$$\begin{array}{c}
\mathbf{U}_{f} \times (\mathbf{X}_{f} * \mathbf{X}_{g} * \mathbf{X}_{h}) & \xrightarrow{\operatorname{dyn}_{f_{\S}(g_{\S}h)}} & (\mathbf{X}_{f} * \mathbf{X}_{g} * \mathbf{X}_{h}) \\
& \operatorname{id}_{\mathbf{U}_{f}} \times \operatorname{coh}_{f_{\S}(g_{\S}h)} & \xrightarrow{\operatorname{dyn}'_{f_{\S}(g_{\S}h)}} & (\mathbf{X}_{f}) \times (\mathbf{X}_{g} * \mathbf{X}_{h}) \\
& \mathbf{U}_{f} \times ((\mathbf{X}_{f}) \times (\mathbf{X}_{g} * \mathbf{X}_{h})) & \xrightarrow{\operatorname{dyn}'_{f_{\S}(g_{\S}h)}} & (\mathbf{X}_{f}) \times (\mathbf{X}_{g} * \mathbf{X}_{h}) \\
& \operatorname{id}_{\mathbf{U}_{f}} \times (\operatorname{id}_{(\mathbf{X}_{f})} \times \operatorname{coh}_{g_{\S}h}) & \xrightarrow{\operatorname{dyn}''_{f_{\S}(g_{\S}h)}} & (\mathbf{X}_{f}) \times ((\mathbf{X}_{g}) \times (\mathbf{X}_{h})) \\
& \mathbf{U}_{f} \times ((\mathbf{X}_{f}) \times ((\mathbf{X}_{g}) \times (\mathbf{X}_{h}))) & \xrightarrow{\operatorname{dyn}'_{f_{\S}(g_{\S}h)}} & (\mathbf{X}_{f}) \times ((\mathbf{X}_{g}) \times (\mathbf{X}_{h}))
\end{array}$$