

$$\begin{array}{ccccc}
& \Omega(A) & \xrightarrow{\iota_A} & P_A & \xrightarrow{\pi_A} \twoheadrightarrow A \\
\text{Id}_{\Omega(A)} \circ \text{Id}_{\Omega(A)} - \text{Id}_{\Omega(A)} = 0 \downarrow & & & \downarrow p_{\phi_2} \circ p_{\phi_1} - \text{Id}_P & \\
& \Omega(A) & \xrightarrow{\iota_A} & P_A & \xrightarrow{\pi_A} \twoheadrightarrow A
\end{array}$$