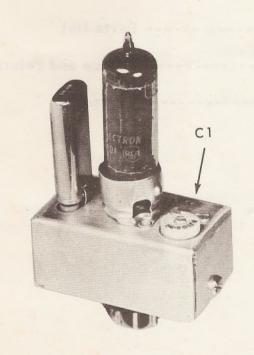
# CALIBRATOR 35



(1|0664)

MANUAL # 183-32 PRICE \$0.50

PAGE 1

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#### SECTION I

#### 1-1 UNPACKING - CLAIMS

DAMAGE: This equipment has been carefully packed for safe arrival IF PROPERLY HANDLED ENROUTE.

### (a) OBVIOUS DAMAGE

If the carton showed signs of rough handling, you should have made such notation on the delivering carrier's receipt. If inspection shows obvious damage such as loose parts, broken parts, etc., the delivering carrier must be contacted immediately and a joint inspection made with this carrier's agent. The joint inspection is NOT a claim but an acknowledgement that the equipment was damaged. The form does not assign responsibility for the damage, but prepares the foundation on which to file a claim. The carrier will then acknowledge or decline the claim at their main office and a local agent may not decline to enter a claim. If the shipment was parcel post, contact your local postmaster for the necessary forms and he will help you enter the claim.

## (b) HIDDEN DAMAGE

In many cases the carton may not be damaged but the equipment may suffer internal damage not obvious on delivery of the shipment. The procedure for filing the claim would be the same as above.

Remember, the responsibility for safe delivery rests with the carrier. The responsibility in obtaining reimbursement for for damage rests with YOU. Prompt action on your part will speed adjustments. Our warranty in no way covers malfunction or damage which is a result of improper handling by a carrier. Under no circumstances should you return merchandise to your dealer before instigating the necessary forms. To do so can jeopardize your investment and the costs of necessary repairs may be a burden you will have to assume. After joint inspection forms have been completed, contact your dealer for assistance.

#### SECTION II

#### 2-1 INSTALLATION

Installation of the calibrator requires only a minute. Simply open the lid of the GALAXY and plug in the calibrator in the open octal (8 pin) socket near the rear of the chassis. The calibrators are aligned at the factory in a test set which should be quite close in production units and

## SECTION II

## 2-1 INSTALLATION (Con't)

further alignment is not necessary in most cases.

- In the event you wish to calibrate the crystal exactly, use an accessory receiver having a built in calibrator or otherwise accurate calibration. Tune it to an even 100 Kc. frequency in the tuning range of the GALAXY Set the GALAXY dial to INDICATE the same frequency, turn the MIC gain to minumum on the GALAXY, place the FUNCTION SWITCH TO TUNE, and adjust the panel CAL of the GALAXY until the signal is zero beat in the test receiver. Now turn the FUNCTION switch of the GALAXY to CAL and adjust trimmer C1 on the calibrator chassis until the signal in the GALAXY receiver is heard to zero beat.
- A less complicated method which is satisfactory for normal accuracy is to tune the GALAXY receiver to 7335 Kc. Canadian time station CHU is on this frequency and can be heard at most times. Set the GALAXY dial to indicate 7335 Kc., then adjust the panel CAL control to receive the signal zero beat. This then permits the operator to tune the dial of the GALAXY to 7300 Kc., and adjust trimmer C1 of the calibrator until the signal from the calibrator is zero beat.

#### SECTION III

## 3-1 RESISTANCE CHART

PINS # 1 through #6 show open circuit

PIN #7 shows 0 (short circuit)

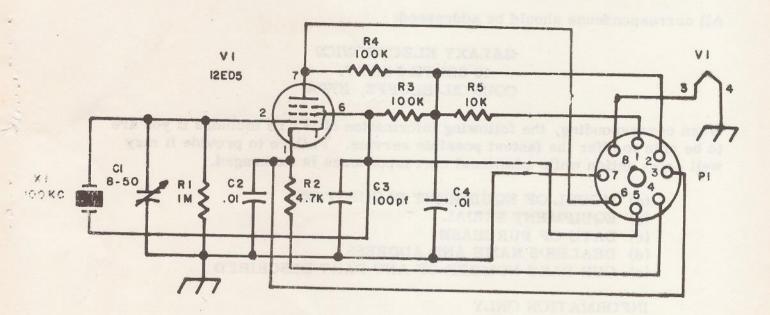
PIN #8 shows 4 Ohms

These measurements were made with the calibrator removed from the equipment and made with the small chassis as the common reference point. Checks were made with a Hewlett Packard 410B VTVM

Installation and use described is correct for the GALAXY III or V.

## 4-1 SCHEMATIC

## 100KC XTAL CALIBRATOR



DATE 10-6-64 DRAWN BY JAT. APPROVED BY DR.S.

## SECTION V

## 5-1 PARTS LIST

| Capacitors    |                |                                   |         |
|---------------|----------------|-----------------------------------|---------|
| C No.         | Description    | Part No.                          | Price   |
| C1            | 8-50 PF NPO    | 26-5                              | \$ 0.83 |
| C2, C4,       | .01 Ceramic    | 20-5                              | 0. 24   |
| C3            | 100 PF         | 22-21                             | 0, 16   |
| Resistors     |                |                                   | 4, 20   |
| R1            | i meg 1/2 watt | 10-10                             | 0,12    |
| R2            | 4.7 K 1/2 watt | 10-36                             | 0.12    |
| R3, <b>R4</b> | 100K 1/2 watt  | 10-32                             | 0.12    |
| R5            | 10K 1/2 watt   | 10-56                             | 0.12    |
| Tubes         |                |                                   |         |
| VI            | 12ED5          | and not also see top may also see | 1.34    |
| Crystal       |                |                                   |         |
| X1            | 100 KC Crystal | 117-5                             | 9.30    |
| Miscellaneous |                |                                   |         |
|               | Crystal Socket | 64-2                              | En 4    |
| P1            | 8 Pin Plug     | 109-1                             | 0.13    |
|               |                | 2001                              | 0.20    |

#### SECTION VI

#### 6-1 SERVICE INFORMATION

All correspondence should be addressed:

## GALAXY ELECTRONICS 10 SOUTH 34th ST. COUNCIL BLUFFS, IOWA

When corresponding, the following information MUST be included if you are to be able to offer the fastest possible service. Failure to provide it may well delay action while additional correspondence is exchanged.

- (a) MODEL OF EQUIPMENT IN QUESTION
- (b) EQUIPMENT SERIAL
- (c) DATE OF PURCHASE
- (d) DEALER'S NAME AND ADDRESS
- (e) OUR PART NUMBER OF ANY PART DESCRIBED

#### INFORMATION ONLY

If only information is desired, address the latter to the attention of the "TECHNICAL DEPARTMENT", stating the exact nature of the problem as briefly as possible, describing parts referred to by our part numbers and listing all measurements taken and effects observed. A brief, concise letter will be helpful.

## PARTS ONLY REQUIRED NOT IN WARRANTY

In the event you know exactly what part or parts are required, we prefer that you order them through your dealer; however, whenever possible, we will ship direct where your check, covering parts cost and postage, is included. Where not included, we will ship C.O.D. We do not offer a billing service.

## PARTS ONLY REQUIRED IN WARRANTY

Where possible, order parts through your dealer; however, to expedite, we can usually ship from our factory. HOWEVER, for parts to be shipped from our factory on an exchange-in-warranty basis, we MUST have your warranty card on file. It is therefore IMPORTANT that you mail in your warranty card as soon as possible. On requests for shipment of parts in warranty, where no card is on file, there may be a delay in order to verify warranty with your dealer. Where verification of warranty is in order, we will normally ship replacement parts with a special return label for the defective part or parts.

### 6-2 RETURNING EQUIPMENT FOR SERVICE

Do NOT ship equipment to us without prior authorization and special return labels. Doing so will usually cause delay.

When shipping equipment, be SURE it is insured with the carrier for compensation against possible shipping damage. We do NOT assume any responsibility for repairs necessary due to shipping damage. Units, received in damaged condition, may be delayed while we file and process a claim to protect your interests. This is an undesirable but unavoidable situation. It is best avoided by adequate packing. Also, poor packing may result in the carrier rejecting the claim, in which case, you will bear the burden of repair costs. It is helpful and expedite if you will mail an advance letter of the forthcoming shipment, listing complaints in detail and packing a copy in with the equipment. BE SURE TO LIST ALL REQUIRED INFORMATION OF DEALER, DATE OF PURCHASE, ETC.

## PREPAY ALL SHIPMENTS TO US.

Where equipment is repaired and parts or labor are not in qwarranty, the equipment will be returned with costs collected by the carrier on delivery. We offer no billing service.

#### SECTION VII

#### 7-1 WARRANTY

GALAXY ELECTRONICS warrants each new product manufactured by it to be free from defective material or workmanship and agrees to remedy any such defect or to furnish a new part in exchange for any part of a unit of its manufacture which under normal installation, use and service discloses such defect, provided the unit is delivered by the owner to GALAXY ELECTRONICS or such repair station as may be designated by us WITH ALL TRANSPORTATION CHARGES PAID, and provided that examination, in our judgment, thus discloses it is defective. Component parts, with the exception of tubes, are warranted for 1 year, and tubes and labor for 90 days, from the date of sale to the original purchaser.

This warranty does not extend to any of our products which have been subjected to misuse, neglect, accident, incorrect wiring not our own, improper use or installation. Nor does the warranty cover improper repairs, adjustments, accessories not of our manufacture, or where the serial has been removed, defaced or changed. We do not authorize the purchase of replacement parts by the owner, to replace parts covered by our warranty, nor will we reimburse the owner for such unauthorized purchases.

This warranty applies only to the original purchaser and is not transferable.