

SECTION II

SPECIAL TOOLS AND TEST EQUIPMENT

2-1. SPECIAL TOOLS. No special tools are required.

2-2. TEST EQUIPMENT. Test equipment required to maintain the instrument is listed in Table 2-1. Equivalent items may be used if the recommended items are not available.

2-3. CONSUMABLE MATERIALS. Table 2-2 lists the consumable materials recommended for maintaining the instrument. Equivalent materials may be used if those recommended are not available.

Table 2-1. Test Equipment List

Tool/Equipment Number	Nomenclature	Application	Description
Tektronix PG 506 ¹	Calibration Generator and Fast-rise Pulse Generator	Vertical deflection system checks and adjustments; trigger range check; trigger view check and adjustment; high and low frequency compensation adjustments.	Range, 1 kilohertz and 100 kilohertz square-wave; output amplitude, 20 millivolts to 20 volts; accuracy, within 0.4%; fast-rise output risetime, 1 nanosecond or less.
Tektronix TG 501 ¹	Time-Mark Generator	Sweep timing checks and adjustments; Y-axis adjustments; geometry adjustments.	Marker range, 10 nanoseconds to 0.5 seconds; accuracy, within 0.4%.
Tektronix SG 502 ¹	Sine-wave Generator Low Frequency	Trigger checks.	Range, 30 hertz to 50 kilohertz; output amplitude, 10 millivolts to 4 volts peak to peak.
Tektronix SG 503 ¹	Sine-wave Generator	Bandwidth checks; cascade sensitivity checks; trigger checks and adjustments.	Range, 4 megahertz to 100 megahertz with a 50 kilohertz reference; accuracy, within 3%; output amplitude, 5 millivolts to 4 volts peak to peak.
Tektronix DM 501A ¹	Digital Multimeter	Power supply checks and adjustments; calibrator adjustments; crt bias adjustments; troubleshooting.	Range, -10 volts dc to +50 volts dc; 300 volts ac, 2 kilohm to 20 megohm; accuracy, within 0.1%.
465M	Oscilloscope	Sweep gate output checks; calibrator output checks; Z-axis compensation adjustment and calibration checks; troubleshooting waveforms.	Bandwidth, at least 100 megahertz; vertical deflection factor, at least 5 millivolts/division; sweep rate, at least 2 microseconds/division.
Tektronix part 017-0061-00	CT-3 Signal Pickoff	Trigger checks.	Assembly, signal pickoff (CT-3).

See footnotes at the end of the table.

Table 2-1. Test Equipment—Continued

Tool/Equipment Number	Nomenclature	Application	Description
Tektronix part 011-0049-01 (2 required)	Feedthrough Termination	Test signal termination for performance checks and adjustments.	Termination, coaxial, 50 ohm, 2 watt, dc to 500 megahertz, BNC male to BNC female.
Tektronix part 067-0538-00	Input RC Normalizer	Vertical deflection system attenuator compensation adjustments.	Calibration fixture, 1 megohm with 20 picofarad input RC time constant, BNC male to BNC female.
Tektronix part 012-0057-01 (2 required)	Coaxial Cable with BNC Male Connectors	Test signal interconnections.	Cable assembly, RF, 50 ohm, 43 inches, BNC male to BNC male.
Tektronix part 067-0525-01 (2 required)	Dual Input Coupler	Matched dual test signal inputs.	Calibration fixture, BNC female input to dual BNC male output with RG-58C/U cable matched within 0.1 inch.
Tektronix part 103-0030-00	T Connector	Test signal interconnections	Adapter, connector, BNC, Tee, BNC male to two BNC female, type UG-274B/U.
Tektronix part 017-0063-00 Manufacturers part 0874-9700.	Adapter, GR874 to BNC female	Test signal interconnections.	Adapter, connector, BNC female to GR.
Tektronix part 017-0064-00. Manufacturers part 874QBPA	Adapter, GR874 to BNC male	Test signal interconnections.	Adapter, connector, BNC male to GR.
Tektronix part 011-0059-02	Attenuator, 10X, 50 ohm	Test signal interconnections.	Attenuator, 50 ohm, 2 watt, dc to 2 gigahertz, BNC female to BNC male.
Tektronix part 010-0277-00	Probe, high voltage	Used with DM 501A for power supply checks and troubleshooting.	Voltage range, 1 kilovolt to at least 4 kilovolts.
General Radio W8MT3VM	Metered variable autotransformer	Vary the power input source for regulation check over the 100 V to 132 V range.	Input voltage, 116 V; Output voltage, 100 V to 132 V. Metered output.

¹ Requires a TM 500 series mainframe/power module.

Table 2-2. Consumable Materials List

Nomenclature	Material	Specification Number	Part Number
Grease, insulation	Silicone compound	MIL-S-8660B	NSN6850-00-880-7616
Lubricant	Silicone compound	MIL-S-8660B	NSN6850-00-880-7616
Mild detergent			NSN6850-00-570-9360-or part GC8666 (vender code 80112)
Contact cleaner	Isopropyl alcohol	MIL-C-81302	NSN6850-00-105-3084

2-4. RACKMOUNTING ACCESSORY. Some instruments may be used in applications where rack mounting is useful. A 465M/USM-425(V)1 Rack Adapter

(Cradle Mount) kit is available as Tektronix part 040-0825-00. Installation instructions are provided with the kit.