chain-consistent-after-input[13,45]

$\forall es$:ES, Cmd:Type, In:AbsInterface(Cmd), $isupdate$:($Cmd \to \mathbb{B}$), Sys, Out:AbsInterface(Top).
$(\mathrm{E}(In) \subseteq_r \mathrm{E}(Sys))$
$\Rightarrow (\forall f$:sys-antecedent(es;Sys), $chain$:($\mathrm{E}(Sys) \to$(Id List)).
   chain-consistent(f;$chain$)
   $\Rightarrow (\forall a$:$\mathrm{E}(In)$, b:$\mathrm{E}(Sys)$.
     $a \leq_{loc} b \Rightarrow (\uparrow(isupdate(In(a)))) \Rightarrow (\neg(\mathrm{loc}(f(b)) = \mathrm{loc}(b) \in \mathrm{Id})) \Rightarrow (\uparrow(b \in_b In))))$