

Inference at * 1
of proof for Lemma last-not-before:

1. $T : \text{Type}$
2. $L : T \text{ List}$
3. $\neg(\uparrow\text{null}(L))$
4. $\text{no_repeats}(T;L)$
5. $x : T$
6. $\text{last}(L) \text{ before } x \in L$
7. $\forall x, y:T. x \text{ before } y \in L \Rightarrow (\neg(x = y))$
8. $\neg(\text{last}(L) = x)$

$\vdash \text{False}$
by ((InstLemma 'before_last' [T;L;x])
CollapseTHEN (Auto·)).

1:antecedent. . . . NILNIL

$\vdash (x \in L)$

2:antecedent. . . . NILNIL

$\vdash \neg(x = \text{last}(L))$

3:

9. $x \text{ before } \text{last}(L) \in L$

$\vdash \text{False}$

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