

Headlamp Lens Data

U.S. - BUILT CARS 1929-37

Part I

The following article, and the several to follow in future issues, was first published by *Skinny Knuckles* in the August and September 1977 issues. Much of the information has been taken from catalog data of United Motor Services, Inc.

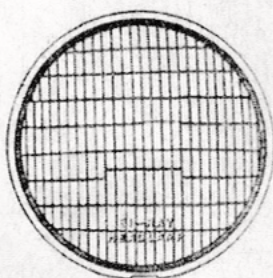
Next month we shall continue the headlamp application data for the Glolite, Guide-Ray, Liberty, Monogram, Multibeam, Parabeam, Riteway, Solar, Stabilite, Supersafe, Tilt-Ray, Tractor, Tribbeam, Twilite and Twin Beam lenses.

Many owners have difficulty in identifying the correct headlight lenses for their vehicles since descriptions or dimensions are not often given in sales literature or parts books. It is not sufficient to specify only the brand name when ordering lenses — the size must be given as some manufacturers made 15 or 20 different sizes in the same basic pattern.

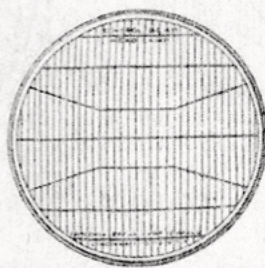
In this issue we present detailed data, descriptions and dimensions of all U.S. headlight lenses in popular usage during 1929-1937. In the issue to follow we will present applications for most U.S.-built cars during this period, so you will be able to instantly identify the correct size, make and pattern for a given car.

Most states had strict regulations concerning the type of lenses, the intensity of illumination, and the aiming of beams. In most cases, lenses were legal only when used in headlamps for which they were designed. The flutes and prisms in lenses are not purely decorative; they are for the purpose of properly directing light beams from the lamps and reflectors for which the lenses were designed. Lens manufacturers almost invariably put a prominent trademark on their products, which was primarily to enable officials to determine the legality of the lens.

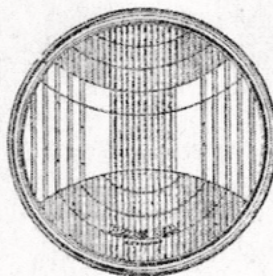
Nearly all lenses have a carefully designed system of vertical flutes which spreads the light horizontally to illuminate the edges of the road, and a series of horizontal prisms which prevent any rays from projecting upward and causing glare. More often than not, no distinction was made between right and left lenses — they were identical. A few manufacturers, however, thought that a different pattern of light distribution was called for and supplied right and left side lenses of different design (an added headache for the restorer trying to locate hard-to-find lenses).



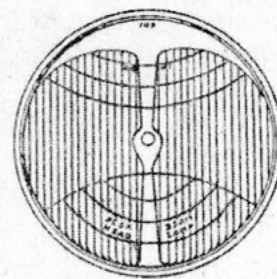
HI-RAY



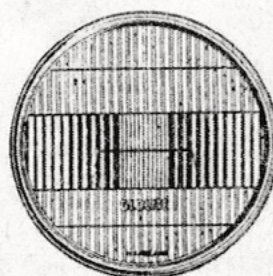
CONTROL BEAM



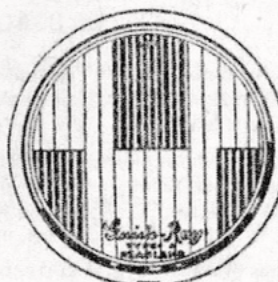
DEPRESS BEAM



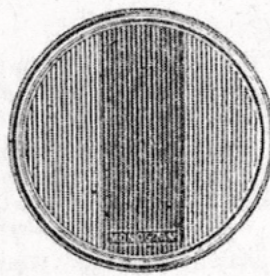
FLEX BEAM



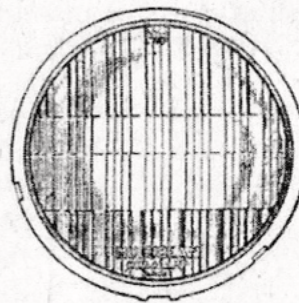
GLOLITE



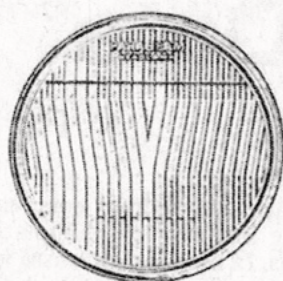
GUIDE-RAY



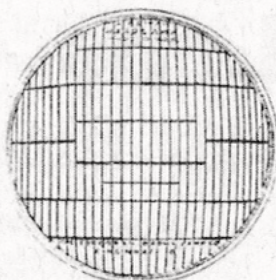
MONOGRAM



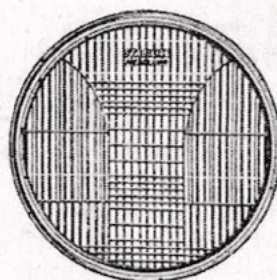
MULTIBEAM



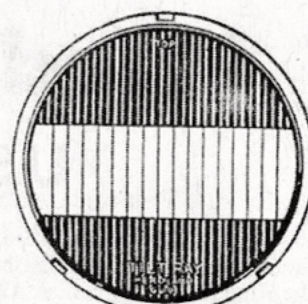
PARABEAM



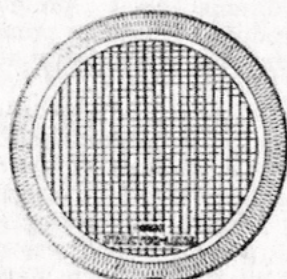
RITEWAY



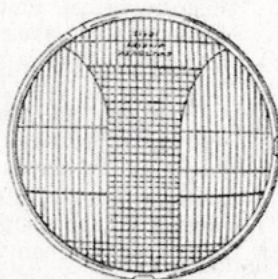
STABILITE



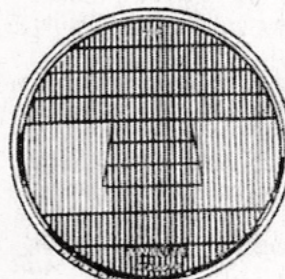
TILT RAY



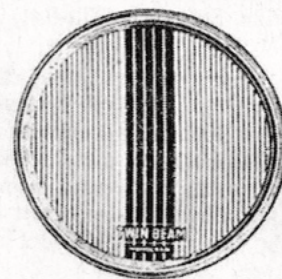
TRACTOR



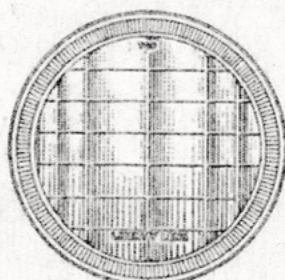
TRIBEAM



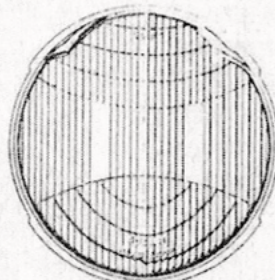
TWILITE



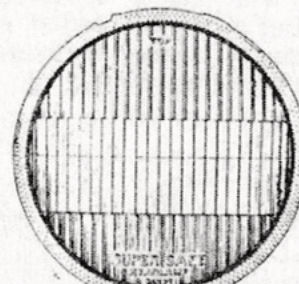
TWIN BEAM



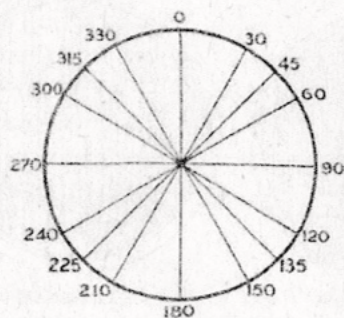
LIBERTY



SOLAR



SUPERSAFE



NOTCH DIAGRAM

The figures shown under "Position of Notches" on the pages to follow indicate the position in degrees and the number of notches on a lens.

Position of notch is expressed in degrees preceding clockwise from top center, facing lens. "0" indicates only one notch at top center of lens. "90-180" means two notches, one at 90 degrees, the other at 180 degrees, etc.

The prices given were retail prices in 1937 and, of course, no longer have any significance.

HEADLAMP LENSES

BI-RAY

Arranged in Order According to Outside Diameter of Lens

Diameter		*Position of Notches	Right or Left	Convex or Flat	Part No.	Price Each
Outside	Prism					
7 1/8	6 7/8	180.....	R. & L.	Convex.....	4000	\$1.85
7 1/4	Minor Axis	None.....	R. & L.	Convex and Oval..	4010	2.10
7 1/2		180.....	R. & L.	Convex.....	4008	1.85
7 5/8	7 1/4	180.....	R. & L.	Convex.....	4009	.75
7 3/4	7	None.....	R. & L.	Convex and Oval..	4002	2.15
7 3/4	7 1/4	180.....	R. & L.	Convex.....	4001	1.85
7 3/4	7 1/4	180.....	R. & L.	Convex.....	4004	.90
8	7 1/4	180.....	R. & L.	Convex.....	4007	1.85
9 1/8	8 1/2	180.....	R. & L.	Convex.....	10986	
9 1/4	8 3/4	0-135-180-225.....	R. & L.	Convex.....	4003	1.85

CONTROL BEAM

8 1/8	7 1/2	180.....	R. & L.	Convex.....	1000	1.85
9 1/8	8 1/8	180.....	R. & L.	Chrome Bead		
				Convex.....	1001	1.85
9 1/8	8 1/8	180.....	R. & L.	Silver Bead		
				Convex.....	1002	2.10

DEPRESS BEAM

7 1/8	6 3/4	180.....	R. & L.	Convex.....	4500	1.85
Special						
Oval		None.....	R. & L.		4501	3.00
7 1/4	7 1/8	155-205-350.....	R. & L.	Convex.....	H-14905	1.75
7 1/2	7 1/8	180.....	R. & L.	Convex.....	4503	1.85
8 1/8	7 1/2	180.....	R. & L.	Convex.....	H-14755	1.75
8 1/4	7 1/2	180.....	R. & L.	Convex.....	H-14755-U	.75
8 1/2	7 1/2	180.....	R. & L.	Convex.....	H-14806	1.75
8 3/4	7 1/4	180.....	R. & L.	Convex.....	H-13464	1.85
8 3/4	7 1/4	180.....	R. & L.	Flat.....	H-12941	1.60
8 3/4	7 1/4	180.....	R. & L.	Flat.....	H-10094	1.75
9 1/8	8 1/2	180.....	R. & L.	Flat.....	H-11471	1.60
9 1/4	8 1/2	180.....	R. & L.	Convex.....	H-12887	1.85
9 1/4	8 1/4	60-180-300.....	R. & L.	Flat.....	H-4285	1.60
9 1/4	8 3/4	0-135-225.....	R. & L.	Convex.....	H-14440	1.85
9 1/4	8 3/4	180.....	R. & L.	Convex.....	H-13459	1.85
9 1/4	8 3/4	180.....	R. & L.	Convex.....	H-13654	1.85
9 1/4	7 1/4	None.....	R. & L.	Convex and Oval..	H-14761	2.10
9 1/4	7					
9 1/4	8 3/4	80-90-180-260-270.....	R. & L.	Flat.....	H-10096	1.60

HEADLAMP LENSES

DEPRESS BEAM—Cont'd

Arranged in Order According to Outside Diameter of Lens

Diameter		*Position of Notches	Right or Left	Convex or Flat	Part No.	Price Each
Outside	Prism					
9 1/4	8 1/4	None.....	R. & L.	Convex.....	H-13643	1.85
9 1/4	9 1/4	180.....	R. & L.	Convex.....	H-13372	1.85
9 1/4	8 1/4	180.....	R. & L.	Flat.....	H-12152	1.60
9 1/4	9 1/4	80-90-180-260-270.....	R. & L.	Flat.....	H-11095	1.60
10 1/4	9 1/4	180.....	R. & L.	Flat.....	H-12311	1.60
10 1/4	9 1/4	180.....	R. & L.	Convex.....	H-12762	1.85
10 1/4	9 1/4	180.....	R. & L.	Oval.....	H-12818	2.10
10 1/4	9 1/4	180.....	R. & L.	Convex.....	H-13802	1.85
10 1/4	9 1/4	180-210.....	R. & L.	Convex.....	H-13269	1.85
10 1/4	9 1/4	0-180-210.....	R. & L.	Flat.....	H-10095	1.60
10 1/4	9 1/4	180-210.....	R. & L.	Flat.....	H-12161	1.60
10 1/4	10 1/4	45-135-180-225-315.....	R. & L.	Flat.....	H-12924	1.60
10 1/4	10 1/4	180.....	R. & L.	Convex.....	H-13339	1.85
10 1/4	9 1/4	0-105-180-225.....	R. & L.	Flat.....	H-11944	1.60
10 1/4	9 1/4	180.....	R. & L.	Oval and Convex..	H-13042	2.10
10 1/4	8 1/4	0-105-180-225.....	R. & L.	Flat.....	H-12120	1.60
10 1/4	9 1/4	0-105-180-225.....	R. & L.	Flat.....	H-10093	1.60
11 1/4	10 1/4	180-210.....	R. & L.	Convex.....	H-13094	2.65
11 1/4	10 1/4	180-210.....	R. & L.	Flat.....	H-10259	2.10
11 1/4	10 1/4	180-210.....	R. & L.	Convex.....	H-13383	2.10
11 1/4	10 1/4	180-210.....	R. & L.	Flat.....	H-12160	2.10
11 1/4	10 1/4	180-210.....	R. & L.	Convex.....	H-10791	2.65
11 1/4	8 1/4	None.....	R. & L.	Oval and Convex..	H-13317	2.10
10 1/4	7 1/4	None.....	R. & L.	Oval and Convex..	H-13317	2.10
11 1/4	8 1/4	0-180.....	R. & L.	Convex and Oval..	H-15091	2.10
10 1/4	7 1/4	135-180-225.....	R. & L.	Flat.....	H-12051	2.10

FLEX BEAM

7 1/4	6 1/4	180.....	Left	Convex.....	H-14925	1.85
7 1/4	6 1/4	180.....	Right	Convex.....	H-14926	1.85
7 1/4	7 1/4	0-140-220.....	Left	Convex.....	H-14287	1.95
7 1/4	7 1/4	0-140-220.....	Right	Convex.....	H-14288	1.95
7 1/4	6 1/4	180.....	Left	Convex.....	H-14669	1.85
7 1/4	6 1/4	180.....	Right	Convex.....	H-14670	1.85
7 1/4	7 1/4	45-135-180-225-315.....	Left	Convex.....	H-14813	1.85
7 1/4	7 1/4	45-135-180-225-315.....	Right	Convex.....	H-14814	1.85
8 1/4	7 1/4	180.....	Left	Convex.....	H-14325	1.85
8 1/4	7 1/4	180.....	Right	Convex.....	H-14326	1.85

HEADLAMP LENSES

FLEX BEAM—Cont'd

Arranged in Order According to Outside Diameter of Lens

Diameter		*Position of Notches	Right or Left	Convex or Flat	Part No.	Price Each
Outside	Prism					
8 1/4	7 1/2	180.....	Right	Convex.....	H-10263	1.85
8 1/4	7 1/2	180.....	Left	Convex.....	H-10264	1.85
9 1/4	8 1/2	None.....	Left	Convex and Oval..	H-14503	2.10
7 1/2	7					
9 1/4	8 1/2	None.....	Right	Convex and Oval..	H-14504	2.10
7 1/2	7					
8 1/2	8 1/2	None.....	Left	Convex.....	H-14215	1.85
8 1/2	8 1/2	None.....	Right	Convex.....	H-14216	1.85
8 1/2	8 1/2	None.....	Left	Convex Decorated Bead.....	H-14461	2.10
8 1/2	8 1/2	None.....	Right	Convex Decorated Bead.....	H-14462	2.10
9 1/4	8 1/2	None.....	Right	Convex.....	H-13902	1.85
9 1/4	8 1/2	None.....	Left	Convex.....	H-13903	1.85
9 1/4	8 1/2	None.....	Right	Convex.....	H-13829	1.85
9 1/4	8 1/2	None.....	Left	Convex.....	H-13830	1.85
9 1/4	8 1/2	None.....	Left	Convex.....	H-13909	1.85
9 1/4	8 1/2	None.....	Right	Convex.....	H-13910	1.85
9 1/4	9 1/4	45-135-225-315.....	Right	Convex.....	H-13890	1.85
9 1/4	9 1/4	45-135-225-315.....	Left	Convex.....	H-13891	1.85
9 1/4	8 1/2	45-135-180-225-315.....	Left	Convex.....	H-14185	1.85
9 1/4	8 1/2	45-135-180-225-315.....	Right	Convex.....	H-14186	1.85
9 1/4	8 1/2	45-135-180-225-315.....	Right	Convex.....	H-14194	1.85
9 1/4	8 1/2	45-135-180-225-315.....	Left	Convex.....	H-14195	1.85
9 1/4	7 1/2	None.....	Right	Convex and Oval..	H-14286	1.75
8 1/2	7					
9 1/4	7 1/2	None.....	Left	Convex and Oval..	H-14285	1.75
8 1/2	7					
9 3/4	8 1/2	180.....	Left	Convex.....	H-14029	1.85
9 3/4	8 1/2	180.....	Right	Convex.....	H-14030	1.85
11 1/4	8 1/2	0-180.....	Left	Convex and Oval..	H-14279	2.10
10 1/4	7 1/2					
11 1/4	8 1/2	0-180.....	Right	Convex and Oval..	H-14280	2.10
10 1/4	7 1/2					

GLOLITE

11 1/4	8 3/4	0-120-180-240.....	R. & L.	Convex and Oval..	CB-9	2.10
10 3/4	7 1/2					
12 1/4	9 1/4	0-70-160-180-200-290.....	R. & L.	Convex and Oval..	1216-GL	2.10
10 1/4	8 1/2					
9 1/4	8 1/2	0-120-180-240-315.....	R. & L.	Flat.....	945-GL	1.60
9 1/4	8 1/2	90-180-210-330.....	R. & L.	Flat.....	944-GL	1.60
9 3/4	8 1/2	45-135-180-225-315.....	R. & L.	Convex.....	CB-737	1.85

Continued
in the June,
2014 issue.
S.K.