

$$\begin{array}{ccc}
 R[(K)^\times] & \xrightarrow{\varepsilon} & K \\
 \uparrow R[j] & \nearrow \psi & \\
 R[G] & &
 \end{array}
 \qquad
 \begin{array}{ccc}
 (K)^\times & & \\
 \uparrow j & & \\
 G & &
 \end{array}$$