$$
\begin{array}{ccccc}
\Omega(A) & \overset{\iota_A}{\lhook\joinrel\longrightarrow} & P_A & \overset{\pi_A}{\longrightarrow\!\!\!\!\longrightarrow} & A \\
\Big\downarrow{\scriptstyle\Omega(f)-\Omega(f)'} & \overset{\phi}{\diagup} & \Big\downarrow{\scriptstyle p_f-p'_f} & & \Big\downarrow{\scriptstyle f-f=0} \\
\Omega(B) & \underset{\iota_B}{\lhook\joinrel\longrightarrow} & P_B & \underset{\pi_B}{\longrightarrow\!\!\!\!\longrightarrow} & B
\end{array}
$$