INSTRUCTION MANUAL

Serial Number ____________

TYPE 568/R568 OSCILLOSCOPE

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070-0596-00

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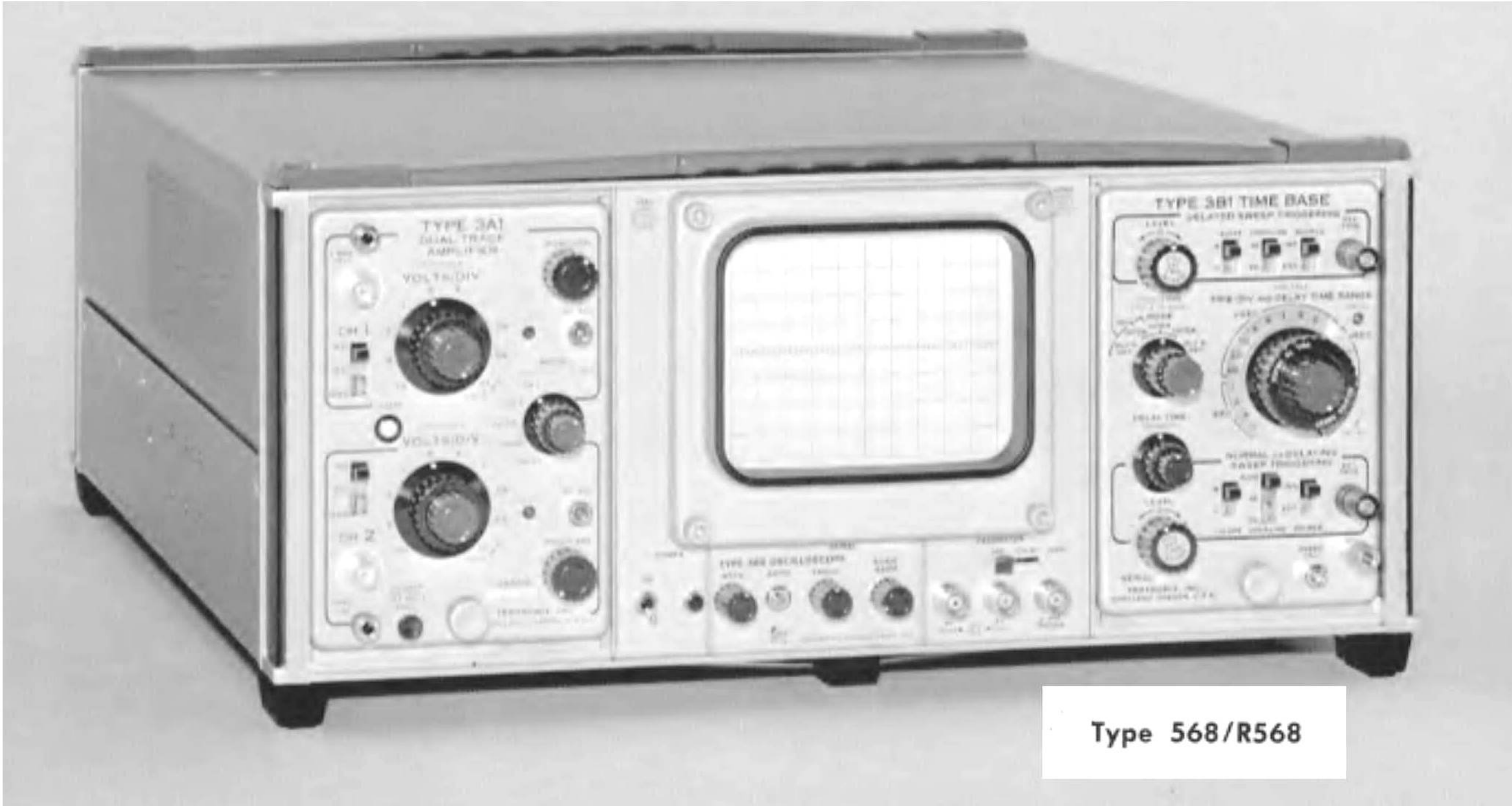


Type 568/R568

SECTION 1
CHARACTERISTICS

General Information

The Tektronix Type 568 is a bench-mount/rack-mount oscilloscope designed for use either as a part of a digital readout system or as a conventional oscilloscope. When used as a conventional oscilloscope, any of the Tektronix 2-Series or 3-Series plug-in units can provide vertical and horizontal deflection of the CRT beam. In order to operate in a digital readout system, only those plug-in units that provide digital information to the readout unit can be used.

An output connector on the rear panel of the Type 568 provides all signal and logic information required by the digital readout unit (such as a Tektronix Type 230). Several power supply outputs are available through rear-panel connectors for operation of external equipment such as auxiliary program devices. A calibrator circuit provides square-wave outputs through front-panel connectors for adjusting compensation of probes and for setting the vertical and horizontal gain of the plug-in units.

Information given in this instruction manual also applies to the Type R568 unless otherwise noted. The Type R568 is electrically identical to the Type 568 but is equipped with slide-out tracks and pull handles for rackmounting in a standard 19-inch rack. Rackmounting instructions, a mechanical parts list and a dimensional drawing of the Type R568 are provided in Section 10 of this manual.

Electrical Characteristics

The characteristics given in Tables 1-1 through 1-3 apply over an ambient temperature range from 0°C to +60°C following a 5-minute warm-up period if the instrument has been calibrated at +25°C ±5°C. Under these conditions, the Type 568 will meet or exceed the specifications given in the Description column of the table. Performance of the instrument is checked to these specifications in the Performance Check and Calibration sections of this manual.

Additional operational information about some of the characteristics is included in a third column of the table where needed. Any characteristics given under Operational Information are not specifications in themselves and are not necessarily checked in the performance check or calibration procedure.

TABLE 1-1
ELECTRICAL CHARACTERISTICS
CATHODE-RAY TUBE AND DISPLAY

Characteristics	Description
Tube Type	Glass envelope, rectangular face. Tektronix T5032-2-1.
Phosphor	P2 standard. Others available on special order.
Accelerating Potential	Approximately 3.5 kV.
Graticule	
Type	Internal.
Area	8 divisions vertically by 10 divisions horizontally; each division equals 1 cm.
Illumination	Variable edge lighting.
Focus	Adjusted by means of front-panel control.
Astigmatism	Adjusted by means of front-panel screw-driver adjustment.
Trace Alignment	Electrically adjusted by means of internal screw-driver adjustment.
Sweep Unblanking	Deflection-type, DC coupled.
Blanking (Chopped Mode)	Internal from dual-trace unit.
Intensity Modulation	Internal from delayed-sweep unit or digital readout unit; external through CRT cathode.
Geometry Raster Distortion	Less than 0.5 minor division of bowing in either the vertical or horizontal plane.

TABLE 1-2
ELECTRICAL CHARACTERISTICS CALIBRATOR

Characteristics	Description	Operational Information
Output Waveform Waveshape	Square wave.	
Polarity	Positive-going from zero volts (baseline).	
Frequency	1 kHz or 100 kHz* from either (5 V or .5 V) output.	100 kHz output may be used for calibrating horizontal gain of timing unit; 1 kHz output may be used for compensating attenuator probes.
Frequency Accuracy	Within —50%/+100% of 1 kHz; within 0.05% of 100 kHz.	
Amplitude	0.5 volt or 5 volts peak to peak into ≥100-kΩ load; 50 mV or 500 mV peak to peak into 50-ohm load; separate output connectors for the two amplitudes.	May be used for calibrating gain of vertical unit; both outputs may be used simultaneously when loaded with ≥100 kΩ, but not when loaded with 50 Ω; outputs are not damaged if shorted to ground; outputs appear as current sources to low-impedance loads.
Amplitude Accuracy	Within 2% of indicated value into ≥100-kΩ load; within 2% of indicated value into 50-ohm load when tolerance of load is ±1%.	
Output Resistance	Approximately 450 Ω from either output.	
Duty Cycle	48% to 52% at either 1 kHz or 100 kHz frequency.	
+ Pretrigger Frequency Lead Time	Same as square-wave output. Approximately ¼ cycle before positive-going transition of square wave.	Used for externally triggering time-base unit; output not damaged if shorted to ground.
Amplitude	Approximately 1 volt into 1-MΩ load; approximately 200 mV into 50-ohm load.	
Output Resistance	Approximately 320 Ω.	

***For serial numbers B150629 and below, the calibrator frequencies are 20 kHz and ≈1 kHz.**

TABLE 1-3
ELECTRICAL CHARACTERISTICS
POWER SOURCE REQUIREMENTS

Characteristics	AC RMS Operating Range	Operational Information
Line Voltage Low 100 VAC Nominal	90 volts to 110 volts	Power connections changed by means of rear-panel line-selector assembly; normally set for 115 VAC Medium operating range when shipped from factory; electronic regulation permits correct operation over indicated range when ratio of peak line voltage to RMS line voltage is between 1.3:1 and 1.414:1.
200 VAC Nominal	180 volts to 220 volts	
Medium 115 VAC Nominal	104 volts to 126 volts	
230 VAC Nominal	208 volts to 252 volts	
High 124 VAC Nominal	112 volts to 136 volts	
248 VAC Nominal	224 volts to 272 volts	
Line Frequency	48 to 66 Hz	
Power Consumption		210 W maximum

TABLE 1-4
ENVIORNMENTAL CHARACTERISTICS

Characteristics	Description
Ambient Temperature Range	
Operating Non-Operating	0°C to +60°C −40°C to +65°C
Maximum Altitude	
Operating Non-Operating	15,000 feet. 50,000 feet.
Vibration (Non-Operating)	Performs within specification after being vibrated for 15 minutes along each major axis at frequencies from 10 c/s to 50 c/s and accelerations up to 1.9 g.
Transportation (Non-Operating)	Performs within specifications after transportation package has been vibrated for 1 hour at accelerations up to 1 g and dropped 30 inches on one corner, on each edge radiating from that corner and on each flat side of the package (total of 12 drops).

TABLE 1-5
MECHANICAL CHARACTERISTICS

Characteristics	Description
Construction Chassis	Aluminum alloy with epoxy laminate circuit boards for component mounting.
Cabinet	Aluminum alloy coated with blue vinyl paint.
Front Panel	Anodized aluminum alloy.
Approximate Dimensions Type 568 Height	8 inches, including feet.
Width	16⅞ inches
Depth	21⅞ inches, including CRT bezel and rear-panel feet.
Type R568 Height	7 inches
Width	17⅝ inches; fits into standard 19-inch rack.
Depth	22¾ inches; including handles and rear-panel feet.
Connectors Calibrator outputs	(3) BNC type.
Programming and readout (rear panel)	(3) 36-terminal Amphenol Micro-Ribbon.
Plug-in receptacles	24-terminal ribbon-type for interconnecting and digital readout (4 total); 30-terminal edge-board with male/male adapters for optional programming connections (2 total).
Ventilation	Forced filtered air; overheat protection by means of thermal relay.
Accessories Standard	Listed on Type 568 and Type R568 Accessories fold-out pages in Mechanical Parts List.
Optional	Illustrations section. See current Tektronix, Inc. catalog.

SECTION 3
CIRCUIT DESCRIPTION

General Information

The circuitry of the Type 568 oscilloscope consists of three major sections: The low-voltage power supply, the CRT circuit and the calibrator. In addition to these, the instrument contains the wiring connections required for operation required with a digital readout unit.

The Type 568 is essentially an indicator unit for the digital and plug-in units, and also serves as a power source for the plug-in units. While reading the following circuit analysis, refer to the block diagram accompanying the text and to the schematics at the rear of this manual.

LOW-VOLTAGE POWER SUPPLY

General

The low-voltage power supply circuit provides the operating power for this instrument from four regulated supplies. Electronic regulation is used to provide stable, low-ripple output voltages. Each regulated supply is properly fused or contains a short-protection circuit to prevent instrument damage if a supply is inadvertently shorted to ground. The power input stage includes the Voltage Selector Assembly which allows selection of the nominal operating voltage and regulating range for the instrument. Fig. 3-1 shows a detailed block diagram of the power supply circuit. A schematic of this circuit is given at the rear of this manual.

Power Input

Power is applied to the primary of transformer T601 through the 115-volt line fuse F601, POWER switch SW601, thermal cutout TK601, Voltage Selector switch SW602 and Range Selector switch SW603. The Voltage Selector switch connects the split primaries of T601 in parallel for 115-volt nominal operation, or in series for 230-volt nominal operation. A second line fuse, F602, is connected into the circuit when the Voltage Selector switch is set to the 230 V position to provide the correct protection for 230-volt operation. The current rating for F602 is one-half that of F601 and although F601 is still in series with the primary, F602 takes precedence over F601 and will blow if the current exceeds the specified level. The fan is connected across one half of the split primary winding so that it always has approximately 115 volts applied to it.

The Range Selector switch, SW603, allows the instrument to regulate correctly on higher or lower than normal line voltages. Each half of the primary has taps above and below the 115-volt (or 230-volt) nominal point. As Range Selector switch SW603 is switched from LO to M to HI, more turns are added, in affect, to the primary of T601, decreasing the primary to secondary ratio. This provides the correct voltage level in the secondary when the input voltage to the primary has been changed.

Thermal cutout TK601 provides thermal protection for the instrument. If the internal temperature of the instrument exceeds a safe operating level,TK601 opens to interrupt the applied power. When the temperature returns to a safe level, TK601 automatically closes to re-apply the power.

—100-Volt Power Supply

The —100-volt supply is the prime reference supply which provides the reference voltage for the remaining supplies. The output from the secondary of T601 is rectified by bridge rectifier D612. This voltage is filtered by C612, then applied to the —100-volt series regulator stage to provide a stable output voltage. The series regulator can be compared to a variable resistance which is increased or decreased to control the output current. Current through the Series Regulator stage is controlled by the error amplifier to provide the correct regulated output voltage.

Reference voltage for the error amplifier is provided by zener diode D613 which sets the base of Q613 at about —9 volts. The base level of Q624 is determined by voltage divider R621-R623-R624-R625 between the output of this supply and ground. The output voltage of the supply is regulated to provide a constant voltage to the load by feeding a sample of the output back through the voltage divider to the base of Q624.

For example, assume that the output voltage increases (becomes more negative) because of a change in load or an increase in line voltage. This negative-going level at the output is applied across voltage divider R621-R623-R624-R625, causing the base of Q624 to go negative. This reduces current flow through Q624, allowing its collecter to go positive. This collector voltage change increases forward bias on Q634, resulting in increased current through R631 and allowing the base of Q633 to go more negative. Reduced current through Q637 decreases current through the load, causing the output voltage to decrease (become less negative). The —100 VOLTS adjustment, R625, sets the output voltage of the supply at —100 volts by determining the amount of feedback that is applied to the error amplifier. In a similar manner the series regulator and error amplifier stages compensate for output changes due to ripple.

When the power switch is activated, neon B633 allows the —100-volt Supply to turn on first because all the other supplies are dependent on the —100-Volt Supply.

The short-protection amplifier stage, Q639, protects the —100-volt supply if the output is shorted. For normal operation, R638-R639 sets the emitter-base bias voltage of Q639, which is too low to turn on the transistor. When the load current thru R639 increases due to an overload or short circuit, the voltage drop across R639 increases and adds an increase in base to emitter voltage of Q639, allowing it to come into conduction. When too much current has been

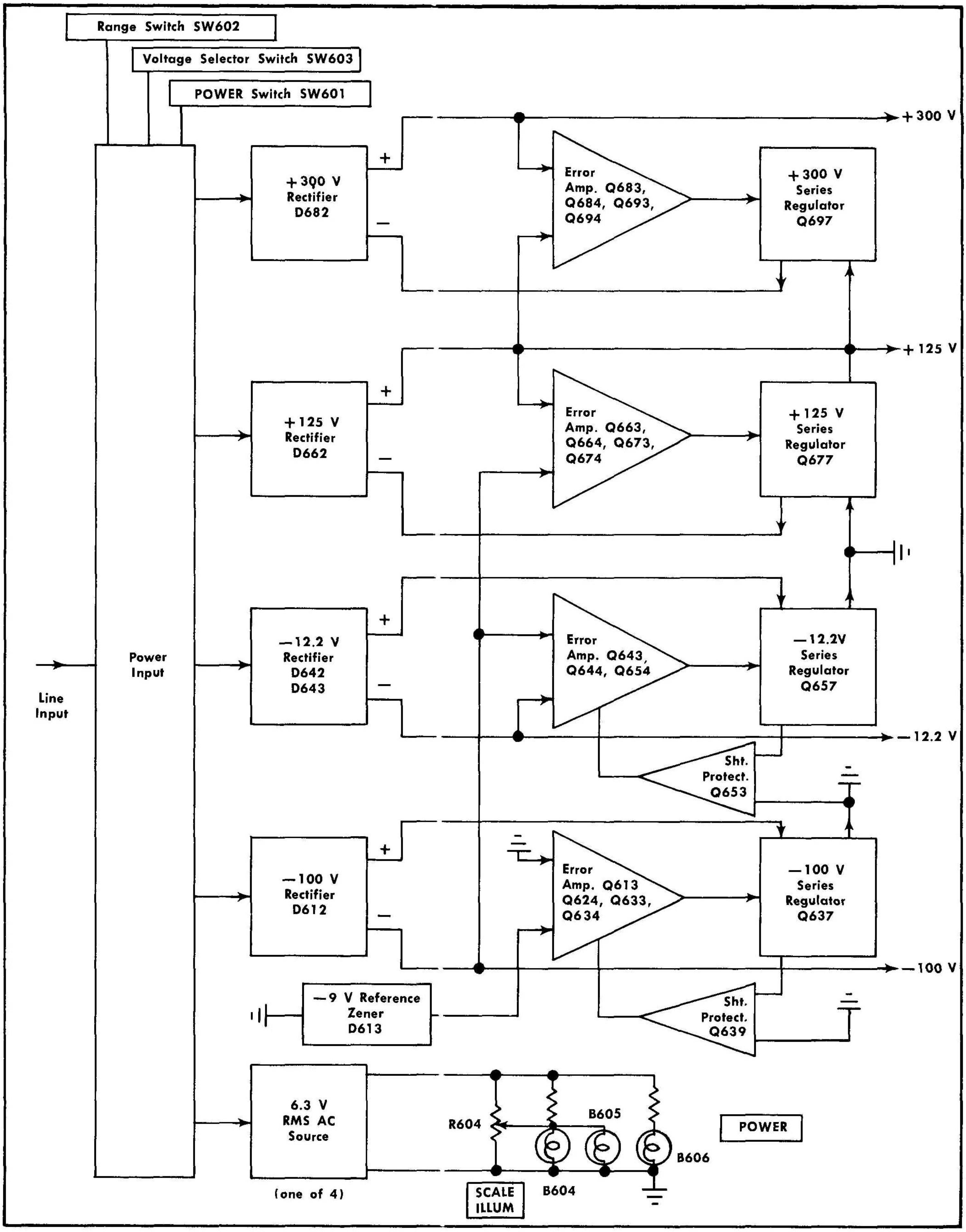


Fig. 3-1. Block diagram of low-voltage power supply circuit.

drawn from the —100-Volt Supply, Q639 decreases the voltage at the base of Q633 and Q637; resulting in an increase of voltage across Q637 and a decrease of the —100-Volt Supply. R637 senses the increase in unregulated voltage across Q637, and adds to the increasing base current of Q639. This results in a further decrease of current thru R639 and Q637. D622, R623 and R621 provide protection to the —12.2-volt supply in the event the —100-volt supply is shorted to the —12.2-volt supply.

—12.2-Volt Supply

Rectified voltage for operation of the —12.2-Volt Supply is provided by D642-D643. The voltage is filtered by C643 and connected to the —12.2-volt series regulator stage, Q657, in a similar manner to that described for the —100-volt supply. The —12.2-VOLTS adjustment, R645, sets the output level at —12.2 volts.

Shorting protection is provided by Q653 and R644. If the —12.2-volts output of this supply is shorted, Q653 is biased on to clamp the current conduction of the series regulator to a fixed value. This action assures that no component will be required to exceed its maximum rating.

+125-Volt Supply

Bridge rectifier D662 provides the rectified voltage which is connected to the +125-volt series regulator. Reference voltage for this supply is provided by voltage-divider R671-R672 between the regulated —100-volt and ground. Since the —100-volts is held stable by the —100-volt regulator circuit, any change at the base of error amplifier Q663 is due to a change at the output of the +125-volt supply. Regulation of the output voltage is controlled by error amplifier Q633-Q664-Q673-Q674 and series regulator Q677 in a manner similar to that described for the —100-volt supply. The +125 VOLTS adjustment, R665, sets the quiescent conduction level of the error amplifier stage to provide an output level of +125 volts.

Series transistors Q673-Q674 are used to equalize the voltage drop and power dissipation, which could possibly exceed the maximum rating of a single transistor at high-line and low-load condition.

Fuse F675 is used to protect the power supply in event the output is accidently shorted. C675 is used to present an instantaneous discharge of stored energy thru the fuse under shorted output conditions, thereby by-passing all components of the power supply. Capacitor C674 reduces instantaneous voltage surges at the output of the regulator circuit.

+300-Volt Supply

Bridge rectifier D682 provides the rectified unregulated output for the +300-volt supply. The output of the +125-volt supply is connected to the negative side of the +300-volt supply through series regulator Q697 to elevate the output

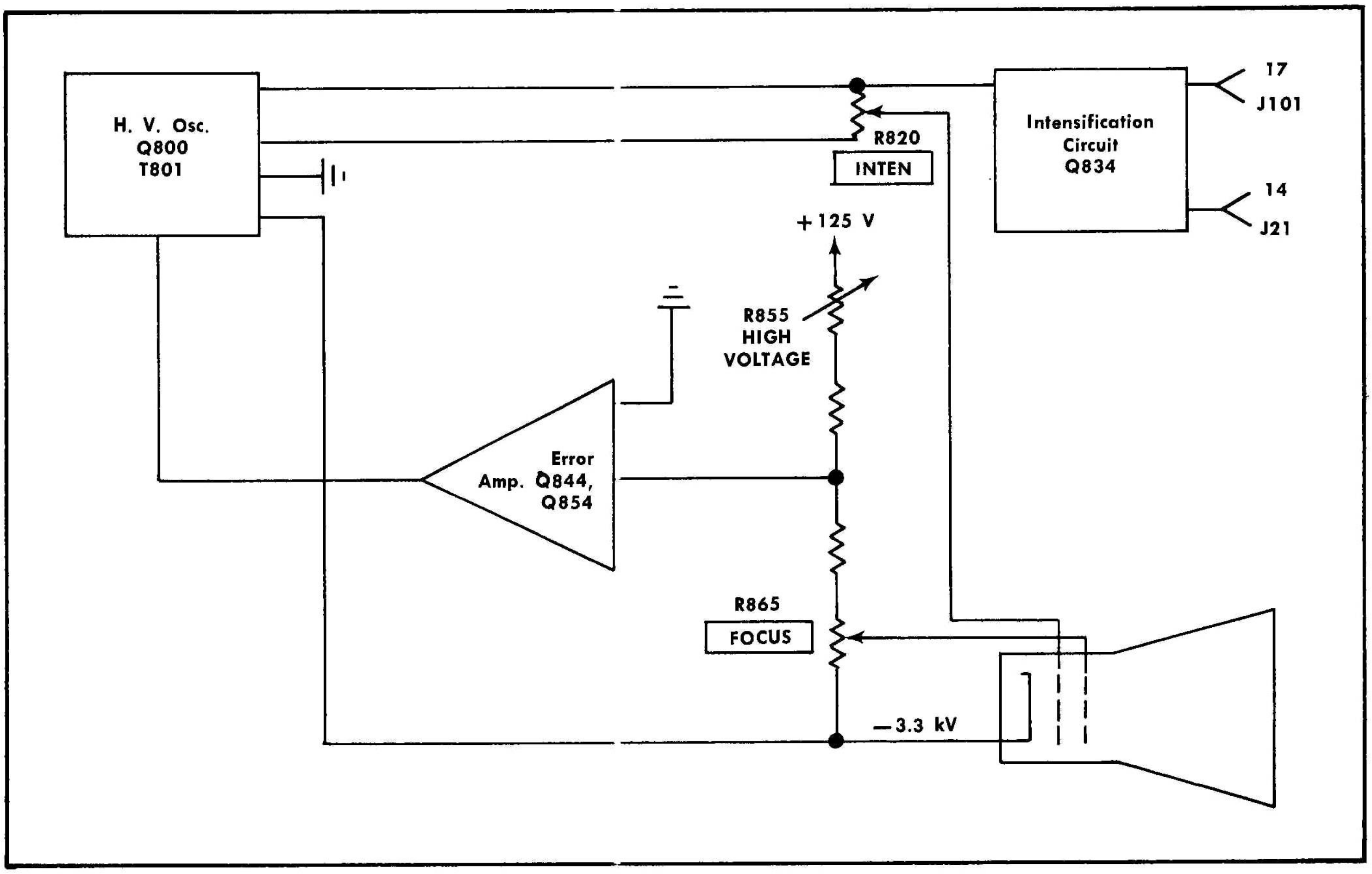


Fig. 3-2. Block diagram of the CRT circuit.

level to +300 volts. The operation of the +300-volt supply is similar to that of the +125-volt supply, except that it is referenced to and dependent upon the +125-volt supply.

Fuse F695 and C699 protect this supply in the same manner as explained in the +125-volt supply.

6.3-Volt RMS AC Source

The four 6.3-volt RMS secondary windings of T601 provide power for the CRT heater, terminals 1 and 2 of J11, terminals 1 and 2 of J21, the POWER light B606, and the scale illumination lights, B604 and B605. Current through the scale illumination lights is controlled by the SCALE ILLUM control, R604, to change the brightness of the graticule lines.

CRT CIRCUIT

High-Voltage Power Supply

Transistor Q800 and its associated circuitry is a resonant feedback oscillator which operates at approximately 45 kHz. Transformer T801 provides the high voltage for the rectifiers.

One secondary winding to T801 and rectifier D482 form a half-wave rectifier circuit which supplies approximately —3.3 kV to the cathode of the CRT. A separate secondary winding of T801 and rectifier D812 supply a floating negative voltage for the control grid of the CRT.

A voltage divider between the —3.3-kV output of D842 and the +125-volt supply provides voltage to the focusing grid of the CRT and also supplies a sample of the power-supply output to the high-voltage regulator circuit. The HIGH VOLTAGE adjustment, R855, sets the high-voltage by adjusting the feedback loop. If the output voltage changes from the set value, a portion of the change appears at the gate of the FET, Q854, as an error signal. The error is amplified by Q854 and Q844 and applied to the base of Q800 through one of the windings in the primary of the high voltage transformer. The voltage change at the base of Q800 causes either an increase or a decrease in the amplitude of the oscillations. This amplitude change is always in a direction to compensate for the error in the output voltage. The resulting voltage change in the secondary of T801 tends to keep the 3.3 kV constant in relation to its fixed setting.

Capacitor C862 greatly increases the AC loop gain of the high-voltage regulator circuit. This permits the regulator to operate quickly in response to rapid changes in the output voltage.

CRT Circuit Controls and Connectors

Optimum size and shape of the flourescent spot on the CRT screen is obtained by adjusting the front-panel FOCUS control and ASTIG adjustment. FOCUS control R865 provides the correct voltage for the second anode (focus ring) in the CRT. Proper voltage for the third anode is obtained by adjusting ASTIG control R867. In order to obtain optimum spot size and shape, both the FOCUS and ASTIGMATISM controls are adjusted to provide the proper electronics lens configuration in the region of the second and third anodes of the CRT.

Spot intensity is adjusted by means of front-panel INTEN control R820. Varying the INTEN control changes the voltage on the CRT grid, which in turn varies the density of the electron beam. Internal GEOM control R873 adjusts the isolation shield voltage in the CRT, and is adjusted to minimize "bowing" or "tilting" of the display. Internal TRACE ALIGNMENT control R870 permits minor adjustments of the orientation. By adjusting the TRACE ALIGNMENT control, the trace can be made parallel with the horizontal lines on the graticule.

The presence and intensity of the CRT beam is controlled by signals from each of the plug-in units with the Type 568. The oscilloscope uses deflection unblanking during the sweep interval. In this method, an additional pair of deflection plates in the CRT electron gun deflects the beam so that it does not emerge from the electron gun structure except during the sweep. When the horizontal sweep is triggered, the unblanking signal then permits the electron beam to pass through to the CRT screen for the duration of the sweep. The beam is then deflected again until time for the next sweep.

When the Type 568 is used with a multi-channel vertical plug-in preamplifier that provides dual-trace chopped blanking pulses, the blanking pulses are applied through rear-panel CRT CATHODE SELECTOR switch SW879. With the vertical plug-in preamplifier operating in the chopped mode and SW879 set to the CHOPPED BLANKING position, a positive pulse of approximately 5 volts amplitude is applied through C878 to the cathode of the CRT. At normal intensity levels, this pulse is sufficient to cut off the CRT beam during the time the amplifier channels in the vertical plug-in preamplifiers are being switched.

An input jack (J878) on the rear panel of the Type 568 provides an input for externally modulating the CRT cathode. The input jack is normally grounded by a grounding link. When it is desired to intensity modulate the display from a external source, the link is removed and the modulating signal is coupled to the CRT cathode through C878.

Intensity brightening of the CRT trace by either the digital unit or a two-sweep time-base unit is accomplished by coupling brightening signals to the reference voltage for the CRT grid-voltage supply. The brightening signal from the digital unit shifts the overall grid supply through terminal 17 of J101. The brightening signal from 9 delayed-sweep timing unit changes the grid supply voltage through terminal 14 of J21. Diode D836 disconnects +125 volts applied to terminal 14 of J21 by some plug-in units.

CALIBRATOR

General Description

The calibrator circuit is a two-frequency signal source that is crystal controlled at 100 kHz and RC time-constant controlled at approximately 1 kHz. An astable multivibrator drives both a divide-by-two bistable multivibrator and a positive-slope differentiator circuit. Square waves of known amplitude at the front-panel connectors come from the ÷ 2 circuit, and positive pretrigger pulses come from the differentiator circuit. The ÷ 2 circuit clamps off the differentiator on alternate cycles of the multivibrator. Thus, the positive pretrigger pulse is generated approximately ¼ cycle before each portion of the output square wave.

Selection of output frequency is by the front-panel OFF-≈1 kHz-100 kHz lever switch. The switch is in the open position for 100 kHz operation, but is closed for 1 kHz operation. Operation at 100 kHz places a series-mode 200 kHz crystal in the feedback path. Operation at 1 kHz places a 0.0047 μF capacitor across the crystal, making feedback capacitive and the fequency of the multivibrator RC controlled.

Astable Oscillator

Transistors 900 and Q914 form a common-emitter astable multivibrator. The regenerative feedback paths consist of the common connection of the two transistor emitters and the crystal (Y905) between the collector of Q900 and the base of Q914 for 100-kHz operation, or C904-D904 in parallel with the crystal for 1-kHz operation. Diode D904 is reverse biased for 100 kHz operation by allowing C904 to charge positive at the junction of C904-D904; thus effectively switching C904 out of the circuit. For 1 kHz operation, C904 is forward biased when SW915 connects the —12.2 V supply to the junction of C904-D904, effectively connecting C904 in parallel with Y905. Both circuit conditions are shown in simplified form in Fig. 3-3.

÷ 2 Multivibrator

Transistors Q925 and Q935 form a triggerable bistable multivibrator that divides the astable output frequency by two. This multivibrator drives the output voltage divider and controls the +Pretrigger emitter follower Q953. The time relationships of several points through the calibrator circuit are shown in Fig. 3-4. The illustration is made up of multiple-exposure photographs obtained by externally triggering the test oscilloscope to show the relative time for each waveform. Voltage amplitudes are uncalibrated.

When the calibrator circuit is turned off by setting SW915 to OFF, the voltage at the output connector may either be high or low, depending on the state of the multivibrator at the instant the circuit was turned off. This voltage is a DC level that corresponds to either the maximum or minimum level of the oscillator waveform.

+ Pretrigger Circuit

Transistor Q953 is an emitter-follower with a differentiator circuit that responds to positive signals from the astable circuit when Q925 in the ÷ 2 circuit is cut off. When Q925 is conducting, the anode of D952 is held at approximately —12 volts, preventing any positive signal from being applied to the base of Q953. Thus a + Pretrigger pulse is formed only when the output signal is at ground and Q925 is cut off, allowing D952 to conduct. Emitter-follower Q953, therefore, only passes one + Pretrigger pulse for every 2 cycles of the astable multivibrator.

The equivalent series circuit of the calibrator is a current generator with a choice of two voltages determined by the load and an equivalent source resistance of approximately 450 ohms. The output voltage is reduced when loaded by

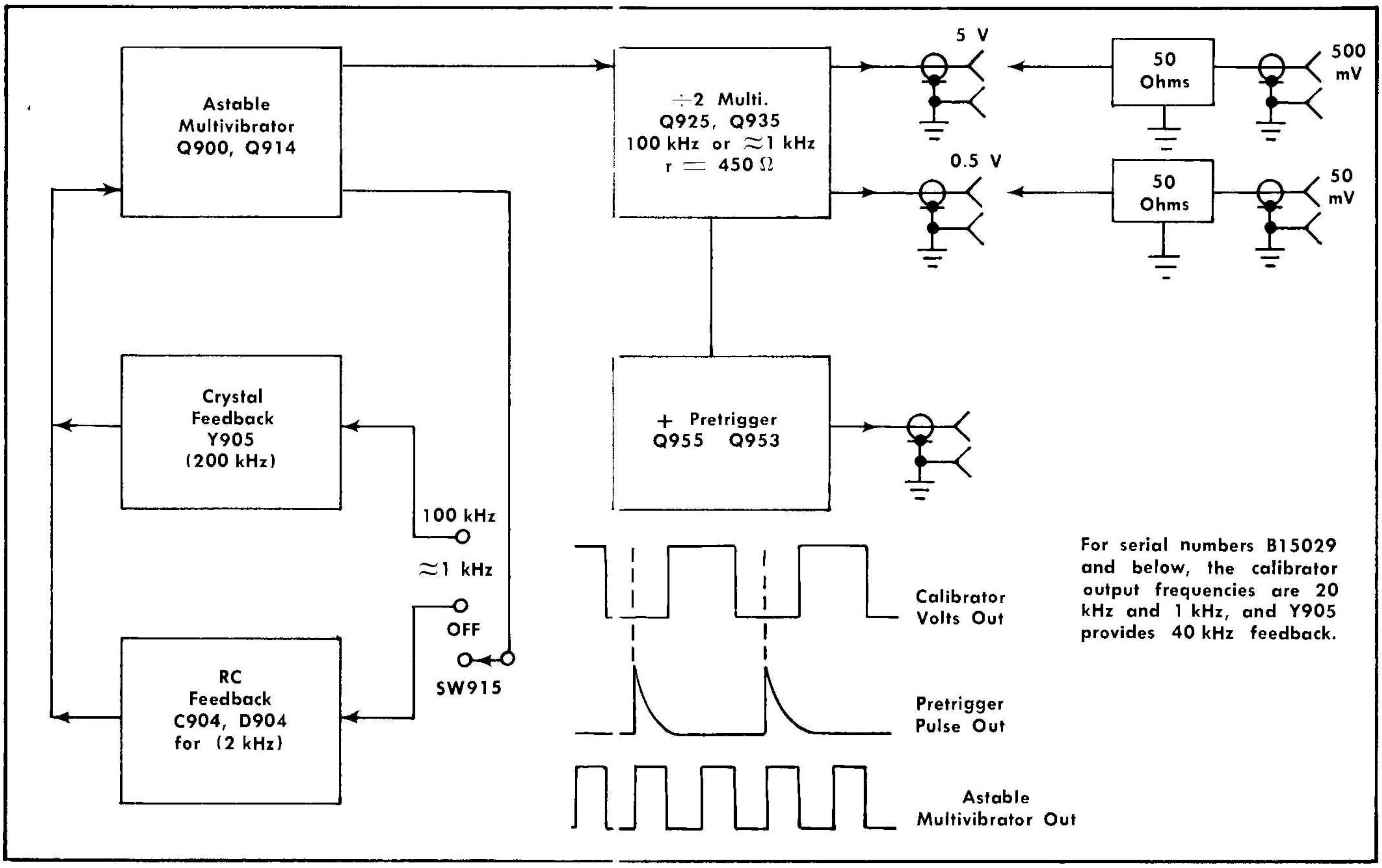


Fig. 3-3. Block diagram of the Calibrator circuit.

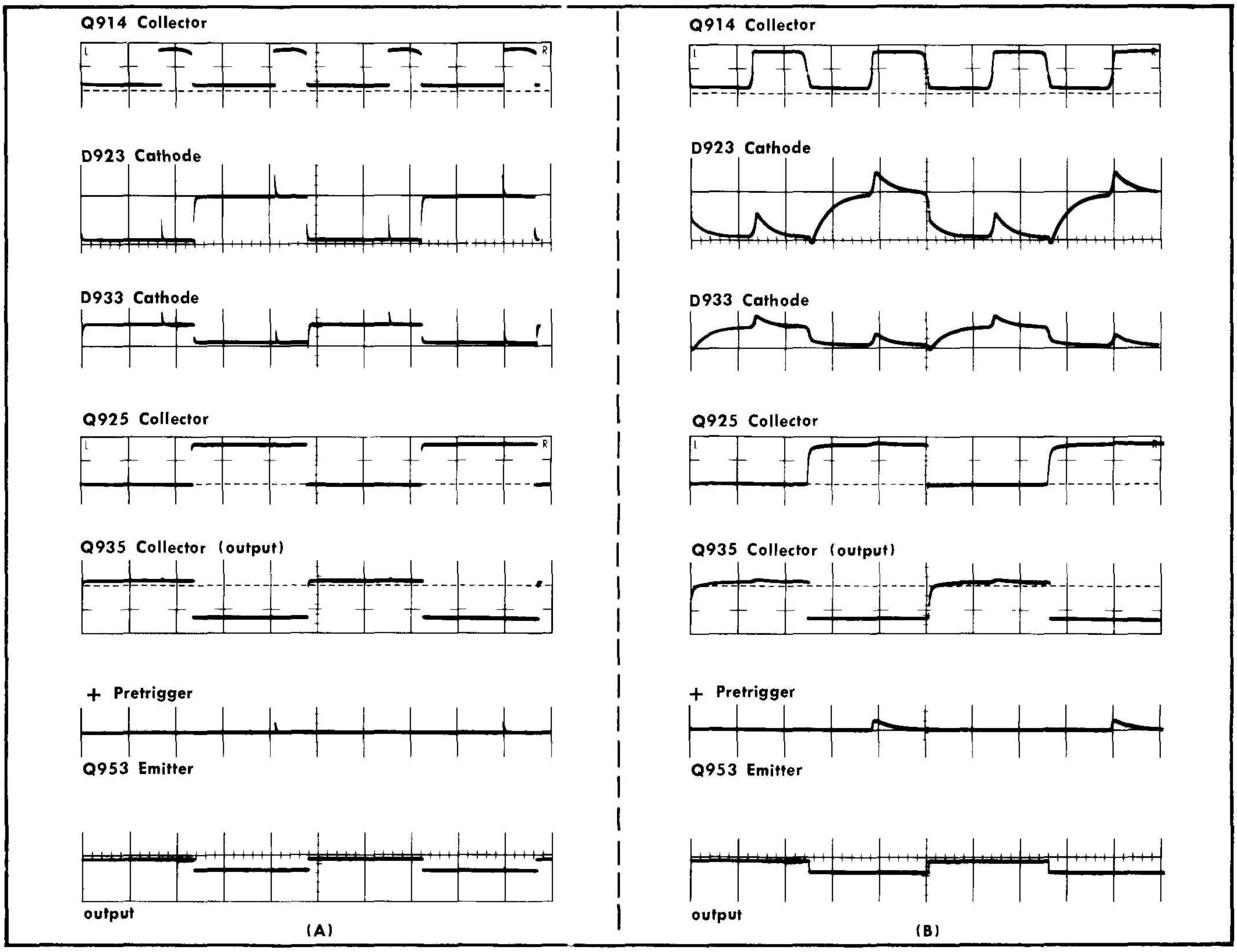


Fig. 3-4. Time relationship of signals appearing in the Calibrator circuit: (A) When set for ∿1-kHz operation; (B) When set for 100-kHz operation.

low resistance loads. When the calibrator is terminated with a 50-ohm load, the output voltage is reduced to either 500 mV or 50 mV, depending on which output jack is used.

DIGITAL AND PROGRAM CONNECTIONS

The standard connections in the Type 568 for transferring signals to and from the plug-in units and the digital unit are shown on the Plug-In Unit connector diagram. Connections for the programming capabilities of the plug-in units are shown on the Program Connectors diagram. These lines connect between rear panel program connectors and special connectors at the rear of each plug-in compartment. In addition to these standard connections the Type 568 also has available connector space on the rear panel for optional input, output and/or program connectors for added programming capability.

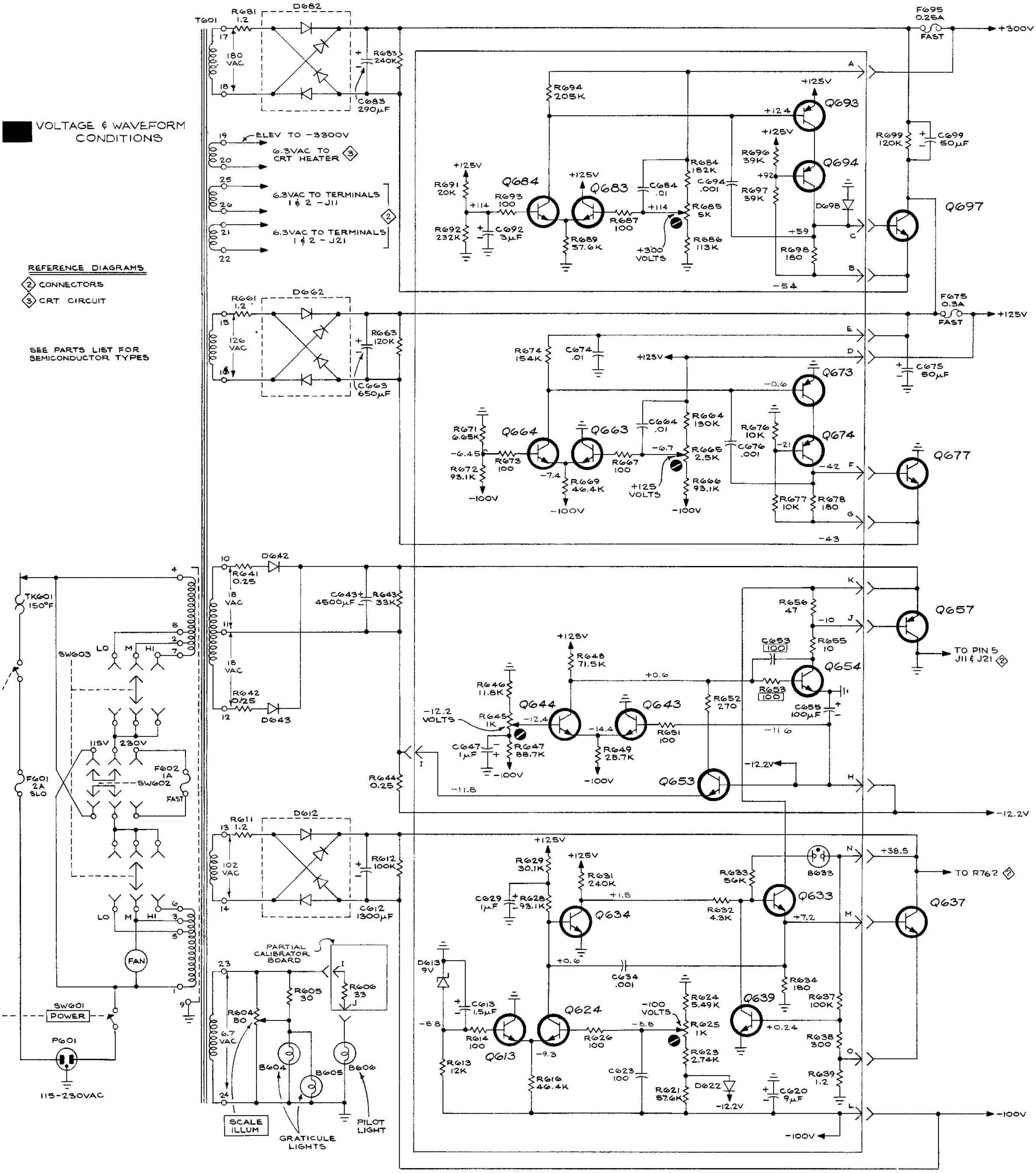
VOLTAGE & WAVEFORM CONDITIONS

REFERENCE DIAGRAMS

2 CONNECTORS

3 CRT CIRCUIT

SEE PARTS LIST FOR SEMICONDUCTOR TYPES

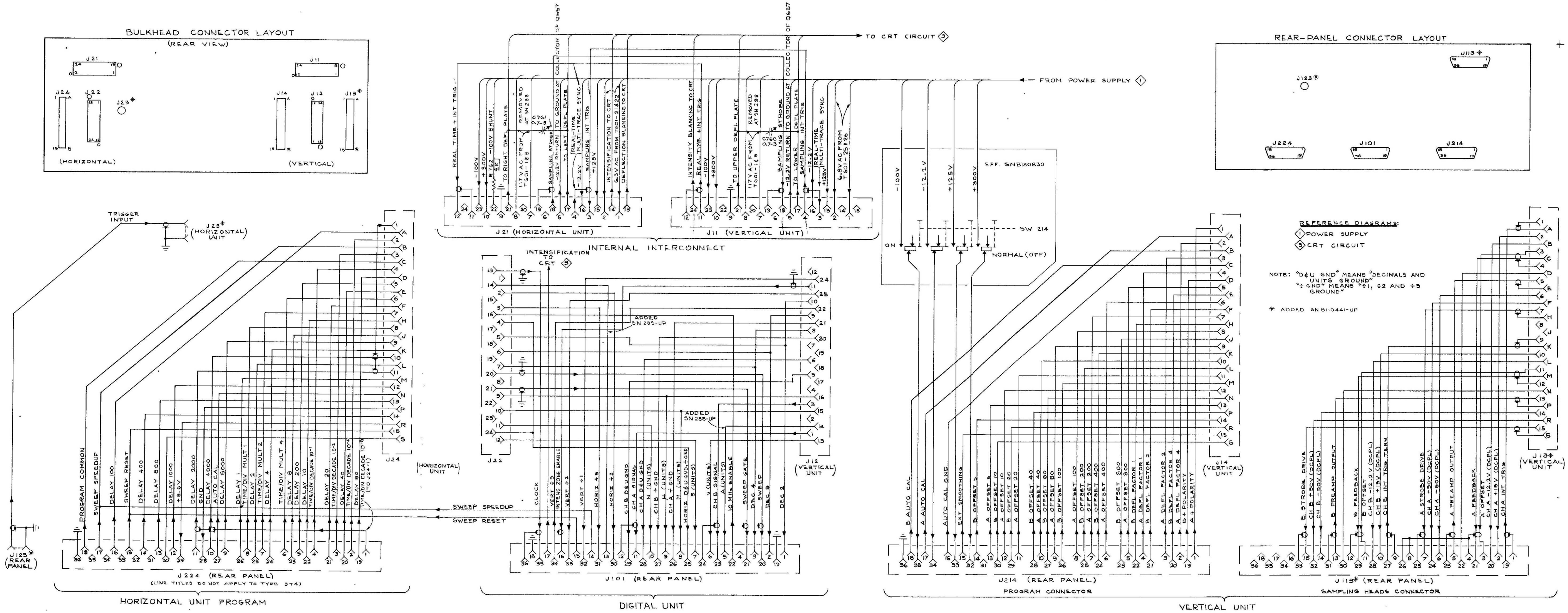


C2

SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS MARKED WITH BLUE OUTLINE.

468

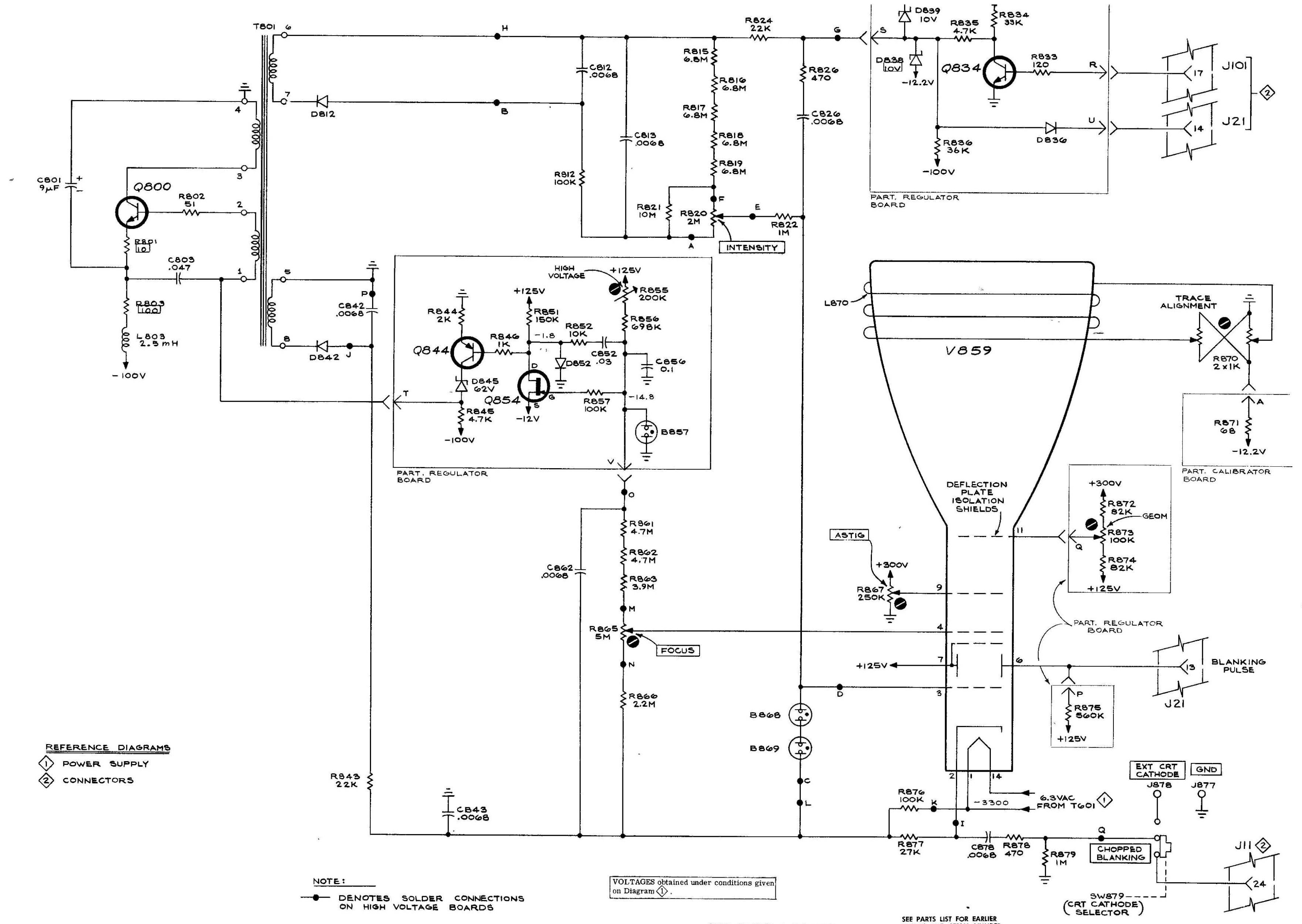
1 POWER SUPPLY



SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS MARKED WITH BLUE OUTLINE.

TYPE 568/R568 OSCILLOSCOPE

CONNECTORS ② 669



REFERENCE DIAGRAMS

1. POWER SUPPLY
2. CONNECTORS

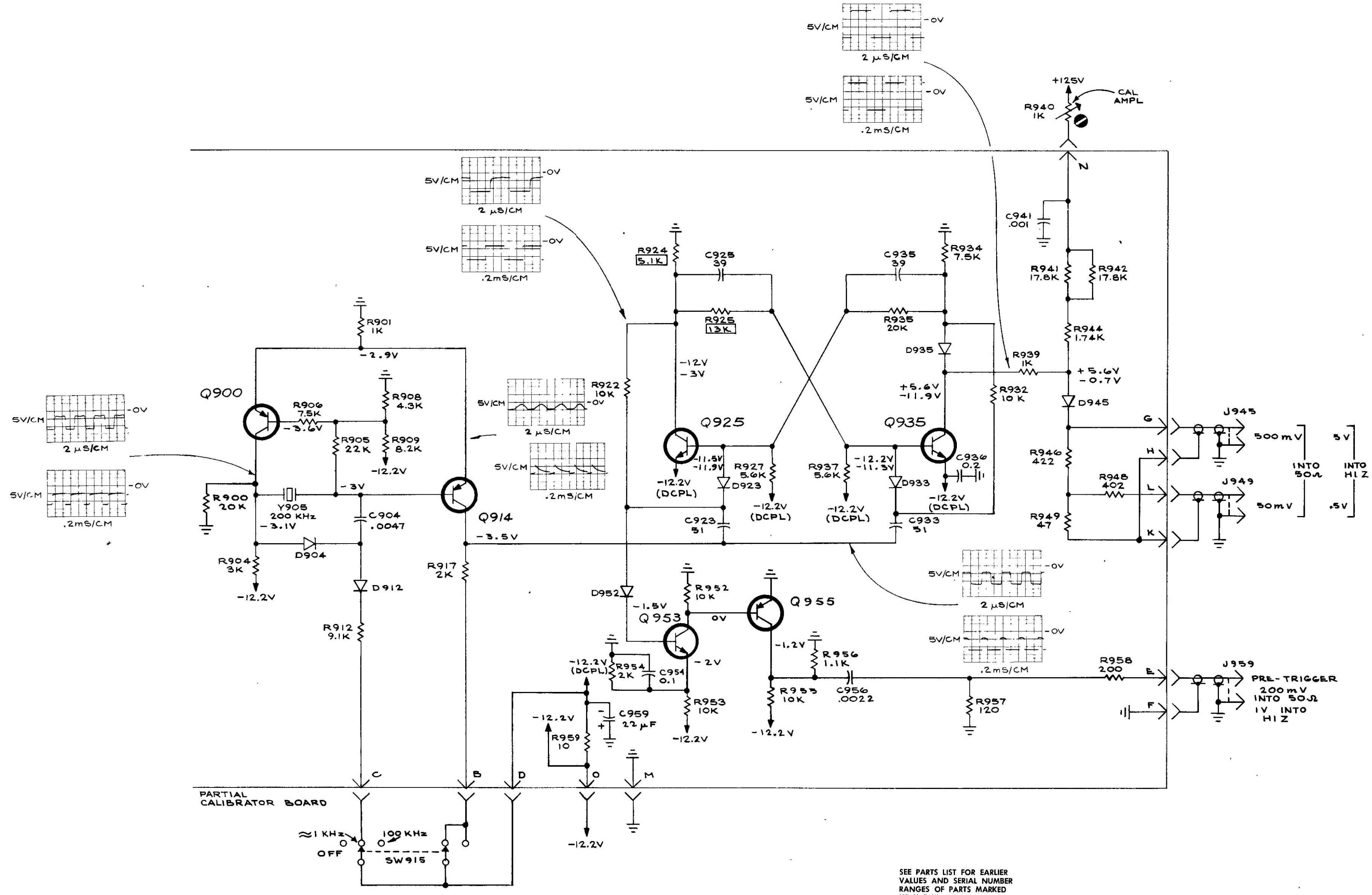
NOTE:

—●— DENOTES SOLDER CONNECTIONS ON HIGH VOLTAGE BOARDS

VOLTAGES obtained under conditions given on Diagram ⟨1⟩.

SEE PARTS LIST FOR SEMICONDUCTOR TYPES

SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS MARKED WITH BLUE OUTLINE.



SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS MARKED WITH BLUE OUTLINE.

VOLTAGES and WAVEFORMS obtained under conditions given on Diagram ⟨1⟩ , except as follows:

VOLTAGES
- Upper: Calibrator OFF, output at 5 volts
- Lower: Calibrator OFF, output at 0 volts

WAVEFORMS
- Upper: Calibrator 100 kHz
- Lower: Calibrator 1 kHz

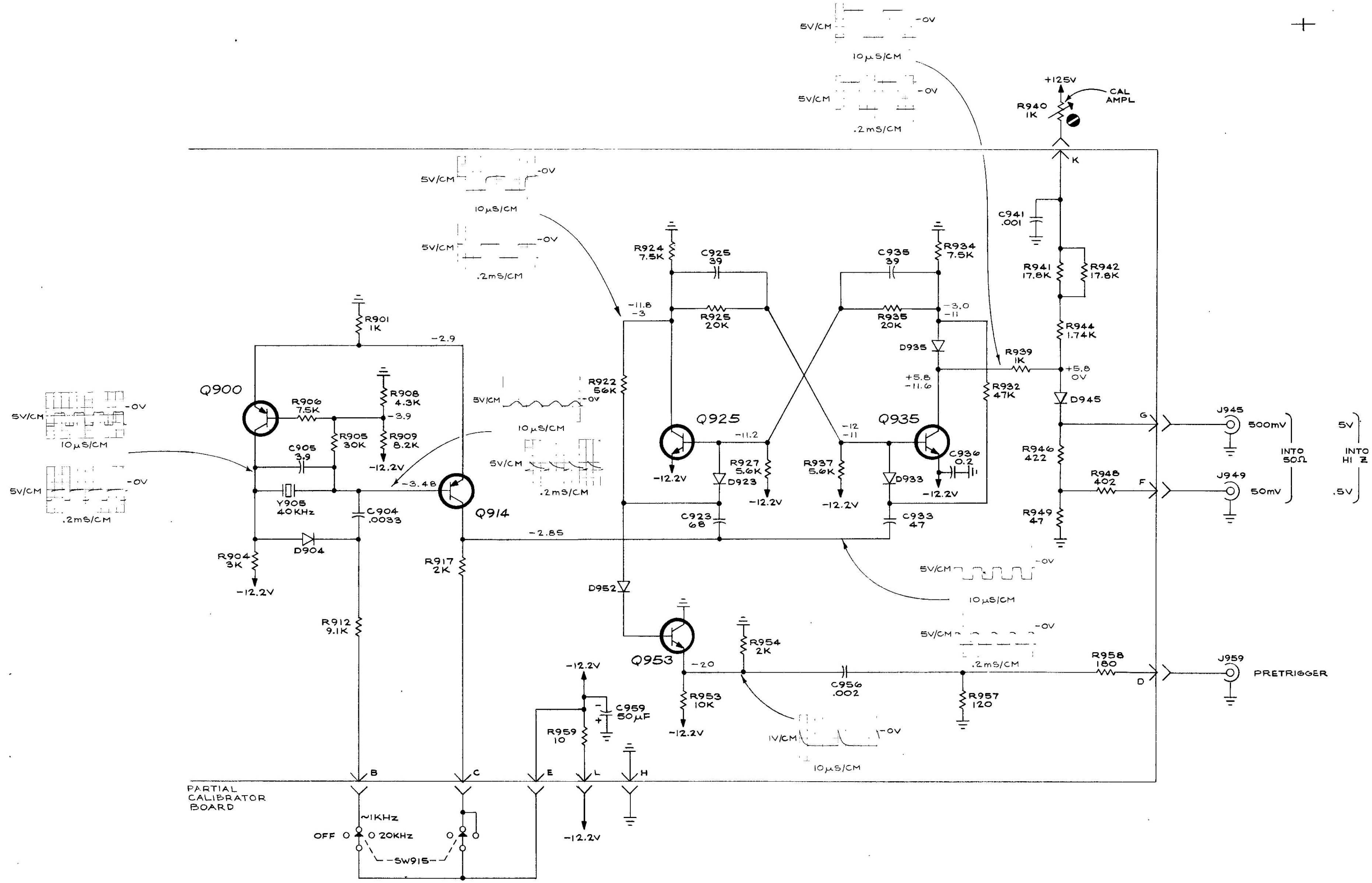
SEE PARTS LIST FOR SEMICONDUCTOR TYPES

670

TYPE 568 OSCILLOSCOPE

⟨4⟩ AMPLITUDE CALIBRATOR

SN B160630-UP



SEE PARTS LIST FOR SEMICONDUCTOR TYPES

VOLTAGES and WAVEFORMS obtained under conditions given on Diagram ⟨1⟩, except as follows:
VOLTAGES
Upper: Calibrator OFF, output at 5 volts.
Lower: Calibrator OFF, output at 0 volts.

TYPE 568 OSCILLOSCOPE

B₂

569

⟨4⟩ AMPLITUDE CALIBRATOR

SN B010100-B150629

MANUAL CHANGE INFORMATION

At Tektronix, we continually strive to keep up with latest electronic developments by adding circuit and component improvements to our instruments as soon as they are developed and tested.

Sometimes, due to printing and shipping requirements, we can't get these changes immediately into printed manuals. Hence, your manual may contain new change information on following pages.

A single change may affect several sections. Sections of the manual are often printed at different times, so some of the information on the change pages may already be in your manual. Since the change information sheets are carried in the manual until ALL changes are permanently entered, some duplication may occur. If no such change pages appear in this section, your manual is correct as printed.

568/R568 EFF SN B240000-up

ELECTRICAL PARTS LIST AND SCHEMATIC CORRECTION

ADD:

C902	281-0510-00	22 pF, Cer, 500 V