

Inference at * 2 1 1 2 1 1
of proof for Lemma before-adjacent:

....antecedent.... NILNIL

1. $T : \text{Type}$
 2. $T \text{ List}$
 3. $u : T$
 4. $v : T \text{ List}$
 5. $\forall x, y:T.$
 $\text{no_repeats}(T;v)$
 $\Rightarrow \text{adjacent}(T;v;x;y)$
 $\Rightarrow (\forall z:T. z \text{ before } y \in v \Rightarrow (z \text{ before } x \in v \vee (z = x)))$
 6. $x : T$
 7. $y : T$
 8. $\text{no_repeats}(T;v)$
 9. $\neg(u \in v)$
 10. $0 < \|v\|$
 11. $x = u$
 12. $y = \text{hd}(v)$
 13. $z : T$
 14. $z \text{ before } y \in v$
- $\vdash(z \in v)$
by ((FLemma 'l.before_member2' [-1])
CollapseTHEN (Auto·)).