Inference at $*$
 of proof for Lemma equal-bnot:

$\vdash \forall x, y{:}\mathbb{B}.\ (x = (\neg_b y)) \iff (\neg(x = y))$
 by ((UnivCD THENA Auto)
 CollapseTHEN (((AutoBoolCase y)
 CollapseTHEN (((((
 RWO "eqtt_to_assert" 0)
CollapseTHENA (Auto$\cdot$))$\cdot$)
 CollapseTHEN (((((
 RWO "eqff_to_assert" 0)
CollapseTHENA (Auto$\cdot$))$\cdot$)
 CollapseTHEN (((((
 RW assert_pushdownC 0)
CollapseTHENA (Auto$\cdot$))$\cdot$)
 CollapseTHEN (Auto$\cdot$))$\cdot$))$\cdot$))$\cdot$))$\cdot$))$\cdot$

1:

1. $x : \mathbb{B}$
2. $y : \mathbb{B}$
3. $\neg(\uparrow y)$
4. $\uparrow x$

$\vdash \neg\neg(\uparrow x)$

2:

1. $x : \mathbb{B}$
2. $y : \mathbb{B}$
3. $\neg(\uparrow y)$
4. $\neg\neg(\uparrow x)$

$\vdash \uparrow x$

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