1 Proof

[$12, 9 \to 13$, subsumption resolution]

$$\frac{\begin{array}{c} b \neq u \\ u = x_0 \end{array}}{\square}$$

[$2 \to 9$, cnf transformation]

$$\frac{(\forall x_0) u = x_0}{u = x_0}$$

[$3 \to 12$, cnf transformation]

$$\frac{a \neq b \wedge a \neq u \wedge b \neq u}{b \neq u}$$

[3, input]

$$a \neq b \wedge a \neq u \wedge b \neq u$$

[2, input]

$$(\forall x_0) u = x_0$$