

FET Replacements for '01 A tubes.

These can be purchased at an online site that sells them (<https://tells-radio-store.square.site/>).

I have not tested these and have no financial interest in them. This is for information only.

The view of the tube sockets is from the above orientation in the area where the bottom of the glass bulb will sit. Therefore, the pins are identified counter-clockwise.

Careful parts placement will allow for the undamaged glass envelope to sit over the components, completely sealing them.

For power connection, anything from 9 to 18 volts will work fine. Some JFETs can take 27 volts- safely. This improves sensitivity and audio volume. Size caps WVDC rating to the voltage you will be using.

To the negative terminal of the battery will go A+ and A-, the lower B voltage (22.5V+), and C voltage.

To the positive terminal will go the B voltages 67.5- and the 90+.

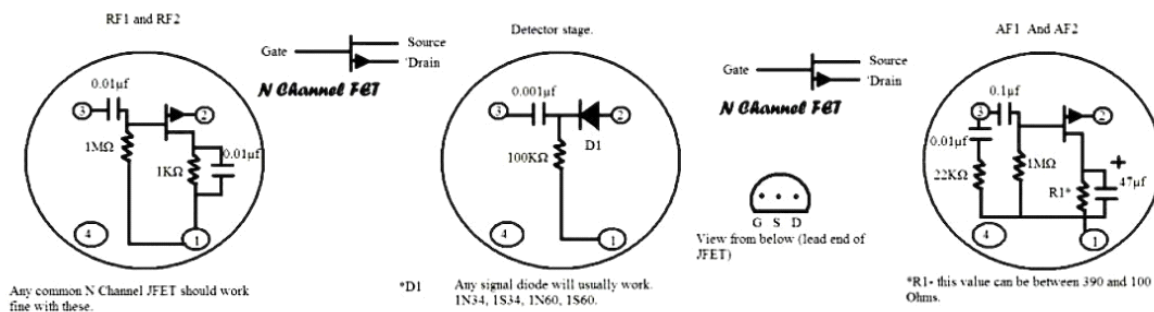
Additionally:

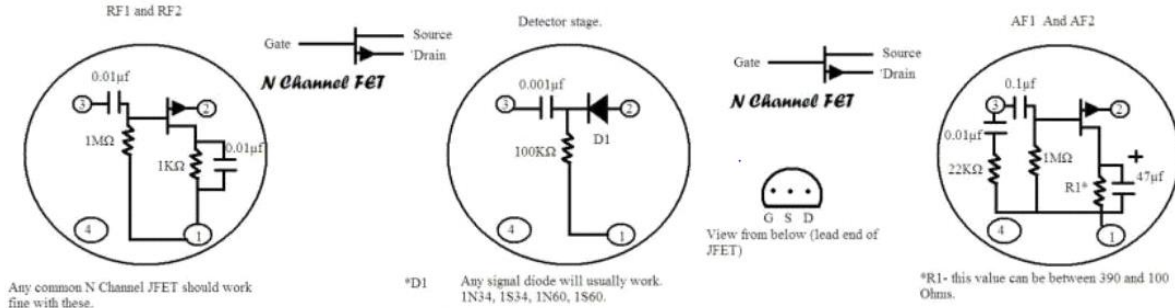
In most sets a long antenna and ground are needed for best results.

In most sets the middle or second tuning gang will be fully bypassed.

In all cases- these CANNOT be mixed with regular rubes.

These are based on a reprint of an article that appeared in the April 1998 Japanese magazine "Mobile Ham" regarding restoration of an Atwater Kent Model 20. I did add some notes and a variant."



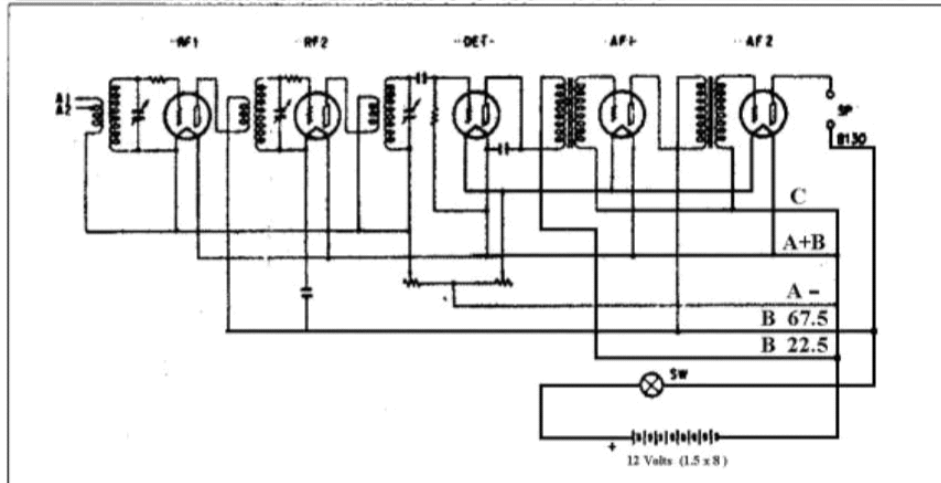
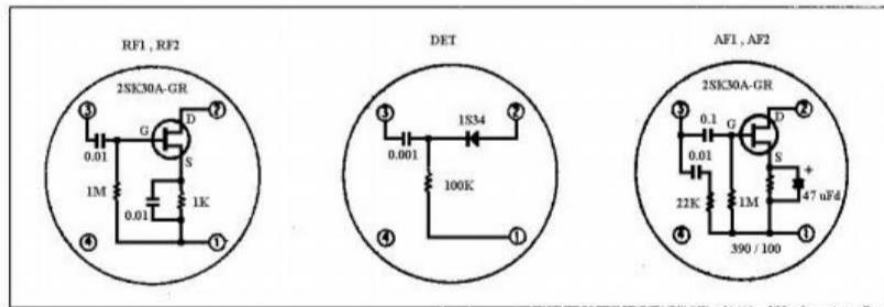


ZL3IB (editor of *Break-In* magazine) spotted an article in the April 1998 Japanese magazine *Mobile Ham* on the restoration of an Atwater Kent AT20-C receiver using FETs to replace the original 01-A tubes. The glass envelope was separated from the base, the FET and associated components assembled inside the base, and then the envelope

glued back into place. For the detector, a 1S34 diode was used. For the RF and AF tubes the same 2SK30A-GR, but with different circuitry, as shown in the illustration.

The wiring of the AT-20C was then modified to accommodate the single 12V supply line. Here are the illustrations as printed in *Break-In*.

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