

# **Church Vision Testing and Assembly Instructions**

**Modified 4/8/13**

- **The mission church needs to have a volunteer group who will take control of the project and go on the mission trip**
  - **They need no optometry skills what so ever**
  - **They need to conduct a simple vision test on each eye**
  - **They need to pop the lenses into place in the frame**
  - **The process takes about 15 minutes with one person and about 10 minutes with 2 people to conduct the test and assemble the lenses to the frames**
- **People that have these issues we cannot help;**
  - **A bad Astigmatism our lenses will do nothing for them**
  - **Cataracts we cannot help with any lenses and this condition can only be seen with a microscope**
  - **Glaucoma can affect our lenses**
  - **Diabetes can affect our lenses**
  - **There are many other eye problems that can affect our vision tests**
- **Items needed for assembly:**
  - **Pliers to pinch lens in a tight frame – by others**
  - **A tube of super glue – by others**
  - **2 small terrycloth pieces for cleaning the lenses- one wet and one dry – by others**
- **Setup:**
  - **Set a table (at least 2 feet wide and 6 foot long) up where the testing client is sitting approximately 10 feet from the**

**eye chart that has been downloaded from the [now4life.org](http://now4life.org) website and taped to a wall.**

- **The eye chart is closer or farther away depending on the amount of light in the testing room – the more light, the further away the eye chart should be( 11 feet rather than 10 feet). Under low light the chart can be down to 8 feet from the client.**
    - **This distance need only be close to right as the test is to see what lens gives the best vision and the comparison is made with the same light**
  - **The client should be at the end of the table nearest to the vision chart.**
  - **If there are 2 testers, one should be on either side of the table**
  - **The assemblers should be behind the testing people.**
- **Line up the lenses and frames on the table;**
- **For one tester, put a row of lenses out of their bags in a line with the +5 Diopter first and the lower Diopters following in numerical order down the side of the table. These are used to put in front of the clients eyeglass frame for testing Diopter needed for optimal vision.**
  - **For two testers, there should be a row of lenses near both sides of the table**
  - **Mark with a black marker the Diopter on each big bag of all the same lenses**

- Put the bags of lenses in the middle of the table with the +5 at one end and the -3 or -5 on the other end of the line and lined up numerically.
- Place one bag of frames in the middle of the table
  - Take out one bundle of frames with a rubber band around them and remove the rubber band
  - Each bundle has 3 different arm lengths in it
    - On the left arm plastic part the arm length is printed. It is either 130 mm, 140 mm or 150mm
- It takes 2 people to do the test and assembly work
  - While the tester is testing a client, the assembly person should have the next client put on the frame with the shortest arms (130 mm) to see how they fit.
    - If they are too tight, try the next length and so on until a proper frame is selected. It is better to have too long a frame arm rather than too short
  - Adjust the nose pieces;
    - Gently bend the nose pieces in and out with your fingers to get the most comfortable fit where the top of the frame comes just below the clients eyebrows when looking straight ahead
    - The pads should be lying flat on the clients nose
  - To get proper pressure on the arms against the head;
    - Bend the arms in or out with your fingers to fit the recipients head

- There should be a slight pressure against the clients head
  - If necessary the front face of the frame can be tilted forward and backward by holding the hinge with a pliers and bend the frame up or down with your fingers to get the proper viewing angle
  - The front frame should be vertical when the client is facing straight ahead
  - For children's frames, bend the rear arm down with your fingers until the arm fits comfortably and has wrapped around the child's ear
- Test person does the vision testing after the frames are OK.;
  - Ask the client if they are farsighted (see well at a distance, but not up close) or near sighted (Can read but can't see things far away).
    - The test person changes the various lenses in front of the recipient's eyes while they read the eye chart on the wall;
    - With 2 fingers the tester holds the lens just in front of the eyeglass frame
    - The client covers one of their eyes with their hand
    - The tester starts with a +1 lens for far sighted people and A -1 lens for near sighted people and go up or down in Diopters until the person sees clearly

- **If this is an improvement, go to a +2 lens and so on until the lens that allows them to read the eye chart at the lowest line is reached.**
  - **This procedure is done for both eyes**
  - **This will help the farsighted person see clearly at a distance but not up close.**
  - **In most cases the farsighted person needs 2 pairs of eyeglasses. One for reading and one for everyday sight which are worn all the time.**
  - **Test the farsighted person again by putting a book in front of them and repeat the eye test as before, but with a book rather than an eye chart.**
  - **If the lenses are close to 2 different Diopters, use the weakest lens (closest to zero)**
- **The test person takes the “Assembler Diopter Worksheet” and fills in the clients name and left and right Diopter readings**
  - **Then the assembler takes 2 new lens with the correct Diopters out of the large plastic bag of the same Diopter lenses**
- **The test person gives the assembler the clients frame and “Assembler Diopter Worksheet” with the correct left and right lens Diopter for that person**
- **The assembly process;**

- Loosen the frame screws holding the frame together about 5 turns (more than 5 turns and the screw comes out of the frame and is very hard to put back in).
- The lens has a ridge all around its exterior right along the edge of the outside of the lens. That ridge must fit into the grooves of the frame
- Force the lens into the frame from the inside of the frame nearest the nose
- Work it in the frame toward the outside (toward the frame arm) until the whole lens is in the grooves of the frame.
- It should be noted here that if the head of the screw twists and no longer accepts the screwdriver, you will have to force the lens using the same instructions above, but when you come to the last part of the lens to slip into the frame, it will not go. Slide the lens from the back of the frame toward the center of the frame with that part of the lens with its ridge into the groove of the frame. From the outside of the frame, use a pliers with a cloth over its teeth and squeeze the lens into the frame. It will pop into place with a lot of pressure.
- Tighten the frame screw. Do this for both lenses and the glasses are finished.
- Clean them with a clean damp towel made of cloth not paper. Paper has clay in it and can scratch the plastic lens.

- **As a double check the client should look thru their new glasses at the vision chart and a book and see if the correction does work for them. If not try lenses Diopters on either side of the chosen lens Diopter**
- **Tell clients that they may have headaches and possibly dizziness for several days while their brain gets trained for the persons new vision**
- **If a lens falls out too easily from the frame, it can be super glued in place.**
  - **With the frame in its normal position, place a drop of super glue at the bottom of the lens where it joins the frame and drag the glue along the frame for about an inch.**
  - **Wipe off the excess glue with a cloth quickly before it sets.**
  - **Let it dry for a minute then turn the glasses upside down and place another drop of glue on the upper frame between the frame and lens.**
  - **Wipe it along the frame for about an inch and wipe off the excess glue. The lens will now be locked in place.**