

## SECTION 6. MAINTENANCE PROCEDURES

Any time you have a problem with the amplifier be certain to check the fuses before continuing troubleshooting. Never use a higher value fuse than the one specified on the amplifier. You can cause damage to the unit.

### SECTION 6.1 INPUT MISMATCH

All Henry amplifiers have a tuned input coil for each band so that there is a relatively good match between the amplifier and exciter. If for some reason you find high reflected power between the exciter and amplifier in the transmit mode for one band only, you will have to retune the input coil of the band where the problem exists. The RF chassis of the amplifier must be removed from the wraparound to retune these circuits. Refer to Section 7 for a description of the disassembly procedure. The input coils are adjusted through holes on the left side of the RF chassis. The coils are labeled as to which band they tune.

To tune the input, you must insert an SWR meter in the drive cable. Key the exciter at the desired operating frequency, tune the amplifier to that frequency, then adjust the input coil for minimum reflected power in the drive cable.

If the high SWR problem appears on every band, you must assume that the input antenna relay is out of its socket, either totally or partially. Also a short in the coax between the input connector and the RF chassis can cause the same problem.

### SECTION 6.2 REDUCED RECEIVER SENSITIVITY

If you see reduced receiver sensitivity in your exciter when the amplifier is being used, or when the amplifier is in standby, you should check the input antenna relay and then output antenna relay to see if they have vibrated out of their socket, or if they have a bad contact. The output relay on the 5K Classic is a vacuum relay. After you have ruled out one of those problems you must check the input and output coax for a short or intermittent contact.

### SECTION 6.3 TUBE PROBLEMS

**EXCESSIVE PLATE CURRENT** - This problem often indicates a bad tube, and the only cure is to replace the tube. The problem can be partial, showing high resting current, or full short causing the circuit breaker to blow. The 5K Classic can not be operated with just one tube because the filaments are in series. Note that a plate current short will probably blow the cathode fuse.

Excessive resting plate current can often be caused by a failure of the bias circuit around D1. Replace the defective diode or resistor to solve the problem.