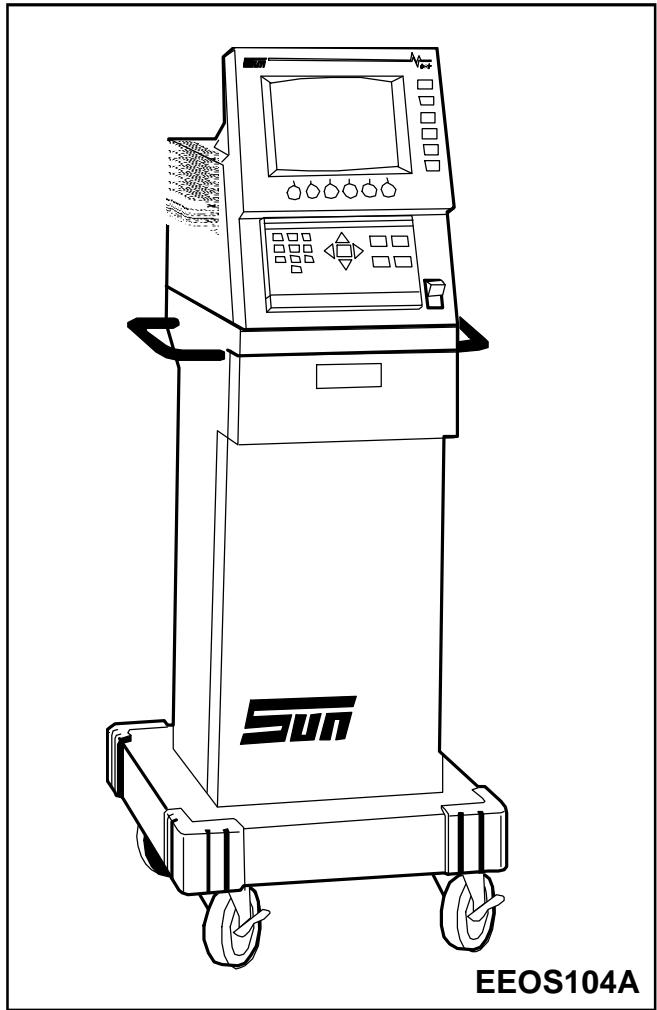


SST 1500 Bid Specification



TEST SCREEN CHARACTERISTICS

- **Primary Waveform:**

RPM Range -- 100 - 9,990 (1 RPM increments)
Dwell Range -- 0° to (360° + No. of cylinders (1° increments)
Grid, Time/Division -- RPM dependent
Grid, Volts/Division -- 50 V

- **Dwell Bar Graph:**

RPM Range -- 100 - 9,990 (1 RPM increments)
Average Dwell Range -- 0° to (360° + No. of cylinders (1° increments)
Ind. Cyl. Dwell Range -- 0° to (360° + No. of cylinders (1° increments)
Ind. Cyl. Percent Range -- 0 to 100% (1% increments)
Bar Graph Range -- 0 - 100% (10% increments)

- **Duty Cycle Bar Graph:**

- 1) Voltage Mode

RPM Range -- 100 - 9,990 (1 RPM increments)
Frequency Range -- 0 - 999 Hz (1 Hz increments)
Voltage Range -- 0 - 15C (0.1V increments)
Voltage Bar Range -- 0 - 15V (0.1V increments)

- 2) Duty Cycle Mode

RPM Range -- 100 - 9,990 (1 RPM increments)
Frequency Range -- 0 - 999 Hz (1 Hz increments)
Duty Cycle Range -- 0 - 100% (1% increments)
Duty Cycle Bar Range -- 0 - 100% (1% increments)
Dwell Range -- 0° - 60° or 0 - 90°

- **Secondary Waveform:**

RPM Range -- 100 - 9,990 (1 RPM increments)
Kv Range -- 0 - 50 kV (1 kV increments)
Grid/Time Division -- RPM dependent
Grid/Volts Division -- 4 kV

- **KV Histogram:**

RPM Range -- 100 - 9,990 (1 RPM increments)
KV Graph Ranges -- 0 - 10; 0 - 15; 0 - 25; 0 - 50kV (1 kV increments)

- **KV Bar Graph:**

RPM Range -- 100 - 9,990 (1 RPM increments)
KV Bar Range -- 0 - 15 and 0 - 30 kV (1 kV increments)
KV MIN/MAX Display Range -- 0 - 50 kV (1 kV increments)

- **Burn Time Bar Graph:**

RPM Range -- 100 - 9,990 (1 RPM increments)
Burn Time Bar Range -- 0 - 2 and 0 - 4 ms (0.01 ms increments)
Burn Time MIN/MAX Display Range -- 0 - 9.99 ms (0.01 ms increments)
Burn Time LIVE Display Range -- 0 - 9.9 ms (0.1 ms increments)

- **Voltage Waveform:**

RPM Range -- 100 - 9,990 (1 RPM increments)
Volts Range -- -15 to +15 (0.1 V increments)
Grid/Time Division -- with ENGINE SYNC, RPM dependent;
with AUTO TRIG, sync selectable (0.5, 1.0, 2.0, 5.0, 10.0
or 20 ms)
Grid/Volts Division -- 5.0 V

- **Lab Scope Waveform:**

RPM Range -- 100 - 9,990 (1 RPM increments)
Volts Ranges -- 0-1.2, 0-3.0, 0-6.0, 0-12.0, 0-30.0, 0-60.0
(dependent upon VOLTS/DIV selected)
Grid Time/Division -- 50, 100, 200, 500 µs
Grid Volts/Division -- 200 mV, 500 mV, 1 V, 2 V, 5 V, 10 V

PRODUCT FUNCTIONS/FEATURES

- **Digital Oscilloscope:** portable 12 V DC powered
- **9-Inch CRT:** displays waveforms, bar graphs and setup screens in an easy-to-read format.
- **Menu-driven test screen selection via keyboard:**
Primary Menu (screens include): primary waveform, primary parade waveform, dwell bar graph, duty cycle/dwell bar graph, duty cycle/voltage bar graph.
Secondary Menu (screens include): secondary waveform, secondary parade waveform, KV histogram, KV bar graph, burn time bar graph.
Diagnostic Menu (screens include): voltage waveform, lab scope waveform, fuel injection waveform, alternator waveform.
Cylinder Test Menu (screens include): power balance waveform, vacuum waveform, cylinder time balance bar graph, cranking amps bar graph, cylinder shorting bar graph, cylinder shorting even/odd bar graph.
- Fully adjustable lab scope waveform screen with single or dual trace scope.
- **Simplified Keyboard:** keys are organized in logical groupings and color-coded for easy recognition; variable function keys are clearly marked on screen.
- **Memory:** up to 16 screens can be stored in memory, then recalled for reference and evaluation.

SST 1500 Bid Specification

TEST SCREEN CHARACTERISTICS

• Fuel Injection Waveform:

RPM Range -- 100 - 9,990 (1 RPM increments)
Grid Time/Division -- RPM dependent
Grid Volts/Division -- 20 V

• Alternator Waveform:

RPM Range -- 100 - 9,990 (1 RPM increments)
Volts Range -- -15 to +15 (0.1V increments)
Grid Time/Division -- With engine sync, RPM dependent
Without engine sync, selectable (0.5, 1.0, 2.0, 5.0, 10.0 or 20 ms)
Grid Volts/Division -- 100 mV

• Power Balance Waveform:

RPM Range -- 100 - 9,990 (1 RPM increments)
Engine Degrees/Major Division (between grid lines) -- 90° for 4-stroke engine; 45° for 2 stroke cycle engine
Relative Amplitude/Major Division (between grid lines) -- selectable (200, 500, 1000, 2000, 5000 or 10,000) used to increase or decrease amplitude of waveform for comparison and analysis

• Vacuum Waveform:

RPM Range -- 100 - 9,990 (1 RPM increments)
Average Vacuum Range -- 0.0-30.0 in. Hg. (0.1 in. Hg increments)
Engine Degrees/Major Division (between grid lines) -- 90° for 4-stroke cycle engine; 45° for 2-stroke cycle engine
Vacuum DC Coupling/Major Division (between grid lines) -- selectable (10 in. Hg or 33.8 kPa)
Vacuum AC Coupling/Major Division (between grid lines) -- selectable (0.1, 0.2, 0.4, 0.8, 2.0, or 4.0 in. Hg); or (0.3, 0.6, 1.4, 2.7, 6.8 or 13.5 kPa)

• Cylinder Time Balance Bar Graph:

RPM Range -- 100 - 9,990 (1 RPM increments)
AVG TIME Range -- 0 - 99.99 ms (0.01 ms increments)
TIME (ms) Range -- 0 - 99.99 ms (0.01 ms increments)

• Cylinder Shorting Bar Graph:

RPM Range -- 100 - 9,990 (1 RPM increments)
Timer Range -- 0 - 31s (1s increments)
RPM DROP Range -- 0 - 999 (1 RPM increments)
TIME (SEC) Range -- 0 - 31s (1s increments)
RPM Bar Ranges -- 0 - 150 (1 RPM increments); 0 - 300 (2 RPM increments)

• Cranking Amps Bar Graph:

RPM Range -- 100 - 9,990 (1 RPM increments)
Individual Cylinder & Average Amps Range -- 0 - 500 (1 ampere increments)
Cylinder Bar Ranges -- 0 - 150 amps (approx. 1 amp increments); 75 - 225 amps (approx. 1 amp increments); 150 - 300 amps (approx. 1 amp increments)

OPERATING SPECIFICATIONS

- **Operating Power Requirements:** DC Operation-- 9 to 16 volts, 12 volts, negative ground.; AC Operation -- 120 volts, 0.55 ampere, 70 Watts; or 240 volts, 0.27 ampere, 70 Watts;
- **Operating Temperature Range:** 35° to 110° F. (1.7° to 43° C.)
- **Storage Temperature Range:** -20° to +130° F. (-29° to 54° C.)
- **Relative Humidity Range:** 0 - 85% non-condensing

- **Weight:** Oscilloscope (instrument only): 32 lb. (19 kg)
- **Dimensions:** 16.7 in. (425 mm)H x12.8 in. (325 mm)W x 23.1 in. (587 mm)D.
- **Power:** 12 volt DC power
- **Engine Test Capabilities:** no. of cylinders 1-16; cycles 2 or 4-stroke.

STANDARD ACCESSORIES

- MT3000-300A HEI Pickup (GM)
- MT3000-320 Capacitive Pickup
- MT60A08 Inductive Pickup
- MT3000A-200 Ignition Test Lead Set
- MT3000-210A DC Power Lead
- MT3000230 Lab Scope Lead

OPTIONAL ACCESSORIES

- EEKR104A Roll Stand
- EEKR106A Test Lead Boom
- Universal AC Power Supply (90 - 264 VAC, 50/60 HZ)
- EERC101A Remote Control
- MT6070 Fuel Injector Adapter Set
- MT3000A-340A Distributorless Secondary Pickup Assembly
- MT3000-341A Distributorless Ignition Secondary Lead Expander
- MT3000-400B Vacuum Probe
- MT3000-410A Amp Probe
- MT3000-420A Power Balance Probe
- MT3000A-440 Low Amps Probe
- MT3000-310B Honda Coil Adaptor
- MT3000-330 Chevrolet Nova IIA/Toyota Adaptor
- MT3000-430AS Back Probe Adaptor Set (3)
- YA 859A Ford and GM CoilAdaptor Set
- THX376 GM External Coil Adaptor
- THX387 TFI Coil Adaptor (Ford)
- THX388 GM Micropak® Coil Adaptor
- MT1665 60 Adaptor for GM Throttle Body Injectors (TBI)
- MT1665 70 Adaptor for Bosch Fuel Injectors (TBI)
- YA3601 Ignition System Diagnostic Harness (GM Integrated Direct Ignition System – IDI)
- MT30124 Jumper Leads (24") Ignition System – IDI)

SAFETY INFORMATION

- Products may have inherent risk to the user.
- Read, understand and follow all safety messages on the product, user manual and vehicle to be serviced before operating Model SST 1500.
- *Improper use may result in injury.*



Specifications subject to change without notice

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