

Troubleshooting the Autoshift 706

If you experience a problem with the operation of your new Autoshift 706, here are few things to check.

The Autoshift unit seems to be completely 'dead':

A solder short has been the problem in all cases when the Autoshift appears to be 'dead'. Check the following connections:

- a. Check for 5Vdc at the 706 CI-V connection point. There have been reports of bad solder connections in the 706 that affect this. The CI-V should indicate 5Vdc on it even with the Autoshift kit installed.
- b. Check the connections in the 706 that you made to ensure that there is not a solder bridge between the CI-V connection point and any of the nearby traces. The 706 traces are covered with a solder mask (Green color) and a hot solder iron can expose the copper trace and cause a short.

After the Autoshift was installed, the radio has no output power on HF:

There is a known problem with the 706s where the HF TX power drops. More information is available on the 706 Service Questions Page. The main two problems are a bad filter relay and shorted diode/transistor in the filter unit.

Also, check the CI-V connection in the 706 for a solder bridge. Even though the traces next to the CI-V connection are covered with a solder mask (The green colored coating), there can still be a very small exposed trace. If a solder "short" is made between the CI-V connection and a trace, this could cause improper operation of the radio.

The Autoshift "shifts" off frequency when I key radio. (Special Note for MK-II Owners)

The Autoshift is enabled when it detects the narrow filter being turned on. However, if you power up the radio with the narrow filter ON, the Autoshift will NOT see the radio as being in narrow mode until you turn narrow OFF than back ON.

The 706 "classic" will enable/disable the NARROW filter on both VFO-A and VFO-B together. However, on the MK-II, the narrow filter in FM mode can be enabled in VFO-A and VFO-B independently. That is, you can have the narrow filter enabled on the B VFO while it's off on the A VFO. If you have the narrow enabled in the B VFO, when you transmit in split mode, the radio will switch to the B VFO (as normal) but since the B VFO has the narrow filter on, the Autoshift will see this and "spring in to action". When you key the mic, the radio effectively enabled the narrow (when it switched to VFO B which had the narrow filter enabled) and also it saw a change in frequency (even if the B-VFO had the same frequency as the VFO-A). This is all the Autoshift needed to think it had been enabled. The key is to make sure that the B VFO does NOT have the narrow filter enabled.

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