

Expert Advice on Progressive Lenses

Carl Zeiss Progressive lenses show a nearly 100% success rate. However, even with Zeiss GT2 you will occasionally have a patient that cannot adapt to progressives. The reason for this can be quite diverse. The suggestions in the following trouble shooting guide are designed to find out the real cause of the problem, solve it and satisfy your customer.

First Step - General Evaluation

Always check the following

- Fit of the frame
- Corneal vertex distance
- Frame tilt
- Inter-pupillary distance (PD)
- Height measurement
- Prescription / optical power of distance and near zone
- Prismatic balance (R / L) in prismatic measurement point

Where does the problem occur

- In the distance zone
- In the intermediate zone
- In the near zone
- In a certain area of the lens
- Across the entire lens

When does the problem occur

- During day or night
- While driving
- During a sport
- During a hobby activity
- At work

After evaluation of these issues refer to the next steps for recommended solutions.

Second Step – Detailed Evaluation and Problem Solution

Issues concerning the DISTANCE ZONE

Problem: Blurred vision when standing. Patient has to tilt head down to see clearly. Everything clear when sitting.

Cause:

- Error in vertical fitting height (too high).

Solution:

⇒ Check vertical height measurement for accuracy*.

Problem: Marked improvements occur in distance vision when frame is tilted.

Cause:

- Patient has uncorrected / under corrected astigmatism.
- Cylinder axis is off.

Solution:

⇒ If necessary, recommend new refraction with special emphasis on the cylinder.

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- Error in vertical fitting height (too high).

⇒ Check vertical height measurement for accuracy*.

Problem: Vision good through center, poor through periphery

Cause:

- Patient is overcorrected for distance vision (too much plus / too little minus).
- Patient has uncorrected / under corrected astigmatism.
- Error in vertical fitting height (too high).
- Corneal vertex distance is too small.

Solution:

⇒ If necessary, recommend new refraction with special emphasis on the distance power.

⇒ If necessary, recommend new refraction with special emphasis on the cylinder.

⇒ Check vertical height measurement for accuracy*.

⇒ Check corneal vertex distance (recommended: 12mm to 16mm).

Problem: Patient locates certain area on the lens where he can see more clearly

Cause:

- Distance prescription is off.

Solution:

⇒ Recommend new refraction with special emphasis on the distance power.

* Fitting cross and center of pupils have to be in coincidence when patient looks horizontally straight ahead.

Second Step – Detailed Evaluation and Problem Solution

Issues concerning the PROGRESSIVE ZONE

Problem: Crisp vision through progressive zone of one lens only**Cause:**

- Patient has uncorrected / under corrected astigmatism.
- Patient needs prismatic prescription.
- Patient needs different near powers for both eyes.
- Error in centration (horizontal and / or vertical).

Solution:

- ⇒ If necessary, recommend new refraction with special emphasis on the cylinder.
- ⇒ Recommend new refraction with special emphasis on binocular testing.
- ⇒ If necessary, recommend new refraction with special emphasis on the near power.
- ⇒ Check horizontal and vertical measurements for accuracy*.

Problem: Crisp distance vision through progressive zone rather than through distance portion**Cause:**

- Patient is under corrected for distance vision (too little plus / too much minus).
- Patient has uncorrected / under corrected astigmatism.

Solution:

- ⇒ If necessary, recommend new refraction with special emphasis on the distance power.
- ⇒ If necessary, recommend new refraction with special emphasis on the cylinder.

Problem: Intermediate field of vision appears to be too small**Cause:**

- Addition is too strong.
- Patient needs prismatic prescription.
- Error in horizontal centration.
- Corneal vertex distance is too large.
- Frame tilt is too small.

Solution:

- ⇒ If necessary, recommend new refraction with special emphasis on the near power.
- ⇒ Recommend new refraction with special emphasis on binocular testing.
- ⇒ Check horizontal measurement for accuracy*.
- ⇒ Check corneal vertex distance (recommended: 12mm to 16mm).
- ⇒ Check frame tilt (recommended: 8° to 12°).

Issues concerning the NEAR ZONE

Problem: Field of near vision appears to be too small (too narrow)**Cause:**

- Addition is too strong, patient is reading in the progressive zone.
- Error in vertical fitting height (too low).
- Corneal vertex distance is too large.
- Frame tilt is too small.

Solution:

- ⇒ If necessary, recommend new refraction with special emphasis on the near power
- ⇒ Check vertical height measurement for accuracy*.
- ⇒ Check corneal vertex distance (recommended: 12mm to 16mm).
- ⇒ Check frame tilt (recommended: 8° to 12°).

Problem: Wide field of vision monocularly, restricted binocularly**Cause:**

- Patient needs prismatic prescription.
- Error in horizontal centration.

Solution:

- ⇒ Recommend new refraction with special emphasis on binocular testing.
- ⇒ Check horizontal measurement for accuracy*.

* Fitting cross and center of pupils have to be in coincidence when patient looks horizontally straight ahead.