Connect the transistor test fixture to the NWA and connect the device biasing connections (as shown below) to the back panel bias ports of the NWA test set. $V_{bb}$ and $V_{cc}$ are both adjustable supplies set initially to zero volts, and returned to zero whenever connections (or disconnections) are made.

They must also be set to zero during calibration.

The blocking capacitor in series with $R_{fac}$ should be either 10 pF or 100 pF, and should be a chip capacitor.

You must hand calculate (by Ohms law!) the required values of $V_{bb}$ and $V_{cc}$ prior to connecting the circuit to the network analyzer.
To prevent static damage, always use the ground strap while using the TDR or NWA. Treat connectors very carefully. Wear safety glasses when soldering.