

general-append-cancellation^{11,40}

$\forall T:\text{Type}, as, bs, cs, ds:(T \text{ List}).$

$(\text{append}(as; cs) = \text{append}(bs; ds) \in (T \text{ List}))$

$\Rightarrow ((\|as\| = \|bs\| \in \mathbb{Z}) \vee (\|cs\| = \|ds\| \in \mathbb{Z}))$

$\Rightarrow \text{guard}((as = bs) \wedge (cs = ds))$