

head-set : $e \rightarrow h$

head-set $\llbracket \varepsilon \rrbracket$ = '()

head-set $\llbracket \textit{natural} \rrbracket$ = '()

head-set $\llbracket (\bullet e_1 e_2) \rrbracket$ = (append head-set $\llbracket e_1 \rrbracket$
head-set $\llbracket e_2 \rrbracket$)

where $\rightarrow \llbracket (\emptyset e_1), Z \rrbracket$

head-set $\llbracket (\bullet e_1 e_2) \rrbracket$ = head-set $\llbracket e_1 \rrbracket$

head-set $\llbracket (/ e_1 e_2) \rrbracket$ = (append head-set $\llbracket e_1 \rrbracket$
head-set $\llbracket e_2 \rrbracket$)

head-set $\llbracket (* e) \rrbracket$ = head-set $\llbracket e \rrbracket$

head-set $\llbracket (! e) \rrbracket$ = head-set $\llbracket e \rrbracket$