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

1. T : Type
2. x : T
3. y : T
4. L_1 : T List
5. L_2 : T List
6. i : $\{0..((\|L_1\|+\|L_2\|)\text{ - }1)^-\}$
7. $x = (L_1 \mathbin{@} L_2)[i]$
8. $y = (L_1 \mathbin{@} L_2)[(i+1)]$
9. $\neg(i < \|L_1\|)$

$\vdash y = L_2[((i\text{ - }\|L_1\|)+1)]$

by ((RWO "select_append_back" (-2))
CollapseTHEN (((Auto')
CollapseTHEN (((
NthHypSq (-2))
CollapseTHEN ((if (((first_nat 2:n)) = 0) then (Repeat (((EqCD)

CollapseTHEN ((Try (Trivial))·))·)) else (RepeatFor (first_nat 2:n) (((EqCD)

CollapseTHEN ((Try (Trivial))·))·)))·))·))·))·

1:

8. $y = L_2[((i+1)\text{ - }\|L_1\|)]$
9. $\neg(i < \|L_1\|)$

$\vdash ((i\text{ - }\|L_1\|)+1) \sim ((i+1)\text{ - }\|L_1\|)$

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http://www.nuprl.org/FDLcontent/p0_963683_/p39_372879_{adjacent-append}1_2_1_2_1.html