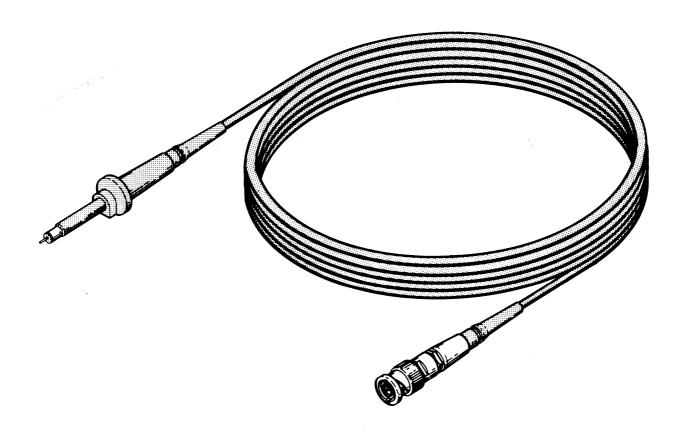
P6101 PASSIVE PROBE



The P6101 Probe is a miniature, lX, passive probe for use with all general-purpose oscilloscopes.

WARNING

To avoid shock, do not disassemble when connected to voltage source. Disassembly is a service operation only. Refer servicing to qualified service personnel.

Modular construction of the probe simplifies repair, as both the probe head and BNC connector are easy to remove from the cable assembly.

The P6101 Probe is available in three lengths and identified by the colored strain relief at each end of the cable: blue - 1 meter (3.3 ft), yellow - 2 meter (6.6 ft), red - 3 meter (9.9 ft).

062-1797-00 FEB 1986(R)



WARRANTY

All TEKTRONIX instruments are warranted against defective materials and workmanship for one year. Any questions with respect to the warranty should be taken up with your TEKTRONIX Field Engineer or representative.

All requests for repairs and replacement parts should be directed to the TEKTRONIX Field Office or representative in your area. This will assure you the fastest possible service. Please include the instrument Type Number or Part Number and Serial Number with all requests for parts or service.

Specifications and price change privileges reserved.

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U.S.A. and foreign Tektronix products covered by U.S. and foreign patents and/or patents pending.

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SPECIFICATIONS

Electrical

Attenuation: 1X (same as oscilloscope).

Input Resistance: Same as oscilloscope.

Approximate Probe Capacitance:

l Meter (3.3 ft)	2 Meter (6.6 ft)	3 Meter (9.9 ft)		
Blue	Yellow	Red		
32 pF	54 pF	78 pF		

Bandwidth (-3 dB):
(Probe only)

Probe Length	Oscilloscope Input Capacitance 20 pF		
1 Meter (3.3 ft)	At least 34.0 MHz		
2 Meter (6.6 ft)	At least 15.5 MHz		
3 Meter (9.9 ft)	At least 8.0 MHz		

Maximum Input Voltage: 500 Volts (dc + peak ac), derated with frequency. See Figure 1. Voltage vs Frequency Derating.

Environmental

Probe operates within specifications over the following ranges:

Temperature: -15° C $(+5^{\circ}$ F) to $+75^{\circ}$ C $(+167^{\circ}$ F).

Altitude: To 15,000 feet.

Physical

Net weight (including accessories):

- 1 Meter (3.3 ft) Probe: 90 grams (3.2 oz).
- 2 Meter (6.6 ft) Probe: 115 grams (4.1 oz).
- 3 Meter (9.9 ft) Probe: 140 grams (4.9 oz).

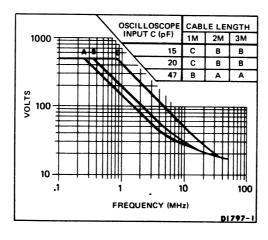


Figure 1. Voltage vs. frequency derating.

OPERATING CONSIDERATIONS

Probe Grounding

A passive probe is capacitive for high-frequency components. Inductance introduced by a long signal or ground lead will form a series reasonant circuit that will"ring" if driven by a signal containing significant frequency components at or above circuit resonance. These oscillations can appear on the oscilloscope display and distort the true waveform. Ground leads and probe tip connections should be kept as short as possible to maintain the best fidelity.

MAINTENANCE . WARNING

To avoid shock, do not disassemble probe when connected to voltage source. Only qualified service personnel should use the following service instructions. Unless you are qualified to do so, perform no servicing except that contained in the preceding operating instructions.

The P6101 Probe is designed to withstand normal operation and handling. However, if the coaxial cable, probe head, or BNC connector should fail or break, replacement parts are available. See Replaceable Mechanical Parts List for part numbers.

BNC Connector Removal:

See Figure 2 for BNC connector removal and replacement.

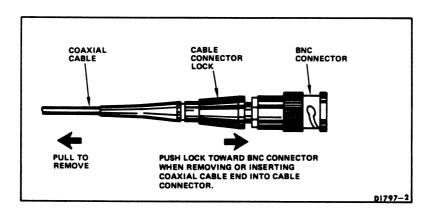


Figure 2. Removal and replacement of BNC connector.

Removing Probe Tip:

See Figure 3 for probe tip removal and replacement.

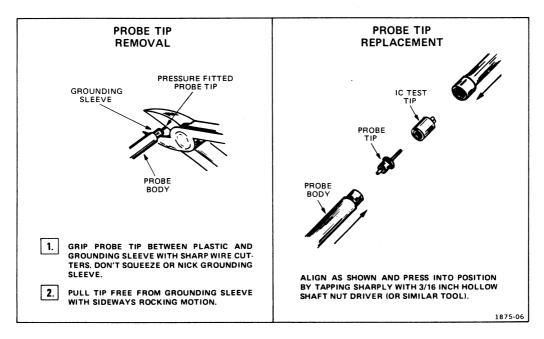


Figure 3. Probe tip removal and replacement.

Fig. & Index No.	Tektronix Part No.	Serial/Assembly No. Effective Dscont	Qty	12345 Name & Description	Mfr. Code	Mfr. Part No.
1-				1 METER PROBE		
-1 -2	010-6101-01 010-6101-00 206-0223-00		1 1 1 1	PROBE, VOLTAGE: P6101,1X,1 METER M/ACCESSPROBE, VOLTAGE: P6101,1 METER,1X,PROBE ONLYPROBE HEAD: 1XTIP, PROBE:(AVAILABLE ONLY IN PACKS OF 10,PART NUMBER 206-0191-03.)	80009 80009 80009	010-6101-01 010-6101-00 206-0223-00
-3			1	TIP PROBE:IC TEST (AVAILABLE ONLY IN PACKS OF 10, PN 015-0201-04 OR 100,PN 015-0201-05.)		
-4 -5	175-1661-00 103-0189-00		1	CABLE ASSY,RF:39 OHM COAX,39.37 LONG ADAPTER,CA END:	80009 24931	175-1661-00 28P224-1

CROSS INDEX - MFR. CODE NUMBER TO MANUFACTURER

Mfr. Code	Manufacturer	Address	City, State, Zip Code
24931	SPECIALTY CONNECTOR CO INC	2620 ENDRESS PLACE P 0 BOX D	GREENHOOD IN 46142
80009	TEKTRONIX INC	4900 S M GRIFFITH DR P 0 BOX 500	BEAVERTON OR 97077
TK1556	CONSOLIDATED VINYL SALES	1237 S SAN GABRIEL BLVD	SAN GABRIEL CA 91776

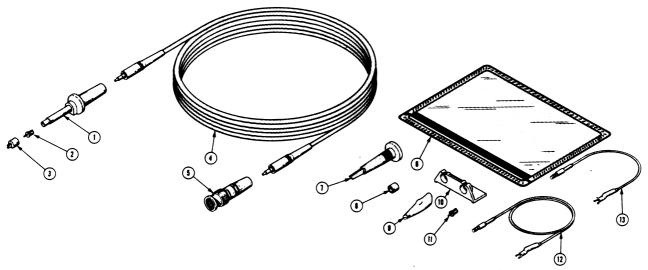


Fig. &						
Index No	Tektronix Part No.	Serial/Assembly No. Effective Dscont	Qty	12345 Name & Description	Mfr.	Mfr. Part No.
2-					Code	MIT, FART NO.
•				2 METER PROBE		
	010-6101-03		1	PROBE, VOLTAGE: P6101, 1X, 2 METER M/ACCESS	80009	010-6101-03
_	010-6101-02		1	.PROBE, VOLTAGE: P6101,2 METER, 1X, PROBE ONLY		010-6101-02
-1	206-0223-00		1	PROBE HEAD:1X	80009	
-2			1	TIP,PROBE:		
				(AVAILABLE ONLY IN PACKS OF 10,		
-3			1	PART NUMBER 206-0191-03)		
•			1	TIP,PROBE:IC TEST(AVAILABLE ONLY IN PACKS OF 10,		
			*	PN 015-0201-04 OR 100,PN 015-0201-05)		
-4	175-1661-01		1	CABLE ASSY, RF:39 OHM COAX, 78.74 LONG	80009	175-1661-01
-5	103-0189-00		1	ADAPTER,CA END:	24931	
•						
3-				3 METER PROBE		
	010-6101-05		1	PROBE, VOLTAGE: P6101, 1X, 3 METER M/ACCESS	80009	010-6101-05
	010-6101-04		i	.PROBE, VOLTAGE: P6101,3 METER, 1X, PROBE ONLY		010-6101-04
-1	206-0223-00		1	PROBE HEAD: 1X	80009	206-0223-00
-2			1	TIP,PROBE:		
				(AVAILABLE ONLY IN PACKS OF 10,		
•			٠,	PN 206-0191-03.)		
-3			1.	TIP, PROBE: IC TEST		
				(AVAILABLE ONLY IN PACKS OF 10, PN 015-0201-04 OR 100,PN 015-0201-05)		
-4	175-1661-02		1	CABLE ASSY,RF:39 OHM COAX,118.11 LONG	80009	175-1661-02
-5	103-0189-00		1	ADAPTER, CA END:	24931	
				ACCESSORIES		
-6	016-0521-00		1	POUCH, ACCESSORY: PROBE ACCESSORIES	TK1556	ORDER BY DESCR
-7	013-0107-03		1	TIP, PROBE: RETR HOOK ASSY, M/FLANGE		013-0107-03
-8	166-0404-01		1	COVER, GROUND:		166-0404-01
-9	344-0046-00		2	CLIP, ELEC: ALLIGATOR, 1.56 L, STL BRT DIPPED	80009	
-10	352-0351-00		1	HOLDER, PROBE: BLACK ABS	80009	352-0351-00
-11			2	TIP, PROBE:		
				(AVAILABLE ONLY IN PACKS OF 10, PN 206-0191-03.)		
-12	175-0125-01		1	LEAD, ELEC: STRD, 24 ANG, GRAY VINYL, 12.0 L	80009	175-0125-01
-13	175-0124-01		i	LEAD, ELEC: STRD, 23 AMG, BLK VINYL, 5.0 L	80009	
	334-2794-00		2	BAND, MARKER: 0.371 DIA, BLACK, PLASTIC	80009	
	334-2794-01		2	BAND, MARKER: 0.371 DIA, WHITE, PLASTIC	80009	
	334-2794-02		2	BAND, MARKER: 0.371 DIA, SILVER GRAY, PLSTC	80009	
	062-1803-00		1	PROBE CARD:	80009	
	062-1797-00		1	DATA SHEET:	80009	062-1797-00