206-0060-00		1		TIP,PROBE	80009	206-0060-00
-8	013-0052-00		1		TIP,PROBE:GROUNDING	80009	013-0052-00
-9	214-0325-00		1		CONTACT,ELEC:GROUNDING TIP	80009	214-0325-00
-10	352-0090-00		1		HOLDER,PROBE:DELRIIN	80009	352-0090-00
	070-0401-02		1		MANUAL,TECH:INSTRUCTION	80009	070-0401-02

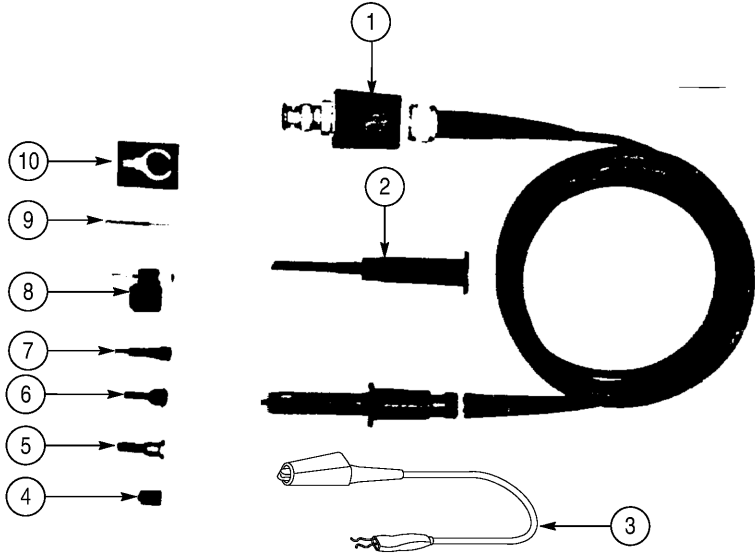


Fig. & Index No.	Tektronix Part No.	Serial/Assembly No. Effective Dscont	Qty	12345	Name & Description	Mfr. Code	MFR. Part No.
					OPTIONAL ACCESSORIES		
-11	175-0263-02		1		LEAD,ELECTRICAL:STRD,18 AWG,3.0 L	80009	175-0263-02
-12	175-0124-02		1		LEAD,ELECTRICAL:STRD,36 AWG,GY VINLY,5.0 L	80009	175-0124-02
-13	175-0125-02		1		LEAD,ELECTRICAL:STRD,24 AWG,GR VINYL,12.0	80009	175-0125-02
-14	344-0046-01		2		CLIP,ELECTRICAL:ALLIGATOR,1.56 L	80009	334-0046-01

