

list_accum_functionality^{11,40}

$\forall T, A: \text{Type}, f, g: (T \rightarrow A \rightarrow T), L: (A \text{ List}), y, z: T.$

$(\forall L': (A \text{ List}), a: A.$

$\text{iseg}(A; \text{append}(L'; \text{cons}(a; [])); L)$

$\Rightarrow (f(\text{list_accum}(x, a, f(x, a); y; L'), a) = g(\text{list_accum}(x, a, f(x, a); y; L'), a))$

$\Rightarrow (y = z)$

$\Rightarrow (\text{list_accum}(x, a, f(x, a); y; L) = \text{list_accum}(x, a, g(x, a); z; L) \in T)$