"FP" Series
Bandpass Filter

General Information

Refer to CI-1055 for tools required and recommended test equipment and setup.

Refer to CI-1052 for electrical specifications and typical response curves for various models.

The cavity filters are equipped with adjustable coupling loops to facilitate insertion loss settings without removal or replacement of the loops. To change to a new insertion loss other than as was preset at time of delivery, unlock the three holding set screws on each loop and rotate each loop equally to obtain the required insertion loss.

If the insertion loss setting is changed, fine tuning will be necessary because changes in coupling affects resonance.

Tuning Procedure

Each cavity has a coarse tuning adjustment for large changes in frequency and a fine tuning adjustment for small changes in frequency. Coarse tuning is accomplished by unlocking the coarse tuning lock screw and sliding the tuning rod in or out. Fine tuning adjustments are made by locking the coarse tuning lock screw securely and loosening the fine tuning lock screw, then rotating the fine tuning bolt.

After final tuning, both the fine and coarse tuning lock screws must be tightened down securely.

Note: Pushing the tuning rod or turning the fine tuning bolt in, lowers the resonance of the filter.

![Diagram of tuning procedure](image)

The recommended test equipment for tuning is described on Page CI-1055.

If using a transmitter, a low power setting is required unless it is known the output can withstand short durations of extreme mismatch.