

NOW, AN EXCITING NEW 2KC.
MECHANICAL FILTER MODIFICATION KIT
IS AVAILABLE FOR THE DRAKE 2A AND 2B
RECEIVER... EXCLUSIVELY AT HENRY RADIO

. WRITE OR CALL FOR SPECIFICATIONS

MODEL DMF-2

COMPLETELY WIRED, READY FOR EASY INSTALLATION!

Once in a "Blue Moon" an equipment accessory is developed which seems to be a natural. A case in point is the new Henry Radio DMF-2 mechanical filter for the Drake 2-A and 2-B and most other 455 kc IF receivers. In conception, in application and in value it demands attention.

No active Amateur needs to be told that the crying need in any modern receiver is for selectivity and yet more selectivity. Understandably, most manufacturers of modestly priced communication receivers are reluctant to make the very considerable investment necessary to install high-quality mechanical filters as original factory equipment.

For owners of Drake 2-A and 2-B receivers this dilemma has now been neatly solved. Based on a revolutionary new miniature mechanical filter, Henry Radio has designed a modification kit which fits the Drake receivers as if it were factory installed. The unit arrives completely wired and with instructions which show in detail how it can be easily and permanently installed on the chassis within the cabinet. Once installed it assures the selectivity normally associated only with the "High Priced Brand." After a few days of use, consensus of opinion is certain to be that the DMF-2 is worth twice its modest price of \$29.00 complete.



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LOS ANGELES (64) MISSOURI ANAHEIM

## HENRY RADIO DMF-2 INSTALLATION INSTRUCTIONS

To install the DMF-2 in your Drake 2-B you will need:

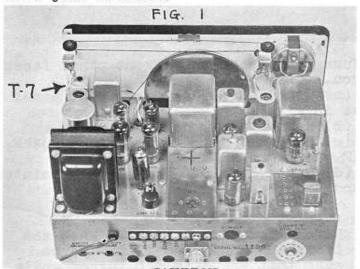
(a) Normal hand tools

(b) Soldering iron and rosin core solder (DO NOT USE ACID CORE SOLDER)

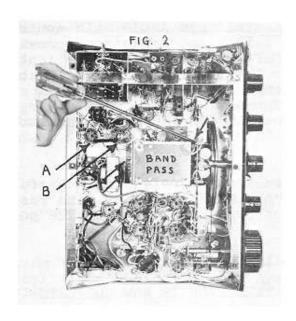
(c) Drill -- 1/2" and # 26

Prepare your Drake 2-B by removing the cabinet and placing the chassis on a clear bench space. Follow the instructions set forth below step-by-step as they are outlined and you will experience no difficulty in making the DMF-2 installation.

Drill a hole 1/2" in diameter in the chassis. The hole must be centered half-way across the channel and 5/8" to the rear of VFO (Fig.1). Install grommet in hole just drilled.



CAUTION Use extreme care when drilling in order to avoid damage to Band Pass Assy. on chassis underside.



STEP # 2

Turn chassis upside down.

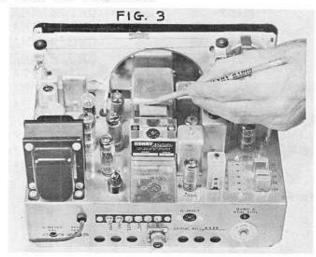
(a) Remove the three mounting screws from Band Pass Assy. (Fig 2) This will allow Band Pass Assy. to be raised

slightly.

(b) Pass DMF-2 wire harness through drilled hole and work wires from under Band Pass Assy. Route wires between the socket of V-3 and the bottom of T-2.

(c) Replace Band Pass Assy. mounting

screws and re-tighten.



STEP # 3

Turn chassis right side up.

(a) Refer to Fig 3. With DMF-2 now seated in the Drake 2-B, place the L-shaped retaining bracket between the DMF-2 and VFO as shown. Note that the screw holes in the retaining bracket must be against the VFO cover.

(b) Use a pencil to mark a line on the VFO cover where the top of retaining

bracket rests against VFO cover.

(c) Remove the two mounting screws from VFO cover. These two screws are located in the left side of the VFO cover when looking forward. Remove the VFO cover.

(d) Locate the retaining bracket against VFO cover on line drawn in (b) above. Using the screw holes in the

retaining bracket as a guide, drill two holes in VFO cover using a #26 drill.

(e) Mount the retaining bracket on VFO

cover with the bolts provided.

(f) Replace VFO cover and VFO mounting screws. Bracket will now rest on DMF-2 and retain it, as in Fig 3.

STEP # 4 Turn chassis upside down. Refer to Fig. 2 and Fig. 4.

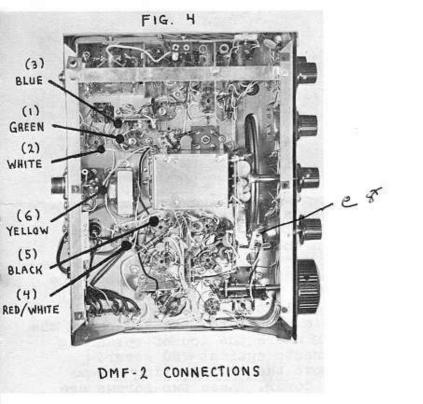
(a) Remove uninsulated wire between Pin -7 of V-4 and secondary winding of T-2.

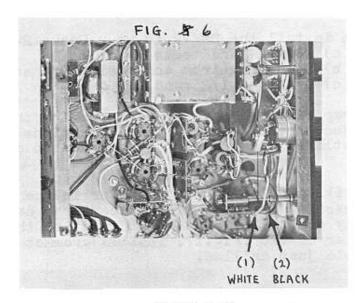
(A and B of Fig 2)

(b) Connect DMF-2 wires as follows:

GREEN Fig. 4-1 (T-2)
WHITE " 4-2 (Pin 7 of V-4)
BLUE " 4-3 (AVC line)
RED/WHITE " 4-4 (Pin 7 of V-10)
BLACK " 4-5 (Ground lug)
YELLOW " 4-6 (Cal. jack)

ALL CONNECTIONS MUST BE SOLDERED





STEP # 5
Turn chassis so that front panel faces
you.

(a) Remove 6 screws from front panel

as in Fig 5.

(b) Remove all knobs.\*

(c) Remove flat nuts from phone-jack,

AF shaft and RF shaft.

(d) Gently pry off Preselector pointer and Band Pass selectivity pointer.

\*CAUTION

Before removing Band Pass knob set it in the CENTER position and be sure that shaft is not turned while removing and replacing front panel.

STEP # 6
Remove AUDIO GAIN control.

STEP # 7

(a) Install new AUDIO GAIN control (with switch and capacitor) provided with DMF-2. Connections are identical as for the original AUDIO GAIN control removed in Step # 6.

(b) Connect Black and White wires from new AUDIO GAIN control switch as

shown in Fig 6.

STEP # 8

Replace front panel, being careful not to turn Band Pass shaft. Band Pass know must be replaced in the CENTER position

STEP # 9
Install 6BA6 tube in DMF-2.

INSTALLATION IS NOW COMPLETE



## ALIGN THE DRAKE 2-B AS FOLLOWS:

STEP # 1

Connect the Drake 2-B to a 110 VAC power source.

(a) Push the AUDIO GAIN control to the IN position. Make sure that the Band Pass knob is in the CENTER position and that the Band Pass selectivity pointer is in

the 2.1 Kc position.

(b) Turn on the receiver and tune to an LSB signal on the 40 meter band. Adjust slug of VFO coil T-7 (Fig 1) and Main Tuning control alternately until maximum clarity of signal is achieved. ADJUST T-7 WITH NON-MAGNETIC TOOL ONLY. Adjustment of T-7 should be slight and, once accomplished, is permanent.

STEP # 2

(a) Pull AUDIO GAIN control to OUT position and tune to USB signal on the 20 meter band.

(b) Adjust Trimmer on C-8 (Fig 6) to achieve maximum clarity of signal. This trimmer has been preset and will require very slight adjustment. Once this adjustment is accomplished it is permanent.

## NOTE

If receiver has a tendency to oscillate, slight adjustment of the small IF cans on DMF-2 will restore stability.

STEP # 3
Return Drake 2-B to its cabinet. DMF-2
Installation and Adjustment are now complete.

## NOTE

AUDIO GAIN push-pull switch positions correspond to Drake 2-B functions as follow:

(a) IN position -- SBl of Band Pass

Tuning.

(b) OUT position -- SB2 of Band Pass Tuning.

The Henry Radio DMF-2 was designed with the Drake 2-B especially in mind. This DOES NOT MEAN that the DMF-2 is limited to use with the Drake 2-B. The DMF-2 can be used profitably with any modern receiver of 455 Kc IF frequency. A list of representative receivers with which the DMF-2 can be used effectively includes:

COLLINS 75A-2 DRAKE 1-A HALLICRAFTERS SX-71 HQ-129X HAMMARLUND HAMMARLUND HQ-140X HQ-150 HAMMARLUND HAMMARLUND HQ-160 HAMMARLUND HQ-170 NC-183 NATIONAL NATIONAL HR0-50 NATIONAL HR0-60

We at Henry Radio will welcome your inquiries about any particular DMF-2 application which you may have in mind.



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