

Inference at *
of proof for Lemma linorder_le_neg:

$\vdash \forall T:\text{Type}, R:(T \rightarrow T \rightarrow \mathbb{P}).$
 $\text{Linorder}(T;x,y.R(x,y)) \Rightarrow (\forall a, b:T. (\neg R(a,b)) \iff \text{strict_part}(x,y.R(x,y);b;a))$
by ((GenRepD)
CollapseTHEN ((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. $R : T \rightarrow T \rightarrow \mathbb{P}$
 3. $\text{Linorder}(T;x,y.R(x,y))$
 4. $a : T$
 5. $b : T$
 6. $\neg R(a,b)$
- $\vdash \text{strict_part}(x,y.R(x,y);b;a)$

2:

1. $T : \text{Type}$
 2. $R : T \rightarrow T \rightarrow \mathbb{P}$
 3. $\text{Linorder}(T;x,y.R(x,y))$
 4. $a : T$
 5. $b : T$
 6. $\text{strict_part}(x,y.R(x,y);b;a)$
- $\vdash \neg R(a,b)$

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