

Tuning the MERCURY 400 FT-NMR

Tuning ^1H and ^{19}F :

At the console type **btune** <return> on the command line.

To tune the proton channel, go to the magnet leg (side facing the magnet) and remove the J5102 HiBnd BNC connector (blue) and move it to the J5402 Tune port (yellow). You must also move the J5602 HiBnd TX BNC connector (blue) to the J5604 Tune port (yellow) – see Figure 1. *Remember to connect and reconnect both cables.*

Turn the switch on the face of the leg to Tune Mode, position the Tune knob to 5 or 6 (sensitivity) and use the tuning sticks to minimize the tune level.

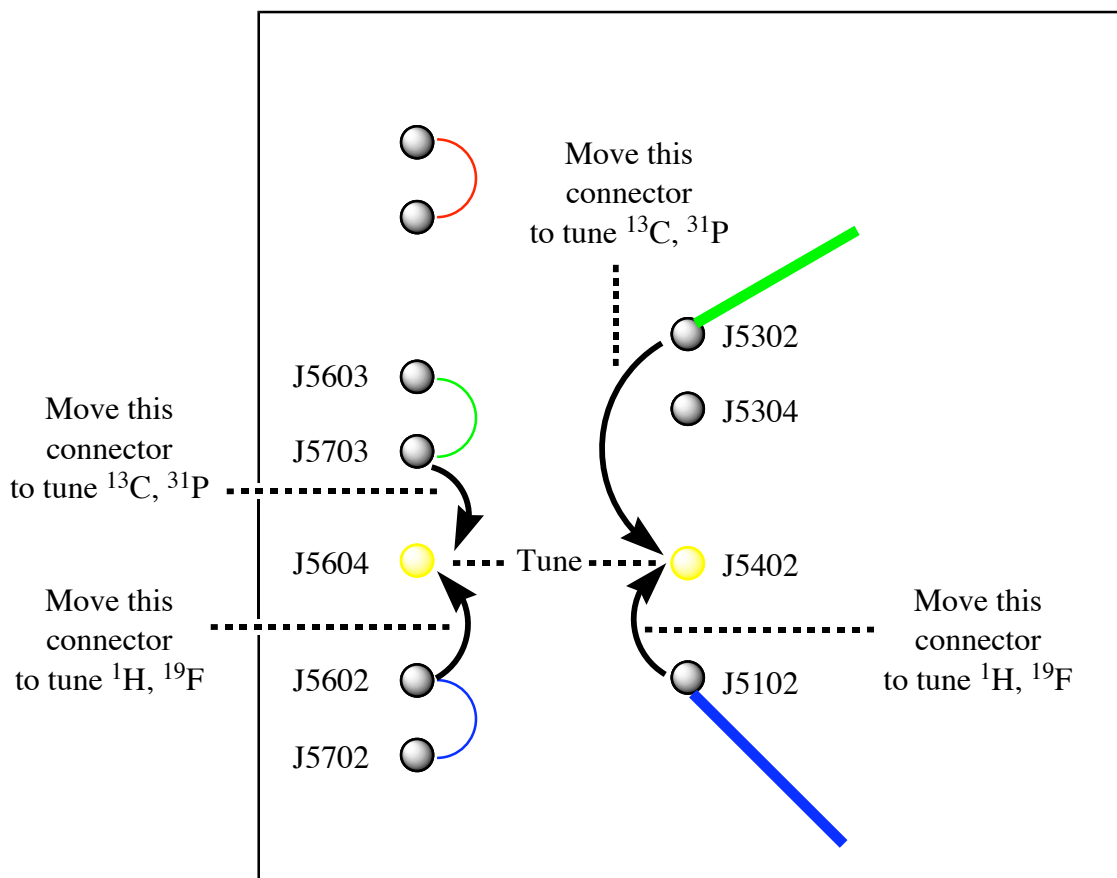
Use tuning stick as follows:

^1H and ^{19}F stick is marked in red (NOT the large red knob with that has 6.8 pF on it!). Pull down the bottom part of the stick slightly to tune ^{19}F and push it up to tune ^1H .

When you are finished, remember to reconnect BOTH cables (J5602 and J5102) to the correct positions.

Go back to the console and type **tuneoff** <return> on the command line.

Figure 1.



Tuning ^{13}C and ^{31}P :

At the console type **btune** <return> on the command line.

Go to the magnet leg (side facing the magnet) and remove the J5302 LoBnd BNC connector (green) and move it to the J5402 Tune port (yellow). You must also move the J5703 LoBnd TX BNC connector (blue) to the J5604 Tune port (yellow) – see Figure 1. *Remember to connect and reconnect both cables.*

Turn the switch on the face of the leg to Tune Mode, position the Tune knob to 5 or 6 (sensitivity) and use the tuning sticks to minimize the tune level.

Use tuning stick as follows:

^{13}C and ^{31}P stick is marked in green.

When you are finished, remember to reconnect BOTH cables (J5302 and J5703) to the correct positions.

Go back to the console and type **tuneoff** <return> on the command line.

Figure 1.

