

iseg-transition-lemma^{11,40}

$\forall T:\text{Type}, P:(T \text{ List}) \rightarrow \text{prop}\{\text{i:l}\}, L:(T \text{ List}), x:T.$
 $((\exists L_1:T \text{ List}. (\text{iseg}(T; L_1; \text{append}(L; \text{cons}(x; []))) \wedge P(L_1)))$
 $\wedge (\neg(\exists L_1:T \text{ List}. (\text{iseg}(T; L_1; L) \wedge P(L_1))))))$
 $\iff (P(\text{append}(L; \text{cons}(x; []))) \wedge (\neg(\exists L_1:T \text{ List}. (\text{iseg}(T; L_1; L) \wedge P(L_1))))))$