$$\operatorname{Id}_{\mathbf{S}}(x \, \S_{\mathbf{S}} \, y) \, = \, x \, \S_{\mathbf{S}} \, y \, = \, \operatorname{Id}_{\mathbf{S}}(x) \, \S_{\mathbf{S}} \, \operatorname{Id}_{\mathbf{S}}(y)$$