

Inference at * 1 1
of proof for Lemma before-hd:

1. $T : \text{Type}$
2. $L : T \text{ List}$
3. $0 < \|L\|$
4. $\text{no_repeats}(T;L)$
5. $x : T$
6. $x \text{ before } \text{hd}(L) \in L$
7. $\forall x, y:T. x \text{ before } y \in L \Rightarrow (\neg(x = y))$
8. $\neg(x = \text{hd}(L))$
9. $\text{hd}(L) \text{ before } x \in L$

$\vdash \text{False}$
by InteriorProof ((FLemma 'l.before.transitivity' [6;9])
CollapseTHEN (MaAuto.)).

1:

10. $x \text{ before } x \in L$
 $\vdash \text{False}$

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