Let $T_{s(\phi)}$ be the induced map on $M_{s(\phi)}$. If

$$s(\phi)M_*s(\phi) := \{\psi\in M_* : \psi = s(\phi)\psi s(\phi)\}$$

where $\langle s(\phi)\psi s(\phi),x\rangle := \langle\psi,s(\phi)xs(\phi)\rangle$ $(x\in M)$, and if $\psi\in s(\phi)M_*s(\phi)$, then for all $x\in M$:

$$(T_*\psi)(x) = \psi(Tx) = \langle\psi,s(\phi)(Tx)s(\phi)\rangle =$$

$$= \langle\psi,s(\phi)(T(s(\phi)xs(\phi)))s(\phi)\rangle = \langle T_*\psi,s(\phi)xs(\phi)\rangle ,$$

hence $T_*\psi\in s(\phi)M_*s(\phi)$. Since the dual of $s(\phi)M_*s(\phi)$ is $M_{s(\phi)}$, it follows that the adjoint of the reduced map $T_*|$ is identity preserving and of Schwarz type.

For example, if $\mathcal{T}$ is an identity preserving semigroup of Schwarz type on M_* such that $\phi\in Fix(\mathcal{T})$, then the semigroup $\mathcal{T}|(s(\phi)M_*s(\phi))$ is again identity preserving and of Schwarz type. Furthermore, if R is a pseudo-resolvent on $D = \{\lambda\in\mathbb{C} : Re(\lambda) > 0\}$ with values in M_* which is identity preserving and of Schwarz type such that $R(\mu)\phi = \phi$ for some $\mu\in\mathbb{R}_+$, then $R|s(\phi)M_*s(\phi)$ has the same properties.