What makes a step green?

A green step is one whose proof TLAPS determines to be correct. This does not mean that the step's assertion is true. For example, add the following theorem and proof to a module:

THEOREM $2 + 2 = 2$

$\langle 1 \rangle 1$. FALSE

$\langle 1 \rangle 2$. QED
BY $\langle 1 \rangle 1$

Run the Prove command on the QED step. TLAPS will color the step green, indicating that its proof is correct. The fact asserted by the step, the goal $2 + 2 = 2$, does indeed follows from step $\langle 1 \rangle 1$, which asserts FALSE. (Anything follows from FALSE because FALSE $\Rightarrow F$ equals TRUE for any formula F.)

To get TLAPS to color the theorem green, you will have to write a correct proof of step $\langle 1 \rangle 1$. You will be able to do that only by using a false theorem or assumption asserted earlier in the module.

CLOSE