

NOTE

The TU-7 was redesignated 1M1 and later given the number 067-0521-00.

John Mulvey
Product Technical Information
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TU-7/IM1

NOMENCLATURE CHANGE

FEN 1-29-65

The TU-7 is now called the IM1. The change properly groups it with the new series 1 plug-ins.

The IM1 and TU-7 are electrically the same so the schematics are alike and the Manuals have the same part number (070-407).
--Earl Williams

CONCEPT AND USE NOTES

FEN 10-23-64

The IM1 is electrically identical to the TU-7.

The IM1 is superior to the TU-2/P/K/107 and is being used exclusively in Beaverton Manufacturing for alignment of all 530, 540, and 550 Series main frames.

The theoretical leading-edge shape of the P Unit output pulse and IM1 output pulse is approximately the same. However, since the IM1 has a 50Ω source Z as compared to the P Unit's 170Ω source, the IM1 provides an effectively faster drive to the vertical amplifier input and will emphasize transient response deficiencies but, in turn, you can tune the vertical deflection system closer to optimum performance.

Where it is possible that wide-band plug-in units, such as the CA, K, and L, may be used interchangeably in 540(A)(B) and 544, 546, and 547 scopes, you should follow these procedures to avoid transient response discrepancies:

1. Use the IM1 exclusively for aligning main frames.
2. Align plug-ins in a 544, 546, or 547. A TU-5, TU-5/105 adapter and a 50Ω 2.5:1 attenuator (011-076) are a good pulse source.

The reason that a "one-way" plug-in tuning procedure is necessary for full compatibility is because

the "bandpass spoiler" switch and circuitry in the 544, 546, and 547 does not "roll-off" the bandpass to where it has the same frequency response characteristics as a 540 30Mc vertical. For example, a K or L Unit at 50 mv/cm, in combination with a 544, 546, or 547, can have a typical bandpass capability of 40Mc. Thus the 544, 546, or 547 has greater transient response "resolution" than the 540(A)(B).

Some advantages of the IM1 over the P Unit are:

1. Provides better possibility of "standards" traceability for transient response because:
 - (a) One unit performs all the functions of TU-2, P, K, and 107.
 - (b) 50Ω pulse-source allows use of sampling system to observe pulse at input to scope vertical amplifier.
2. Provides a (+) and (-) pulse.
3. Higher pulse rep rate provides a brighter CRT display.
4. Variable gain for timing-markers.
5. Provides a more optimum load for -150v regulated supply.

In the near future, we will elaborate on the IM1 concept and use-procedures.
--Earl Williams

TU-7

GENERAL PARTS INFORMATION

NEW STYLE KNOBS--CRACKING PROBLEM

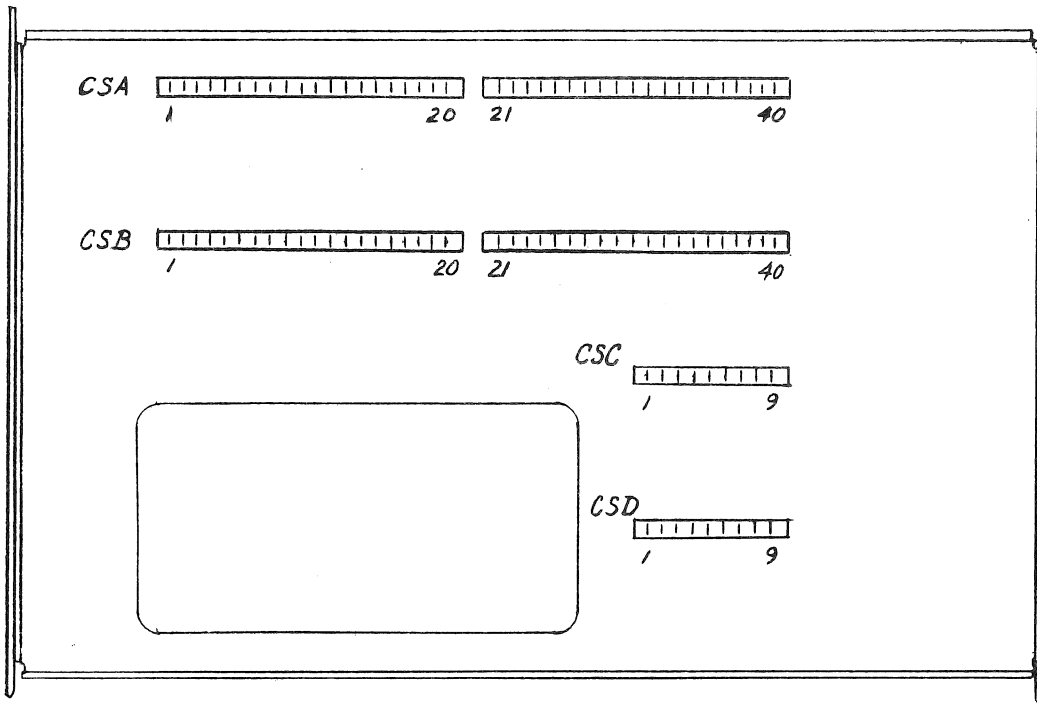
FEN7-10-64

We've had some cases of knobs 366-220 and 366-254 cracking a few days after installation. The trouble has been traced to use of too much force when tightening the set screw, and the fact that the outer shell is being threaded along with the insert. These knobs will be changed to have the shell hole size increased so set screw force is not applied against the shell body. Production use of the re-worked knobs should start in a couple months.

Until the new knobs are available, it would be a good idea to ream the hole in the plastic a little larger before field installation of a replacement knob.

366-220 is the 5/16" charcoal knob with 0.7" skirt; 366-254 is the same but with a 5/32" hole in the end for a screwdriver adjustment.

STRIP LAYOUT - (1 M 1)
067-0521-00 (TU-7)



CHASSIS 610-240

MOD #	M9319
DATE	4-8-66
KIT #	ALL

