

Inference at *
of proof for Lemma adjacent-member:

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⊢∀T:Type, L:(T List), x, y:T. adjacent(T;L;x;y) ⇒ {(x ∈ L) & (y ∈ L)}  
  by ((Auto·)  
    CollapseTHEN (((((FLemma 'adjacent-before' [-1])  
  THENM (((  
    FLemma 'l.before_member'[-1])  
  THENM (FLemma 'l.before_member2'[-2]))·))·)  
    CollapseTHENA (Auto·))·)
```

1:

1. $T : \text{Type}$
 2. $L : T \text{ List}$
 3. $x : T$
 4. $y : T$
 5. $\text{adjacent}(T;L;x;y)$
 6. $x \text{ before } y \in L$
 7. $(y \in L)$
 8. $(x \in L)$
- ⊢ $\{(x \in L) \& (y \in L)\}$
- .