

Inference at \*  
of proof for Lemma l\_before\_antisymmetry:

```
⊢∀T:Type, l:(T List), x, y:T. no_repeats(T;l) ⇒ x before y ∈ l ⇒ (¬y before x ∈ l)
  by ((((((Unfolds "l_before" 0)
    CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat
      1:n),(first_nat 3:n)) (first_tok :t) inil_term))))))·)
    CollapseTHEN (D 0))·)
```

```
    CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok
      :t) inil_term))))·
```

1:

1.  $T : \text{Type}$
  2.  $l : T \text{ List}$
  3.  $x : T$
  4.  $y : T$
  5.  $\text{no\_repeats}(T;l)$
  6.  $[x; y] \subseteq l$
  7.  $[y; x] \subseteq l$
- ⊢ False