

# HP Archive

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On-line curator: Glenn Robb

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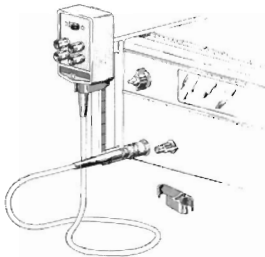
## SERVICE TIPS AND HINTS

HP MODEL P486A THERMISTOR MOUNT  
Serials above 1408

The P486A has joined ranks with the adjustables! Like the HP Model 478A Thermistor Mounts, P486A's now coming off the assembly line (units with serials above 1408, to be exact) have a compensating screw installed. This means you can thermally rebalance the mount if you've accidentally overloaded it. Just a word of sage counsel though... As fine as the compensating feature is, it can't bring back badly damaged thermistors. Be prudent with input power - stay within specs.

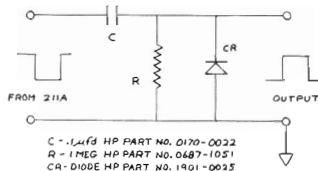
HP MODEL 740A DC  
STANDARD, DIFFERENTIAL VOLTMETER

Maybe you've already thought of this handy idea... If you use your 740A with the INPUT and OUTPUT boxes close to the front panel, a convenient way to manage the two boxes and cables is to secure them to the 740A handles with plastic probe holders (HP Part No. 5040-0404). The holders are black plastic and simply press onto the 740A handles - no hardware needed. See sketch below.



## HP MODEL 211A SQUARE-WAVE GENERATOR

Here's a handy circuit you can construct to reverse the polarity of the 211A. The values of C and R in the circuit shown below are typical and will give fairly good waveform from approximately 1 KC to 1 MC. Vary the values for better waveforms at specific frequencies.



## HP MOSELEY DIVISION X-Y RECORDERS

Change Notice for  
Platen Cleaning Procedure

Your AUTOGRIP\* losing its grip? If so, it's probably because you followed the cleaning instructions recommended in the December/January issue of Bench Briefs. But, first, a little background on the story.

In case you aren't familiar with the trademark, AUTOGRIP\* is a unique platen paper hold-down system used on Moseley X-Y recorders where the paper is held down electrostatically. The only maintenance required of the AUTOGRIP\* is an occasional cleaning of the platen - we recommended Jet-Spray Bon Ami for this job.

Alas.....Jet-Spray Bon Ami is a fine product, but not for the platen. It has been reported and verified that, with repeated usage, the Bon Ami will lessen the holding capabilities of the AUTOGRIP\*. It seems as though silicones from the Bon Ami are built up on the table surface. The silicones then act as an anti-static agent - just what we don't need for a device, the operation of which is based upon electrostatic forces!

Happily, the platen can be fully restored to full grip by simply washing it with warm soapy water followed with a clear water rinse. Use this cleaning procedure in the future.

\*Trade-mark, Patent Pending

## HP PRODUCT TRAINING NEWS!!

The acquisition of newer and better electronic instruments usually makes all of our jobs a little bit easier. To derive the most benefit from these instruments, however, we must learn to use and maintain them. This challenge is very much on our minds at Hewlett-Packard, as is our responsibility to help you meet it.

A Product Training program is conducted at the Hewlett-Packard factory in Palo Alto for just this purpose. The program for the next quarter is listed below. Contact your HP field engineer for details on enrollment, motel reservations, etc.

- July 19-23 HP and Harrison Solid State Power Supply Maintenance, and Practical Approach to Transistorized Circuitry
- Aug. 16-20 8600 Series Signal Generator and 690 Series Oscillator Maintenance
- Aug. 23-27 Advanced Microwave Techniques
- Sept 13-17 Dymec Data Acquisition System Maintenance
- Sept. 13-17 Analog Voltmeter and Wien Bridge Oscillator Maintenance
- Sept. 20-24 HP and Dymec Digital Voltmeter Maintenance.
- 



There is another excellent Illustrated Parts Identification List available - this time for the HP Model 526A Super High-Frequency Signal Generator. As usual, this document includes exploded views of the major mechanical assemblies. You'll find the package of real value for assembly, disassembly, and replacement parts identification. If you would like a complimentary copy of the Illustrated Parts Identification List, circle 626A on the SERVICE NOTE ORDER FORM.

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## SERVICE NOTES

Here are the latest Service Notes.....all designed to insure top-notch performance from your HP family instruments. If there are any you would like to receive, circle the appropriate number of each under SERVICE NOTE ORDER FORM.

- 130C-2 HP Model 130C Oscilloscope, serials below 445- Improved low frequency response and common mode rejection.
- 130C-3 HP Model 130C Oscilloscope, serials below 438- Improved power supply reliability.
- 140A-2 HP Model 140A Oscilloscope, modifications for updating the Oscilloscope.
- 1402A-2 HP Model 1402A Dual Trace Amplifier, serials below 451-00476. Improved trigger amplifier reliability.
- 1420A-1 HP Model 1420A Time Base, serials below 441-00668. Improved trace position stability.
- 160B-4 HP Models 160B/BR and 170A/AR Oscilloscopes, all serials. Installation of AC fan motor.
- 175A-5 HP Model 175A Oscilloscope, serials below 413-02326. Modification of 175A for 1784A recorder plug-in.
- 175A-6 HP Model 175A Oscilloscope, serial prefix below 450- . New vertical output printed circuit board 175A-65W.
- 175A-7 HP Model 175A Oscilloscope, all serials. Improved sweep operation.
- 1750B-1 HP Model 1750B Dual Trace Amplifier, serials below 435-00176. Increased frequency response.
- 185B-4 HP Model 185B Sampling Oscilloscope, serials below 432-01151. Improved sweep linearity.
- 187B-1D HP Model 187B Dual Trace Amplifier, installation of matched probe diodes.

- 200CD-8 HP Model 200CD Oscillator, all serial numbers. Distortion reduction.
- 3440A-5 HP Model 3440A Digital Voltmeter, serials 429-02226 and below. A3Q18 and A9Q6 replacement parts.
- 412A-9 HP Model 412A Vacuum Tube Voltmeter. Prevent high-voltage flash-over between probe set screw and operator.
- 612A-5B HP Model 612A Signal Generator, serial 329 to serial 299-01815. Conversion from selenium to silicon rectifiers (HP Part No. 612A-95B).
- 651A-1 HP Model 651A Test Oscillator, serials 434-00675 and below. Corrections to Operating and Service Manual.
- 682A-4A HP Model 680 Series Electronic Sweep Oscillators, modification and adjustment procedures.
- 230A-3 BRC 230A Power Amplifier, serials below 727. Detent modification kit (Boonton Stock No. 00230-80002).
- 260A-1 BRC Model 260A Q Meter, all serials. Power supply modification.

#### MISSING INSTRUMENTS

There appears to be heavy traffic on the test equipment black market. Following is a list of stolen instruments

Moseley 2D X-Y Plotter  
S/N 52, stolen from Jet  
Propulsion Laboratory  
4800 Oak Grove Drive,  
Pasadena, California.  
Attn: Fred Menninger



Sanborn Visette S/N  
3203, stolen from Egon  
Waltuch, M.D., 68-61  
108th Street, Forest  
Hills, New York.

Sanborn Model 300 Visette S/N 2621, stolen from  
Clarence Aggrey, M.D., Alvin Sellers, M.D., 465  
North Roxbury Drive, Beverly Hills, California.

Dymec 2222A, Saw Tooth Generator, S/N 125-00048,  
missing from Microwave Chemicals Laboratory, Inc.,  
282 Seventh Avenue, New York 1, New York.

If you have any clues to the equipment listed, please  
contact the appropriate firms listed or your local  
HP Sales Office or us at HP Customer Service.

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#### Cut Along Dotted Line

**SERVICE NOTE ORDER FORM....** Here is a list of the latest Service Notes to help insure a maximum usage from your HP family instruments. To obtain a copy, simply circle the Service Note number you wish. Cut along dotted line, enclose this portion of Bench Briefs in an envelope, and send it to your nearest HP Field Office or to us at HP Customer Service. In Western Europe send order to: Hewlett-Packard S. A., 54 Route des Acacias, Geneva, Switzerland.

Do you have a friend who would enjoy receiving Bench Briefs? If so, please give us his name and address.

Name \_\_\_\_\_ Address \_\_\_\_\_

HP	HP	HP	BOONTON
626A	160B-4	187B-1D	230A-3
130C-2	175A-5	200CD-8	260A-1
130C-3	175A-6	3440A-5	
140A-2	175A-7	412A-9	
1402A-2	1750B-1	612A-5B	
1420A-1	185B-4	651A-1	
		682A-4A	

HEWLETT-PACKARD  
WESTERN SERVICE CENTER  
395 Page Mill Road  
Palo Alto, California 94306



DONALD E BURGESS  
GENERAL DYNAMICS/CONVAIR  
PO BOX 166, MZ 142-00  
SAN DIEGO 12, CALIFORNIA

665NE  
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