insert-by[11,40]

insert-by(eq;r;x;l)
$\equiv_{\text{def}}$ rec-case(l) of [] => [x] | a::as => v.ifeq(x,a)
then [a / as]
if r(x,a) then [x; a / as] else [a / v] fi

clarification:

insert-by(eq;r;x;l)
$\equiv_{\text{def}}$ rec-case(l) of [] => [x / []] | a::as => v.ifeq(x,a)
then [a / as]
if r(x,a) then [x; a / as] else [a / v] fi

http://www.nuprl.org/FDLcontent/p0_963683_/p0_419562_{insert-by}.html