

TRIAL LENS SET 266 PCS

sphere lens						cylinder lens				prism lens		accessory lens	
CONVEX(+)			CONCAVE(-)			CONVEX(+)		CONCAVE(-)		list	pcs	specification	pcs
list	pcs	list	pcs	list	pcs	list	pcs	list	pcs				
0.25	2	5.25	2	0.25	2	0.25	2	0.25	2	0.5	2	red	1
0.50	2	5.50	2	0.50	2	0.50	2	0.50	2	1.0	1	green	1
0.75	2	5.75	2	0.75	2	0.75	2	0.75	2	2.0	1	black	1
1.00	2	6.00	2	1.00	2	1.00	2	1.00	2	3.0	1	plane	2
1.25	2	6.50	2	1.25	2	1.25	2	1.25	2	4.0	1	maddox	2
1.50	2	7.00	2	1.50	2	1.50	2	1.50	2	5.0	1	slit	1
1.75	2	7.50	2	1.75	2	1.75	2	1.75	2	6.0	1	polariscope	1
2.00	2	8.00	2	2.00	2	2.00	2	2.00	2	7.0	1	cross	2
2.25	2	8.50	2	2.25	2	2.25	2	2.25	2	8.0	1	frosted	1
2.50	2	9.00	2	2.50	2	2.50	2	2.50	2	9.0	1	pinhole	2
2.75	2	9.50	2	2.75	2	2.75	2	2.75	2	10.00	1	cross cylinder	2
3.00	2	10.00	2	3.00	2	3.00	2	3.00	2				
3.25	2	11.00	2	3.25	2	3.25	2	3.25	2				
3.50	2	12.00	2	3.50	2	3.50	2	3.50	2				
3.75	2	13.00	2	3.75	2	3.75	2	3.75	2				
4.00	2	14.00	2	4.00	2	4.00	2	4.00	2				
4.25	2	15.00	2	4.25	2	4.50	2	4.50	2				
4.50	2	16.00	2	4.50	2	5.00	2	5.00	2				
4.75	2	18.00	2	4.75	2	5.50	2	5.50	2				
5.00	2	20.00	2	5.00	2	6.00	2	6.00	2				



AMCON (266 PIECE) TRIAL LENS SET USER'S MANUAL EQ-6004

AMCON The Eyecare Supply
CENTER®

1-800-255-6161 • Fax 1-800-397-0013

www.amconlabs.com

TRIAL LENS SET HANDBOOK

Please Read This Handbook Before Use

The trial lens set is used to determine a patient's refractive error and binocularity. It consists of positive and negative sphere lenses, positive and negative cylinder lenses, prism lenses, and accessory lenses.

Maintenance:

Clean the lenses with alcohol or ether monthly.

To prevent scratches, keep lenses clean by wiping with the included soft cloth after each use.

Contents: (266 lenses plus 2 Jackson Cross Cylinders)

• **Sphere Lenses** (160)

The dioptric power on all axes is the same. Light passing through the lens focuses at one point or virtual focus. Convex lenses (+) are used to correct hyperopia and presbyopia. Concave lenses (-) are used to correct myopia.

• **Cylinder Lenses** (80)

The dioptric powers on all axes are not the same. Light passes through the lens into a straight line. Convex cylindrical (+) and concave cylindrical (-) lenses are used to correct astigmatism.

• **Prism Lenses** (12)

When light passes through the prism lens, the light beam bends to the base and the object shifts to the apex. The prism lens is used to examine and correct strabismus and used for vision therapy.

• **Black Lens** (1)

This opaque lens is used to occlude the non-tested eye.

• **Cross Lens** (2)

This lens contains perpendicular lines used for centering pupils and measuring papillary distance.

• **Frosted Lens** (1)

This half-transparent lens is used for occluding the non-tested eye.

• **Slit Lens** (1)

This black lens with a slit is used to determine astigmatism by turning it in front of the eye.

• **Plano Lens** (2)

This transparent lens with no dioptric power can be used to determine whether a patient is malingering.

• **Color Lens** (1 red, 1 green)

These lenses can be used for balancing the prescription between the eyes. They can also be used to determine whether a patient is malingering.

• **Jackson Cross Cylinder (JCC) Lens** (2 total, ± 0.25 and $\pm 0.50D$)

This handled lens with contrary dioptric powers in two axis positions is used to examine the degree and axis position of astigmatism. Put the JCC in front of the patient's eye. To correct the axis position, center the two axes of the JCC around the patient's current cylindrical lens axis. Then turn the JCC and check the visual acuity at the two opposite positions. If the visual acuity is better at one position, the axis of the cylindrical lens can be turned slightly in the direction of the position mark of the clearer one. Then test again until the difference of visual acuity at the two positions can no longer be and determine the change in visual acuity. If no change in visual acuity is noted, the degree of cylindrical lens used can be considered suitable. Otherwise, the degree of cylindrical lens would be adjusted according to the variant results. The cylindrical lens is then in the correct position.

• **Maddox Lens** (1 clear, 1 red)

This ribbed lens is made of parallel glass rods that convert a light spot into a streak 90° from the axis of the rods. This lens is used in examination of binocular vision. Place the lens in front of one eye. Shine a light spot directly at the patient. As the patient watches with both eyes, ask the patient if the streak and spot overlap. If they overlap, the patient has normal fusion. With horizontal strabismus, the light spot is on either side of the vertical streak. With vertical strabismus, the spot appears above or below the streak. To correct the vision in a patient with strabismus, place a prism lens in front of the eye until the light spot and streak coincide. The strength of the prism lens indicates the degree of strabismus in prism diopters.

• **Pin Hole Lens** (2)

This black lens has a very small hole in the center, through which light can pass to form an artificial pupil. It is used to evaluate potential acuity.

• **Polarized Filter Lens** (1)

This polarized filter lens is used to balance the correction between the eyes. It can also be used to examine a malingering patient.

• **Padded Aluminum Case**

• **Mira Kleen Lab Size Cleaning Cloth**

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