Summary fitting guide

Trial fitting with an msd diagnostic lenses is critical.
msd lenses of known parameters will establish the initial fitting relationship.
All diagnostic lenses are clearly identified by sag depth value and midperipheral/limbal clearance values.

Advanced Keratoconus (Oval, Nipple) PMD, Globus. Steep K readings above 50.00D **Steep K readings above 52.00D**	**Moderate Keratoconus (Oval, Nipple) PMD, Globus. Moderate K readings between 42.00D and 50.00D**	**Post Graft, LASIK, RK, PRK traumatic cornea.** **Evaluate corneal profile**

1 SELECT INITIAL SAG DEPTH VALUE

4.60 S (standard)	4.40 S (standard)	4.20 S (standard) Required SAG may be higher or lower depending on profile

2 EVALUATE CENTRAL FIT

Ignore midperipheral/limbal fit at this stage.	Ignore midperipheral/limbal fit at this stage.	Ignore midperipheral/limbal fit at this stage.
Non fenestrated lens: Allow the lens to vault the entire cornea, ideally 200 to 350 microns clearance. In the case of central bubbles, not insertion bubbles, lower the sag depth value. If touch occurs, increase the sag depth value.	**Non fenestrated lens:**Allow the lens to vault the entire cornea, ideally 200 to 350 microns clearance. In the case of central bubbles, not insertion bubbles, lower the sag depth value. If touch occurs, increase the sag depth value.	**Non fenestrated lens:**Allow the lens to vault the entire cornea, ideally 200 to 350 microns clearance. In the case of central bubbles, not insertion bubbles, lower the sag depth value. If touch occurs, increase the sag depth value.
Fenestrated lens: Allow the lens to vault the entire cornea, having a closer alignment fit. (100 to 150 microns clearance).	**Fenestrated lens:**Allow the lens to vault the entire cornea, having a closer alignment fit. (100 to 150 microns clearance).	**Fenestrated lens:**Allow the lens to vault the entire cornea, having a closer alignment fit. (100 to 150 microns clearance).

Immediately after applying lens to the eye, evaluate to ensure complete corneal vaulting has been achieved using an optic section slit-lamp analysis.
Allow lens to settle for an additional 20 minutes, then be sure there is still ample vaulting as the lens will continue to settle with a few hours of wear.
With non fenestrated lenses, apical clearance in excess of 350 microns is acceptable if it does not interfere with vision.
With fenestrated lenses, apical clearance in excess of 150 microns may cause the undesirable infiltration of air bubbles underneath the lens via the fenestration.

3 EVALUATE MIDPEREPHERAL/LIMBAL FIT

There should be limbal clearance with a slight pool of tears (no less than 100 microns) in the midperipheral zone (bright fluorosceine band). In case of touch, increase clearance and/or sag.
In case of bubble formation in the midperiphery try the decreased profile trial lens.

4 EVALUATE PERIPHERAL EDGE FIT

Look for scleral alignment. If there is scleral impingement, showing excessive blanching, order a lens with a flatter edge, 1 flat or 2 flat (depending on the diameter). If there is too much edge clearance (peripheral bubbles), try increasing the sag depth.

ASSESS POWER

Perform over-refraction in normal light conditions. Start by using ± 1.00D steps and refine with 0.25D steps.

Note : When the best possible vault has been achieved with the non fenestrated lens but bubbles have formed and appear stagnant, remove the lens and re-insert the lens (this is most likely insertion bubbles).
With the fenestrated lens, try closer aligning , making sure these are not insertion bubbles.