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

$\vdash \forall T$:Type, L:(T List).
($0 < \|L\|$) $\Rightarrow$ ($\forall x$:T. ($x \in L$) $\Rightarrow$ ($\neg(x = \mathrm{hd}(L))$) $\Rightarrow$ hd(L) before $x \in L$)
by ((Auto)
CollapseTHEN (((DVar 'L')
CollapseTHEN (((All Reduce)
CollapseTHEN (
Auto'))·))·))·

1:

1. T : Type
2. u : T
3. v : T List
4. $0 < (\|v\|+1)$
5. x : T
6. ($x \in [u$ / $v]$)
7. $\neg(x = u)$

$\vdash$ u before $x \in [u$ / $v]$

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