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

1. T : Type
2. T List
3. u : T
4. v : T List
5. $\forall x, y{:}T.$
   no_repeats(T;v)
   $\Rightarrow$ adjacent(T;v;x;y)
   $\Rightarrow$ ($\forall z{:}T.$ z before $y \in v \Rightarrow$ (z before $x \in v \vee (z = x)$))
6. x : T
7. y : T
8. no_repeats(T;[u / v])
9. $0 < \|v\|$
10. $x = u$
11. y = hd(v)
12. z : T
13. z before $y \in v$

$\vdash$(($z = u$ & ($x \in v$)) $\vee$ z before $x \in v$) $\vee$ ($z = x$)
by ((RWO "no_repeats_cons" (-6))
CollapseTHEN (Auto·))·

1:

8. no_repeats(T;v)
9. $\neg(u \in v)$
10. $0 < \|v\|$
11. $x = u$
12. y = hd(v)
13. z : T
14. z before $y \in v$

$\vdash$ (($z = u$ & ($x \in v$)) $\vee$ z before $x \in v$) $\vee$ ($z = x$)

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