

BILL DAVIS



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GENERAL  ELECTRIC

*Catalog of Standard*  
**LARGE MAZDA LAMPS**  
A N D T Y P E D L A M P S





*BEHIND the name General Electric is a sterling reputation of company integrity and the unsurpassed quality of its products.*

*MAZDA lamps of General Electric manufacture incorporate every characteristic and every improvement that assure the customer the maximum in incandescent lamp quality and performance, at the lowest prices commensurate with these characteristics.*

*Moreover, General Electric's continuous engineering and research activities to insure the best performance of all types of MAZDA lamps in their many specific services and functions, have established the relationship between light and vision, which is the most important consideration to all who buy lamps for any illumination purpose.*



T3-LL 17

# GENERAL ELECTRIC

C A T A L O G O F

## STANDARD LARGE MAZDA LAMPS

A N D T Y P E D L A M P S



*This catalog is offered in order to present the lamp products of General Electric in better relation to the many general and specific lighting services which they render.*

*Incandescent Lamp Department*  
**GENERAL ELECTRIC COMPANY**  
*Nela Park, Cleveland*



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# LIGHT FOR SEEING...

## *not light for looking*

■ The startling facts revealed by the science of seeing have led to new standards of lighting, standards that now make seeing safe, comfortable and more productive. Man has learned more about the science of light and vision in the last few years than in any century of the past, and this new knowledge is being put to work in modern lighting standards.

Since the first time it was used, artificial light has been considered a substitute for darkness, a device to prolong the active, productive daytime hours. But now the science of seeing has shown the importance of the relationship between good seeing conditions and the welfare of human beings. The science of seeing indicates the need of *light for seeing* rather than simply light for looking.

Science has demonstrated that seeing is not done with the eyes alone and that it affects the whole body. Experiments have proved that a close seeing task, such as reading an ordinary book, is accompanied by much less actual muscular fatigue when there is 100 footcandles (units) of light than when there is only one footcandle on the page. It is plain that seeing has a definite effect on the comfort and productiveness of people who, in their work or their relaxation, use their eyes for close seeing over long periods of time as do so many people in our modern society.

The human eye is a poor judge of lighting for seeing, for it can actually see in light that is far too dim for easy seeing. The lighting system of a factory, an office, a schoolroom or a home may appear to be providing ample light for the eye tasks being performed under it, but a scientific measurement of the light shows the eye to be thoroughly inaccurate.

### *A Light Meter Check-up*

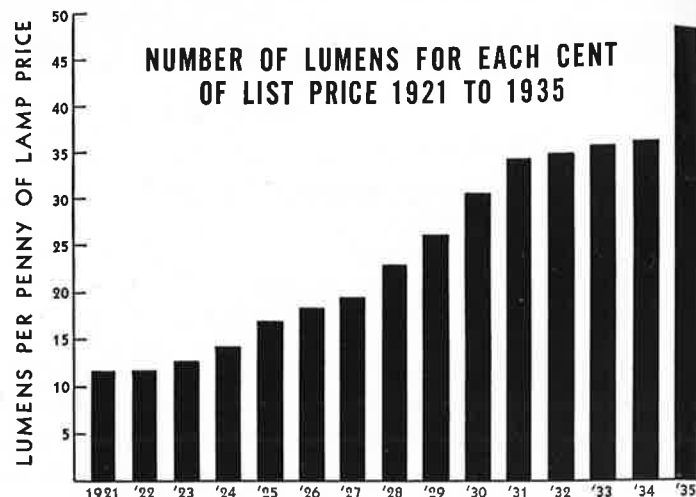
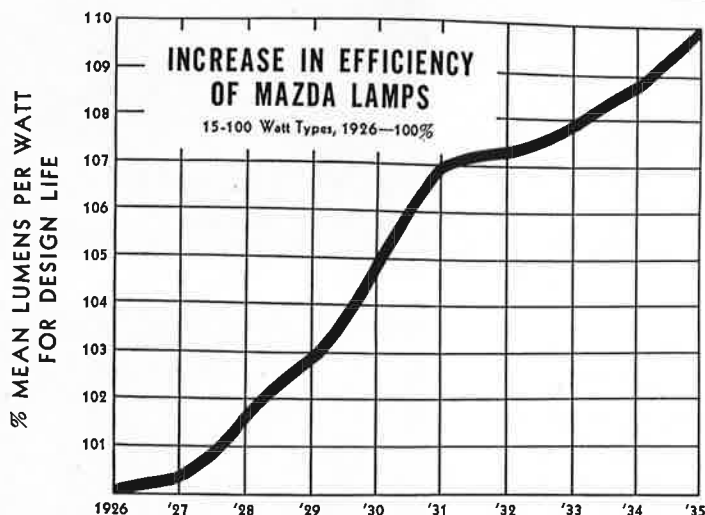
With a Light Meter it is easy to measure exactly how much light you have. This little instrument, smaller than a pack of playing cards, through a light-sensitive cell on the top, shows on a dial the number of footcandles of light on an office desk, at a factory machine, under a reading lamp in a living room or at any other place where people use their eyes for close seeing. A check-up with a Light Meter will tell you precisely how much *light for seeing* you get from your lighting. The organization from which you buy MAZDA lamps or your local utility will tell you how you can have this check-up made.



In a factory, an office, a store, a schoolroom or at home, the Light Meter measures scientifically the light under which close seeing work is done.







## THE COST OF LIGHT...

■ When you buy a lamp, you do not buy it for itself but for the light it gives when placed in a socket. The cost of the light you get is made up of two principal factors: the cost of the current required to burn the lamp and the cost of the lamp itself. The amount of light you get is determined by *the ability of the lamp to convert as much of the electrical energy consumed as possible into light.*

The chart above shows that the light-yielding powers of MAZDA lamps, as a result of research and developmental work, have been increased ten per cent during the last ten years alone. This is an important and economical increase, for under average conditions the cost of the current used by a lamp is several times (generally more than ten times) the cost of the lamp, and an increase in efficiency means that at no additional cost for current the user of MAZDA lamps receives more lumens

of light. This increase in efficiency of MAZDA lamps during the past ten years has given the public increased illumination which would have cost more than \$125,000,000 a year.

The prices of MAZDA lamps have been consistently reduced whenever research has found a way to decrease their cost. Many improvements have been made since MAZDA lamps were first manufactured, and the benefits of these improvements have been given to the public in reduced prices and lamps that yield more light for the current required to burn them.

The chart above shows this combination of lower and lower prices and better and better lamps has steadily reduced the cost of light. In 1921 the user of a 60-watt MAZDA lamp paid, at list price, 45 cents for it and received 509 lumens (units of light). Today he pays, at list price, only fifteen cents and receives 703 lumens of light—only about 12 lumens for each cent of list price in 1921 and over 46 lumens for each cent of today's list price.

## THE QUALITIES OF A GOOD LAMP...

■ Lamps may look alike, but the simplicity of a lamp's exterior belies the precision and resource and skill that must go into its interior construction if it is to be a good lamp. The interior construction of all MAZDA lamps is the result of research and skill and they combine all of the qualities that make lamps economical. Any good lamp and every MAZDA lamp must have these qualities:

### *High Efficiency When The Lamp Is First Placed In A Socket And During Its Whole Burning Life*

Today the light output of a 60-watt MAZDA lamp, even at the end of its life, seldom falls below 90% of that of a new lamp.

### *Correct Average Life*

MAZDA lamps are carefully designed for a life that has been determined to be best for each class of service.

### *Uniform Performance*

MAZDA lamps are uniform in life, candlepower and watts.

### *Accurate Rating*

MAZDA lamps conform more closely to the wattage marked on their bulbs and to the accuracy of their efficiency ratings than required by Federal Specifications.

### *Freedom From Defects*

MAZDA lamps are 99.9% free from defects that will seriously affect their performance.

### *Strength*

By correct design and careful selection of the materials that go into MAZDA lamps their strength is assured both when new and throughout life.



# The *Best* Lamp . . . MAZDA

■ The mark "MAZDA" on a lamp is the mark of a research service, and it is your guarantee of the best lamp it is possible for modern science and technology to make.

## *World-wide Research*

■ Chemists, physicists, metallurgists and engineers in our laboratories are engaged in a ceaseless program of research aimed at finding new materials and new methods that will make MAZDA lamps ever better producers of light. Added to the knowledge these scientists gain are the findings of the world's most famous experimental and technical laboratories. The benefits of this world-wide research are received only by MAZDA lamps. The rise in the light-yielding power of MAZDA lamps throughout the years (see efficiency chart, page 4) reveals the results of this continuous work which is still creating improvements for tomorrow's lamps.

## *An Audit of Manufacture*

■ To make certain that every factory making MAZDA lamps maintains the high standards of quality set for them, the Electrical Testing Laboratories, the foremost independent electrical testing organization in the country, have for years been employed to make continuous inspections and tests of each factory's output of MAZDA lamps. This audit of manufacture, called MAZDA Service, is carried on by inspectors stationed in each MAZDA lamp factory, and every package of MAZDA lamps, after it has passed the factory's rigid quality tests, is subject to their sampling and inspection before it may be shipped.

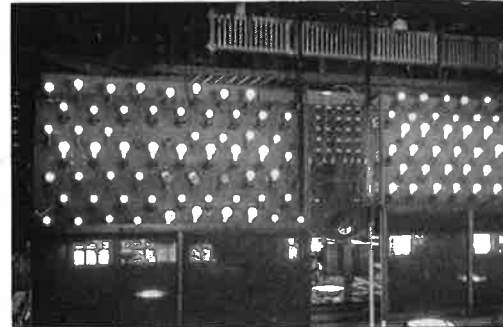
## *A Unique System of Quality Control*

■ These MAZDA Service inspectors are entirely independent of the management of the factories in which they are located. Each year they impartially inspect millions of lamps for every possible flaw and report their findings directly to the manufacturer and the scientists who control the operation of the system. This plan for seeking and maintaining the highest possible quality is unique in the lamp industry.

MAZDA Service controls the high quality of MAZDA lamps through these: APPRAISAL INSPECTION—the lamp is critically examined, lighted and gauged to check for mechanical and structural defects; SPECIAL TESTS—samples are given a short burning test to find if defects detrimental to performance might develop during life; FLOOR INSPECTION—Thorough examination is made of all lamps in any package in which, despite extreme precautions, defective lamps may have been found during Appraisal or Special Test Inspection; RATING TESTS—to determine conformity of light output, watts and efficiency to rating limits; LIFE TESTS—to determine conformity to life rating.



Appraisal Inspection



Special Tests



Floor Inspection



Rating Tests



Life Tests

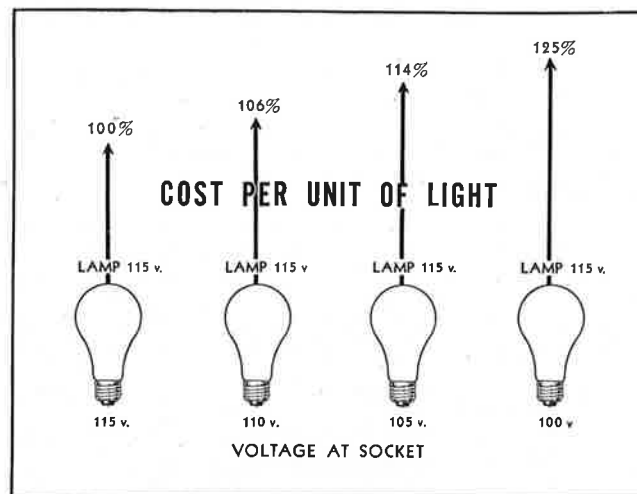


# GET ALL THE LIGHT YOU PAY FOR...

■ Each type of MAZDA lamp is carefully designed for a life that has been determined to be best for its particular class of service, and it costs you money to have your lamps last longer than this designed life.

Some lamp users believe they are being economical by using lamps with a rated voltage higher than the voltage of the sockets in which the lamps are burned. This may make a small saving on lamps, but it actually increases the cost of light. The fact that the cost of lamps is generally only about 10 per cent of the total cost of light (the bigger part being the cost of the current required to burn the lamps) makes it plain that a small saving on lamps has only a small effect on the total cost of light.

When lamps are burned under their rated voltage (a 115-volt lamp, for example, burned in a socket where the voltage is 110), the light output drops off so rapidly with each volt of undervoltage that the

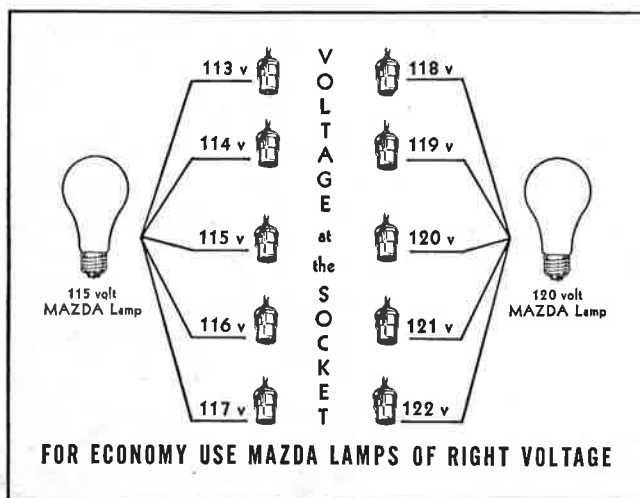


cost of light rises. The chart above shows the swift rise in the cost of light.

When you burn lamps under their rated voltage, you waste useful electrical energy. Undervoltage burning has the same effect as a reduction in the efficiency of a lamp. Years of patient research have been spent to raise the efficiency of MAZDA lamps to their present high levels, and any lamp user who knowingly burns lamps undervoltage sacrifices this gain in efficiency and raises his own cost of light.

The chart at the left shows you the proper, economical voltage of the lamps to burn at your particular socket voltage.

Undervoltage burning makes you pay for light you do not get. Make certain you get all the light you pay for by verifying the voltage at the sockets in which you burn lamps and order MAZDA lamps to conform to it.



## THE SAFEST GUIDE IN BUYING LAMPS...

**MAZDA lamps are made to specifications that are more rigid than any others ever set up for lamps, and the safest guide in buying is the trade-mark of a manufacturer whose history, achievements and reputation are outstanding.**



# STANDARD PRICE SCHEDULE OF LARGE MAZDA LAMPS AND TYPE D LAMPS

## HOW TO ORDER LAMPS

All orders should give the following information:

**Quantity**—Number of lamps desired. Purchasers will avoid delays and get best discount by ordering standard package quantities.

**Size of Lamps**—Specify wattage of multiple lamps and lumens of street series lamps.

**Voltage**—For multiple lamps.

**Amperes**—For series lamps.

**Bulb**—For example: A-19, G-25, T-8, P-19, PS-30, etc. The letter in the bulb designation indicates its shape and the

figure its approximate diameter in eighths of an inch. Thus a PS-30 bulb is pear shaped and is approximately  $\frac{3}{8}$  or  $3\frac{3}{4}$  inches in diameter. G indicates a round (globular), and T a tubular bulb. The letter "A" indicates the standard line bulb shape with inside frost, unless otherwise noted.

**Finish of Bulb**—Clear, inside frosted, white bowl, daylight, white, etc.

**Base**—Medium screw, mogul screw, candelabra screw, etc.

**Service**—For example: Projection, Floodlight, Locomotive Headlight, etc.

## DISCOUNT SCHEDULE

TO PURCHASERS UNDER FORMS E AND CE CONTRACT			
Net Value (Exclusive of Transportation Charges)	Discount		Minimum Net Purchases Under Each Basis to Reach Next Higher Basis
	Standard Package Quantities	Broken Package Quantities	
Primary (Less than \$150)	15%	10%	\$ 159.38
\$150	20%	10%	311.69
\$300	23%	13%	616.00
\$600	25%	15%	1,232.87
\$1,200	27%	17%	2,570.42
\$2,500	29%	19%	5,144.93
\$5,000	31%	21%	10,298.51
\$10,000	33%	23%	20,303.03
\$20,000	34%	24%	30,461.54
\$30,000	35%	25%	50,781.25
\$50,000	36%	26%	101,587.30
\$100,000	37%	27%	152,419.35
\$150,000	38%	28%	228,688.53
\$225,000	39%	29%	305,000.00
\$300,000	40%	30%	.....
TO PURCHASERS WITHOUT CONTRACT			
Any quantity in standard packages..... 15%			

Standard package discounts on all large MAZDA lamps can be given on orders for, and shipments to one point at one time of exact standard package quantities or multiples thereof. This is not to be allowed in any case where part of a standard package which has been sold, is retained in the custody of the manu-

facturer or any of its agents. It is allowable, however, to combine in one standard package all sizes of large MAZDA lamps having the same standard package quantity. Such lamps may be of different voltages and finish of bulb.

Provision is made for contracts on less than the \$150 basis in order that purchasers not at the time eligible to at least the \$150 basis, may obtain the greatest discounts justified by their total purchases within a year, in case purchases amount to \$150 or more.

## TRANSPORTATION ALLOWANCES AND CHARGES TO PURCHASERS

All lamps listed in price schedules will be sold and billed to purchasers f. o. b. point of shipment, with transportation (excluding cartage) allowed on shipments consisting of not less than one standard package, to all points in domestic territory.

Domestic territory shall be considered to be the United States, its territories and dependencies, including Alaska, the Hawaiian Islands, the Panama Canal Zone, Porto Rico, and the Virgin Islands, but not the Philippines, which with the rest of the world shall be regarded as foreign territory.

Should any purchaser desire its lamps shipped "Charges Collect," such purchaser, in deducting transportation charges from invoices covering lamps so shipped, will not be allowed to deduct cartage.

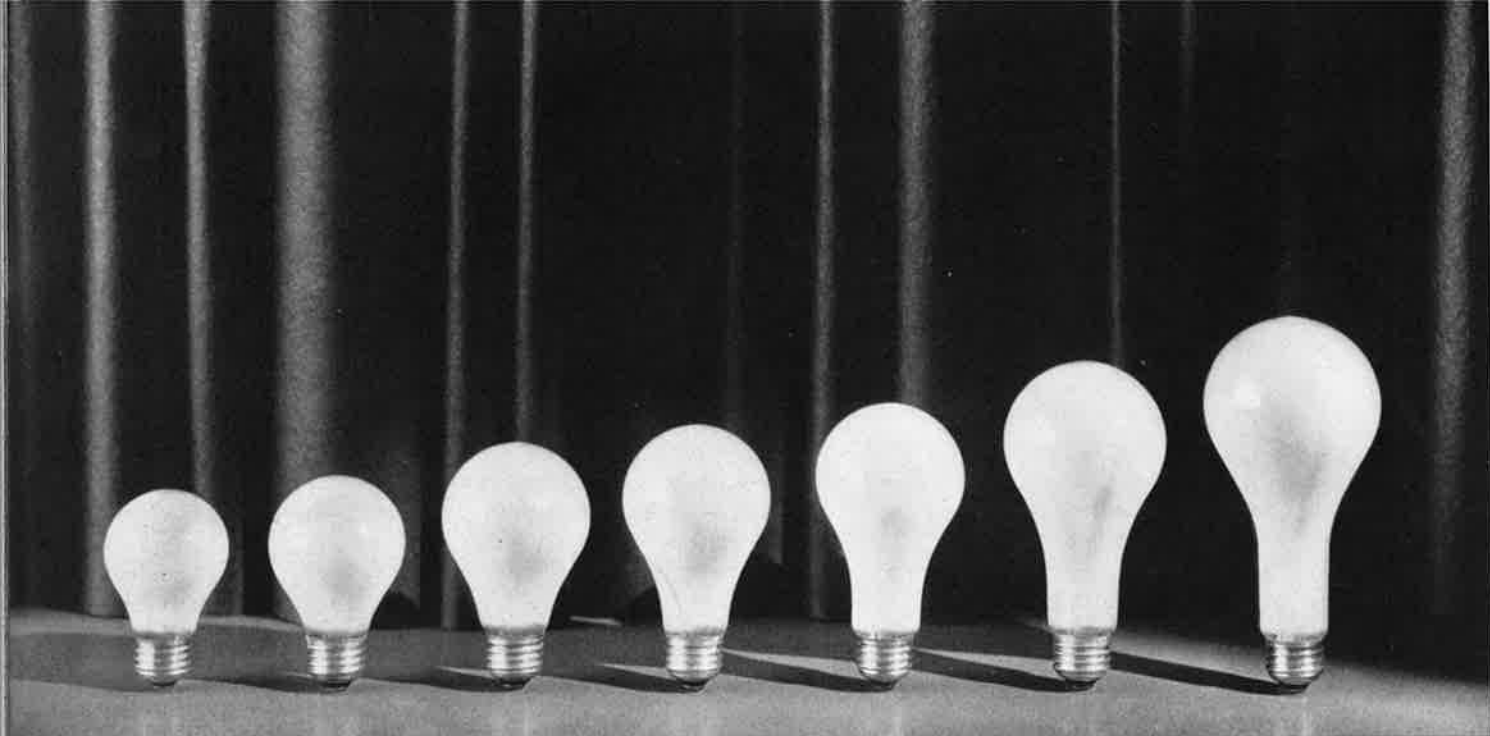
Claims for loss or damage in transportation must be filed with carriers within nine months after date of delivery or in case of non-delivery within nine months after a reasonable time for delivery has elapsed. Claims for concealed damage will be accepted by carriers only when such damage has been reported to them within fifteen days after delivery. Purchasers desiring the assistance of the manufacturer in filing such claims must report them to the manufacturer within a reasonable time so as to enable the manufacturer to comply with the common carrier's requirements.

## EXTRA CHARGES FOR SPECIAL FEATURES

WHITE, ALL FROSTED AND WHITE BOWL LAMPS OF MANUFACTURER'S STANDARD SPRAY COATINGS			
List Price of Clear or Inside Frosted Lamps	List Additional Charge for White, All Frosted or White Bowl	List Price of Clear or Inside Frosted Lamps	List Additional Charge for White, All Frosted or White Bowl
Less than \$1.00	\$0.05	\$4.00 to \$4.99	\$0.25
\$1.00 to 1.99	.10	5.00 to 5.99	.30
2.00 to 2.99	.15	6.00 to 6.99	.35
3.00 to 3.99	.20	7.00 to 7.99	.40

**Special Lamps**—Any MAZDA lamp requiring a change in construction from the standard, that is, in voltage (except 125 and 130 volts supplied at no extra charge), bulb shape or finish, basing or special etching will take a special price, which may be obtained upon application. All orders for special lamps except special etching may be filled either short or in excess, within the limits of 10 per cent, except that on orders for 10 lamps or less there will not be any shortage or excess. Orders for MAZDA lamps with special etching may be filled either short or in excess by 5%; except that on orders for less than 40 lamps the shortage or excess may equal but not exceed two lamps.





Watts      15                      25                      40                      60                      75                      100                      150

## GENERAL LIGHTING SERVICE—110 115 and 120 Volts

**GENERAL LIGHTING SERVICE** lamps fulfill 65 per cent of the nation's lamp requirements for ordinary uses in homes, stores, offices, schools, factories and the like. These lamps will operate in any position of burning, but the light maintenance, particularly in lamps of higher wattage sizes, is best when burned vertically base up. The data on light (lumen) maintenance given in the technical summary apply to this burning position only.

**OUTDOOR SERVICE**—Lamps of 40 watts and above are gas-filled and because of the bulb temperature should be protected from rain and snow when used out-of-doors.

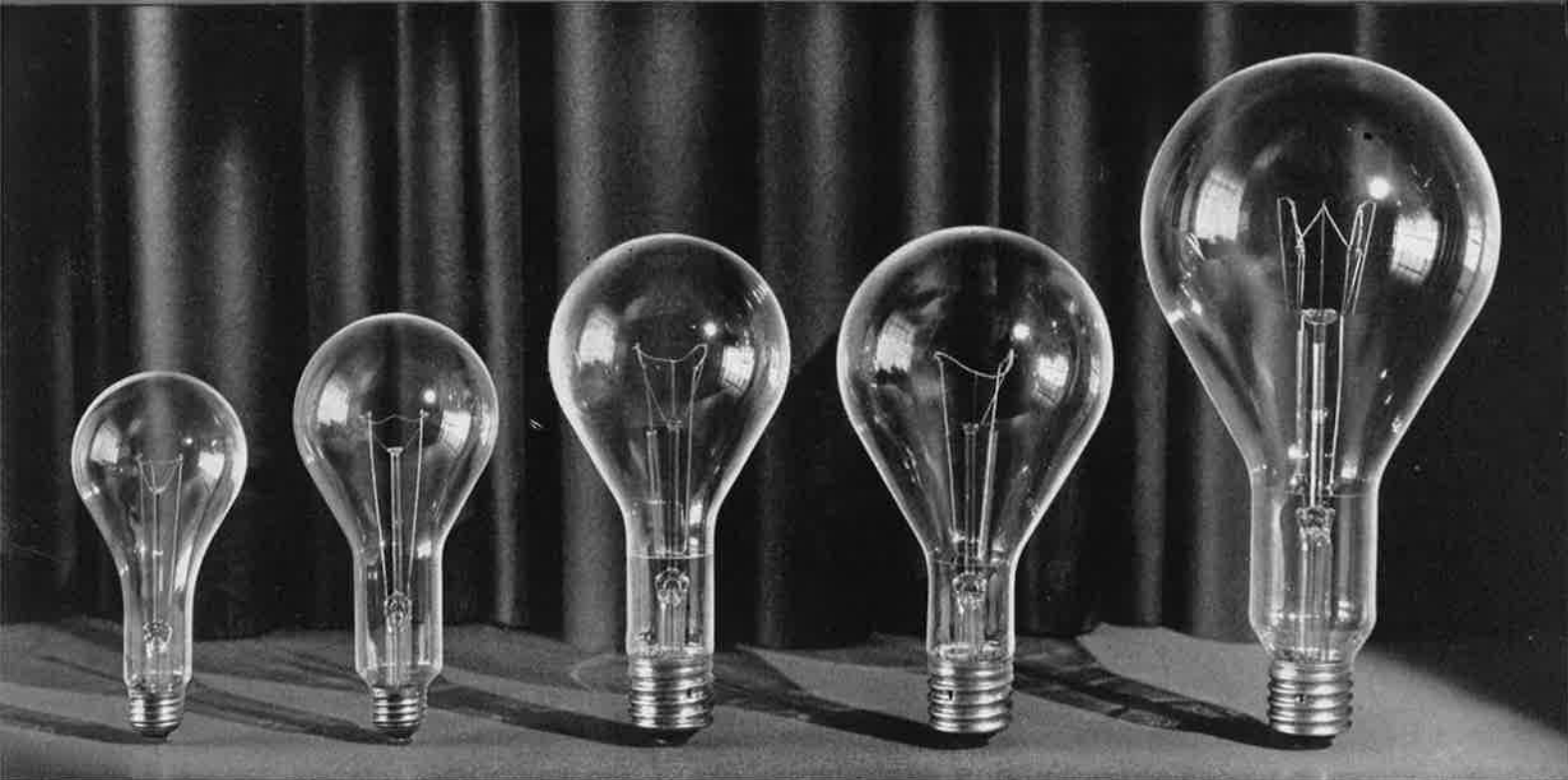
**VIBRATION AND ROUGH SERVICE**—Where lamps are subjected to vibration and shocks, attention should be given to the use of vibration and shock-

absorbing devices, or to a type of system or better location of lighting equipment to avoid these conditions. Where such conditions are inherent, lamps of special design for both vibration and rough service are available and are listed on page 17.

**SPORTS LIGHTING SERVICE**—For lighting baseball, football and softball fields and other similar large recreational areas employing 1000- and 1500-watt lamps, it is recommended that circuit voltage be adjusted to operate these standard lamps 10% overvoltage. While the life will be reduced to about 300 hours, a gain of 35% light with only a 16% increase in wattage is obtained. This permits lower initial equipment investment and makes for high operating efficiency for sports lighting installations where the system is in use only 100 or 200 hours each season.

Watts	Bulb	Approximate Lumens	Screw Base	Standard Package Quantity	List Price
					Inside Frosted
15	A-17	140	Medium	120	\$0.15
25	A-19	258	Medium	120	.15
40	A-19	440	Medium	120	.15
60	A-21	762	Medium	120	.15
75	A-21	1065	Medium	60	.20
100	A-23	1530	Medium	60	.20
150	A-25	2535	Medium	60	.25





150

200

300

500

750, 1000 and 1500

## GENERAL LIGHTING SERVICE—110, 115 and 120 Volts

**INSIDE FROSTED FINISH**—The light absorbed by inside frosting is so negligible (the lumen output is rated the same as for clear lamps) that these lamps are recommended for most general lighting purposes to give added diffusion and in the case of indirect lighting equipment to eliminate striations and harsh shadow effects.

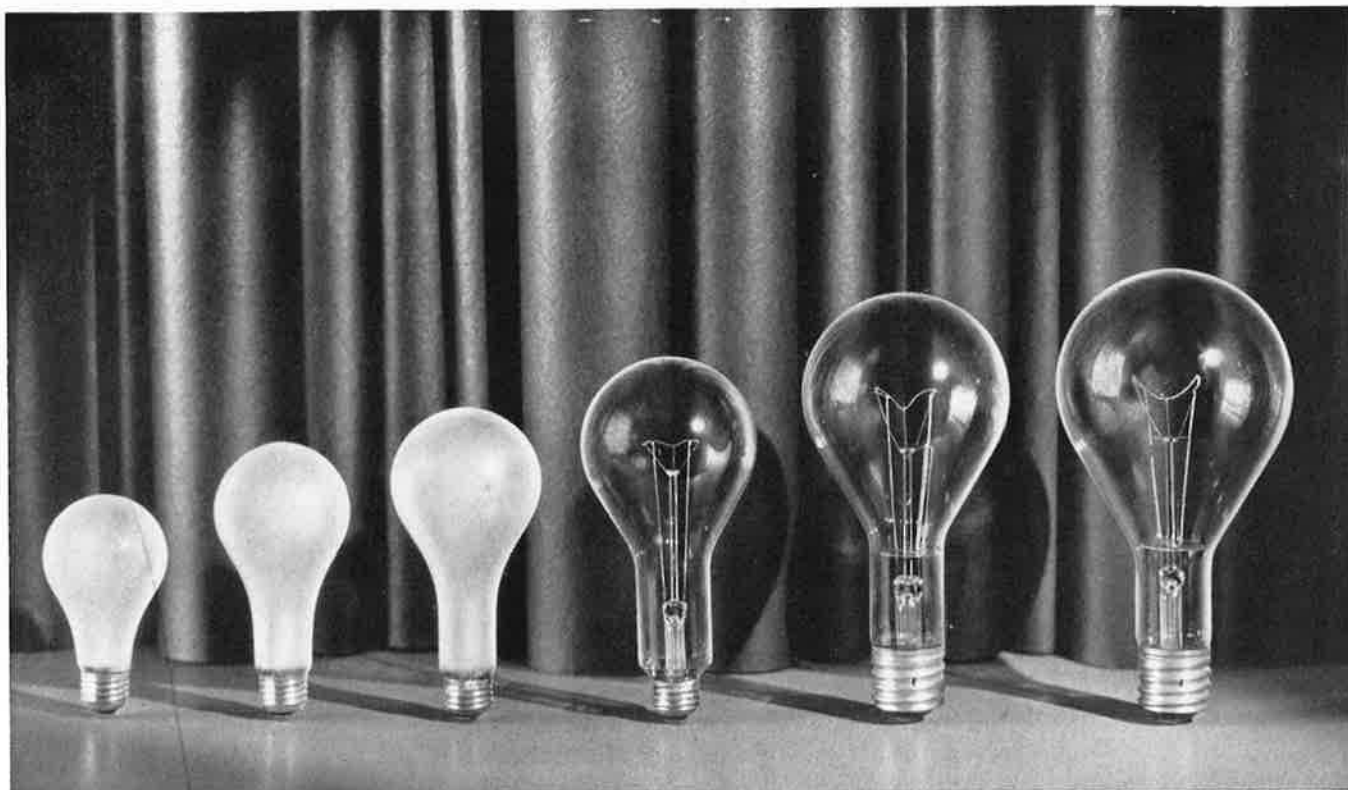
**CLEAR FINISH**—Clear bulb lamps are satisfactory for use in adequately shielded reflectors or diffusing equipments which protect the eyes from the irritating effects and inefficiency which glare produces; also in

floodlighting and miscellaneous special applications requiring reasonably accurate control of light.

**WHITE BOWL FINISH**—The light output of white bowl lamps is approximately 3 per cent less than that of clear or inside-frosted lamps. They should be burned base up only and are recommended for use in open-type equipment such as the RLM Standard Reflector to improve the quality of illumination by minimizing direct glare, reflected glare and deep shadows. These factors, as well as adequate amount of light, determine the effectiveness of the illumination.

Watts	Bulb	Approximate Lumens	Screw Base	Standard Package Quantity	List Price		
					Clear	Inside Frosted	White Bowl
150	A-25	2535	Medium	60	\$0.25	.....	\$0.30
200	PS-30	3400	Medium	24	.45	\$0.50	<del>.50</del>
300	PS-35	5520	Mogul	24	.75	.80	.80
500	PS-40	9800	Mogul	12	1.40	1.50	1.50
750	PS-52	14550	Mogul	6	3.75	.....	3.95
1000	PS-52	20700	Mogul	6	4.00	.....	4.20
1500	PS-52	33000	Mogul	6	5.75	.....	5.95





Watts    60                      100                      150                      200                      300                      500

## MAZDA DAYLIGHT LAMPS—110, 115 and 120 Volts

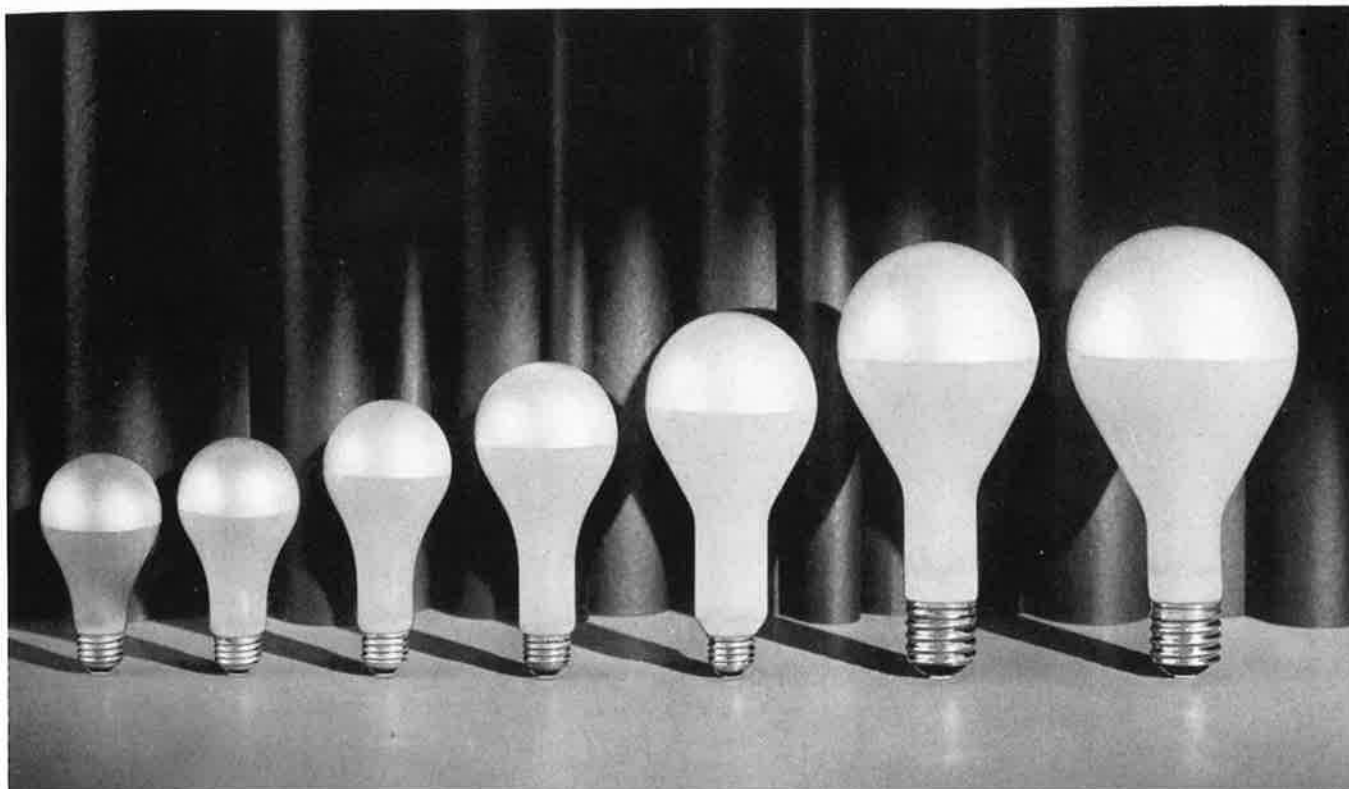
■ MAZDA Daylight lamps are supplied with blue bulbs and emit a whiter light which is a partial step toward natural daylight. In many instances of color rendition their use gives sufficient color correction to be of considerable advantage over the warmer tones of unmodified light. For example, they are used in many industrial applications, particularly in local lighting units for sewing machines and for special assembly and inspection processes. Again, the light blends well with natural daylight; in fact, in many cases it is about the same color as the daylight which

one gets indoors, taking into account the prevalence of warm tones in window shades, walls and hangings. For this reason the use of daylight lamps in offices, stores and other commercial interiors will be found to correct an unsatisfactory mixture of ordinary artificial light and inadequate daylight.

The next larger size of lamp will be required to produce approximately the same illumination value as computed for a clear lamp of a given size. MAZDA Daylight lamps are used in all common types of equipment.

Watts	Bulb	Approx. Lumens	Screw Base	Standard Package Quantity	List Price	
					Clear	Inside Frosted
60	A-21	495	Medium	120	.....	\$0.30
100	A-23	988	Medium	60	.....	.35
150	A-25	1650	Medium	60	\$0.50	.55
200	PS-30	2210	Medium	24	.80	.85
300	PS-35	3590	Mogul	24	1.20	1.30
500	PS-40	6370	Mogul	12	2.15	2.30





Watts    60                      75                      100                      150                      200                      300                      500

## Silvered Bowl MAZDA Lamps — 110, 115 and 120 Volts

■ Silvered bowl lamps have a permanent coating of mirror silver on the bowl. This coating shields the brilliant filament and forms a highly efficient reflecting surface as an integral part of the lamp. This reflecting surface does not dull or tarnish throughout the life of the lamp.

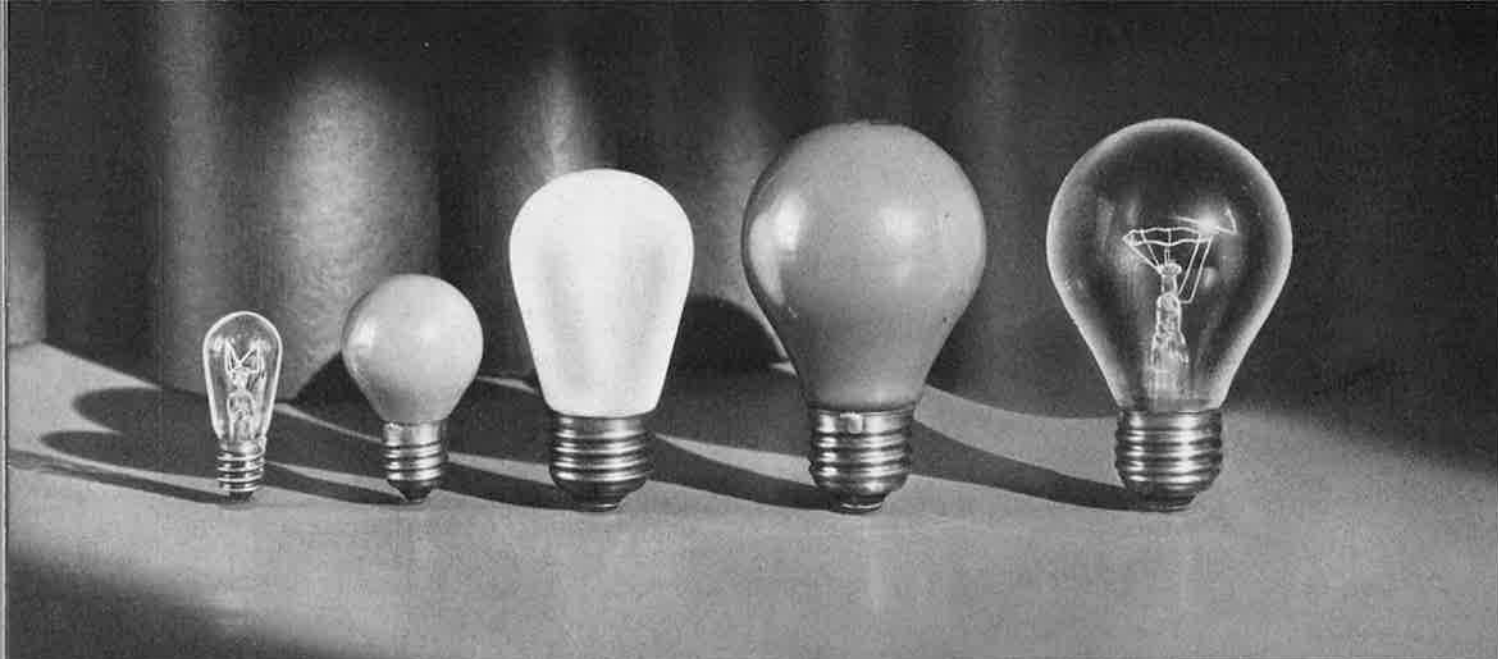
Silvered bowl lamps should be used only in porcelain sockets and in fixtures so designed that the temperatures of the lamp and fixture do not exceed limits for satisfactory operation. Such precautionary measures should be applied to all high wattage lamps,

but the heating effect is more pronounced with silvered bowl lamps because the silvering redirects the heat toward the base and socket assembly.

It is intended that silvered bowl lamps be used in a base up position, the silvering serving as a highly efficient indirect reflector. Silvered bowl lamps are applicable to all types of indirect equipment. These lamps are standardized with inside-frosted bulbs because of the desirability of eliminating streaks, striations, and shadows of fixture supports on the ceiling.

Watts	Bulb	Screw Base	Standard Package Quantity	List Price
				Inside-Frosted Silvered Bowl
60	A-21	Medium	120	\$0.50
75	A-21	Medium	60	.70
100	A-23	Medium	60	.70
150	A-25	Medium	60	.80
200	PS-30	Medium	24	1.10
300	PS-35	Mogul	24	1.60
500	PS-40	Mogul	12	2.60





Watts	6	10	6 and 10	25	25 and 50
Finishes	Clear	<ul style="list-style-type: none"> <li>Clear</li> <li>Red</li> <li>Blue</li> <li>Green</li> <li>Yellow</li> <li>Amber-orange</li> <li>Flametint</li> <li>White</li> </ul>	<ul style="list-style-type: none"> <li>Inside Frosted</li> <li>Clear</li> <li>Red</li> <li>Blue</li> <li>Green</li> <li>Yellow</li> <li>Amber-orange</li> <li>Old Rose</li> </ul>	<ul style="list-style-type: none"> <li>Inside Frosted</li> <li>Red</li> <li>Blue</li> <li>Green</li> <li>Yellow</li> <li>Amber-orange</li> <li>Flametint</li> <li>Ivory</li> <li>Old Rose</li> </ul>	Clear Daylight

## Clear, Inside Colored, Tinted and Frosted MAZDA Lamps—110, 115 and 120 Volts

### —for Sign and Decorative Lighting

■ These lamps are suitable for outdoor exposed lamp signs and for colored festoons, and similar decorative lighting. For enclosed lamp signs and luminous architectural displays where lamps are protected from rain and snow, the full range of general service lamps (pages 8 and 9) is applicable.

Inside colored lamps find their most logical use in

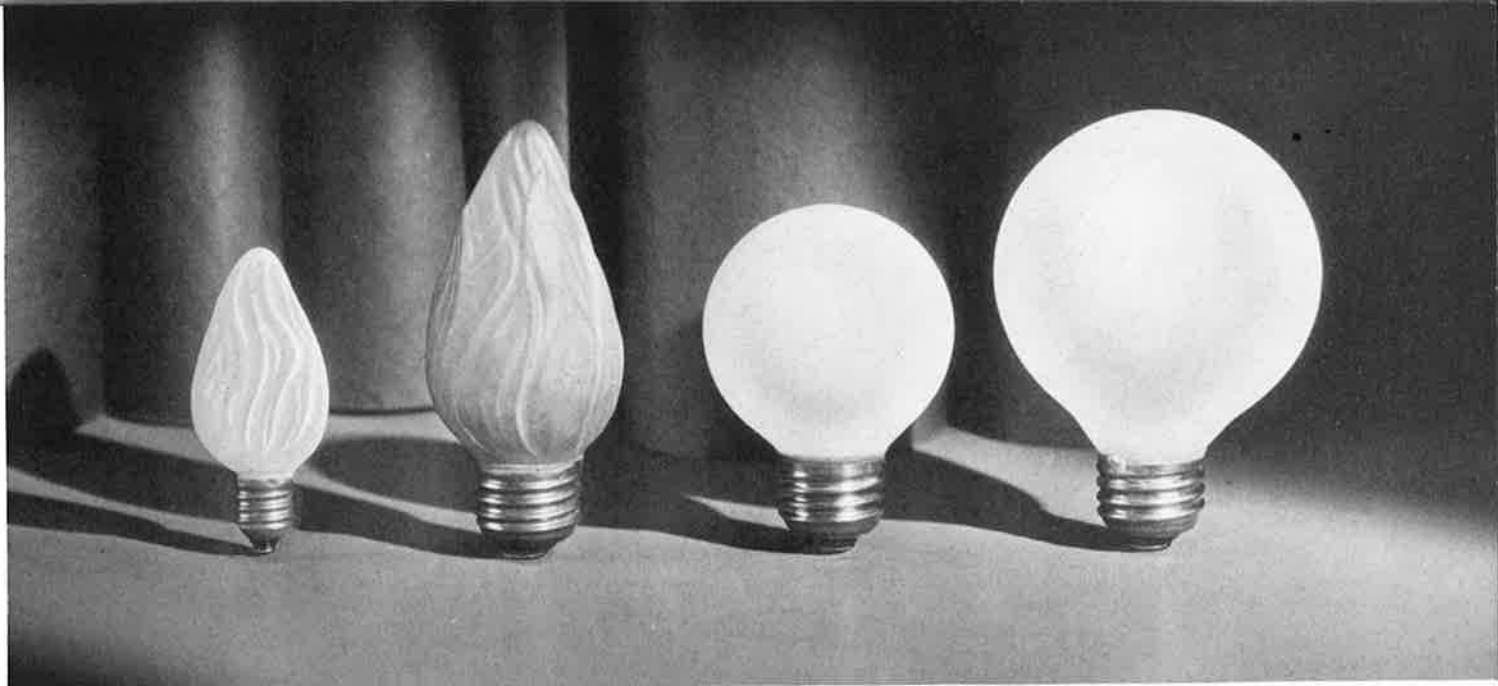
exposed lamp signs and colorful displays where the lamps themselves are visible and form the pattern of the display. Where color effects of lighting are desired from concealed lamps as in color-circuits in coves, luminous panels, and the like, color may be incorporated in the translucent elements themselves or produced by natural colored or coated glass bulbs, or by the use of color accessories such as color hoods.

Watts	Bulb	Standard Bulb Finishes	Screw Base	Std. Pkg. Qty.	List Price†		
					Clear	Inside Frosted	Inside Colored
*6	S-6	Clear	Candelabra	120	\$0.20	.....	.....
6	S-14	Clear, Red, Blue, Green, Yellow, Amber-orange, and Old Rose	Medium	120	.15	\$0.15	\$0.20
10	S-11	Clear, Red, Blue, Green, Yellow, Amber-orange, Flametint and White	Intermediate	120	.20	.....	.20
10	S-14	Clear, Red, Blue, Green, Yellow, Amber-orange, and Old Rose	Medium	120	.15	.15	.20
25	A-19	Inside Frosted, Red, Blue, Green, Yellow, Amber-orange, Flametint, Ivory, and Old Rose	Medium	120	.....	.15	.20
25	A-19	Clear Daylight	Medium	120*	.30	.....	.....
50	A-19	Clear Daylight	Medium	120	.35	.....	.....

† These prices apply only to the manufacturer's standard inside coloring.

\* Candelabra base lamps not recommended for outdoor service.





Watts	15	25	25	25 and 40
Finishes	{ White Ivory Flametint	{ White Ivory Flametint	{ White Ivory Flametint	{ White Ivory Flametint

## Outside Coated Flame Shape and Round Bulb MAZDA Lamps—110, 115 and 120 Volts

—for *Decorative Luminaires*

■ These lamps are adapted to many decorative and ornamental fixtures used in homes, clubs, lobbies, foyers and public buildings, where the bulb

shape is related to the artistic design of the luminaire. These lamps are not recommended for outdoor use.

Watts	Bulb	Standard Bulb Finishes	Screw Base	Standard Package Quantity	List Price†
15	F-10	White, Ivory, and Flametint	Candelabra	60	\$0.35
25	F-15	White, Ivory, and Flametint	Medium	120	.20
25	G-18½	White, Ivory, and Flametint	Medium	120	.30
25	G-25	White, Ivory, and Flametint	Medium	60	.35
40	G-25	White, Ivory, and Flametint	Medium	60	.35

† These prices apply only to the manufacturer's standard outside coating.

### NATURAL COLORED LAMPS

The four lamps in natural colored clear glass bulbs listed below cover a large percentage of present

demand for natural colored lamps. The prices shown are for the manufacturer's standard colored glass only.

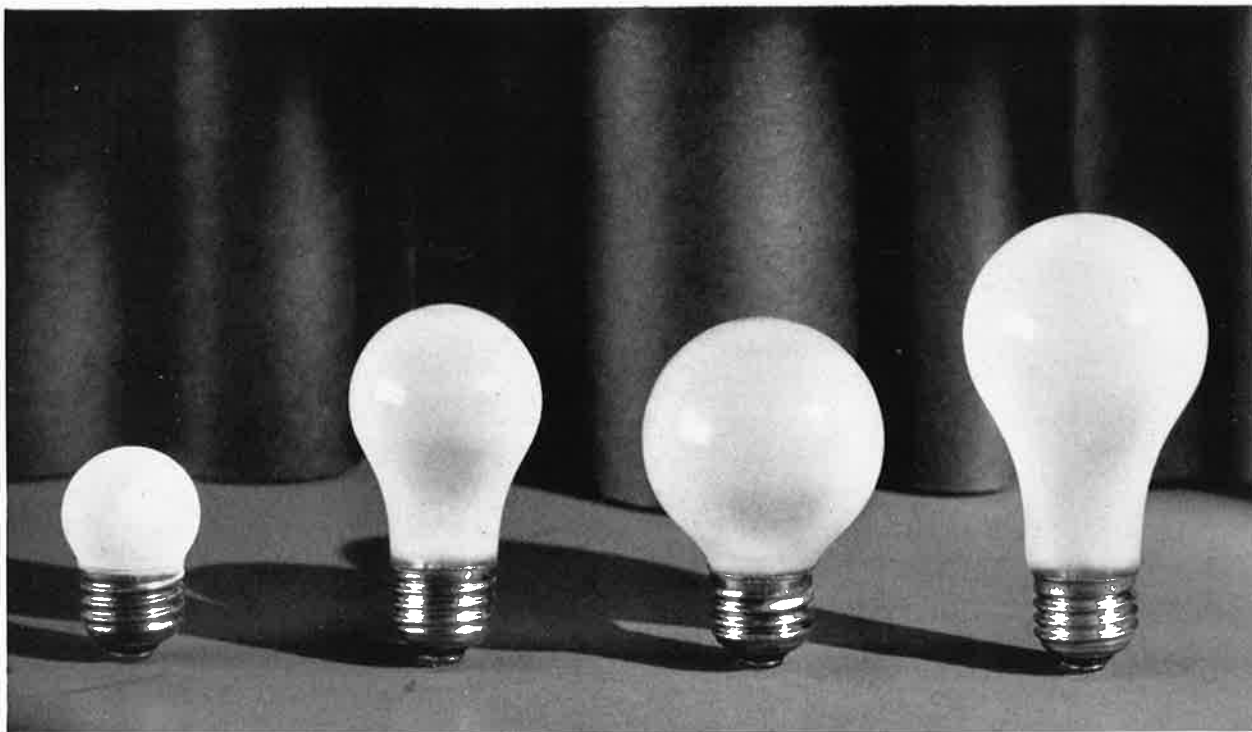
Watts	Bulb	Standard Colors Available	List Price	
			Amber, Blue, and Green	Ruby
10	S-14	*Ruby, *Amber, Green, and Blue†	\$0.40	\$0.50
25	A-19	*Ruby, *Amber, Green, and Blue†	.40	.50
40	A-21	*Ruby, *Amber, Green, and Blue†	.40	.50
§60	A-21	*Ruby, *Amber, Green, and Blue†	.45	.55

\* Natural ruby and natural amber lamps are regularly furnished in the light shade. Dark ruby and dark amber lamps used in photographic work will be furnished, only when definitely specified, at the same price.

† Does not include daylight blue or photographic blue.

§ This lamp not to be burned in enclosing globe.





Watts 7½

15

30

60

## GENERAL LIGHTING SERVICE

### TYPE D LAMPS—110, 115 and 120 Volts Only

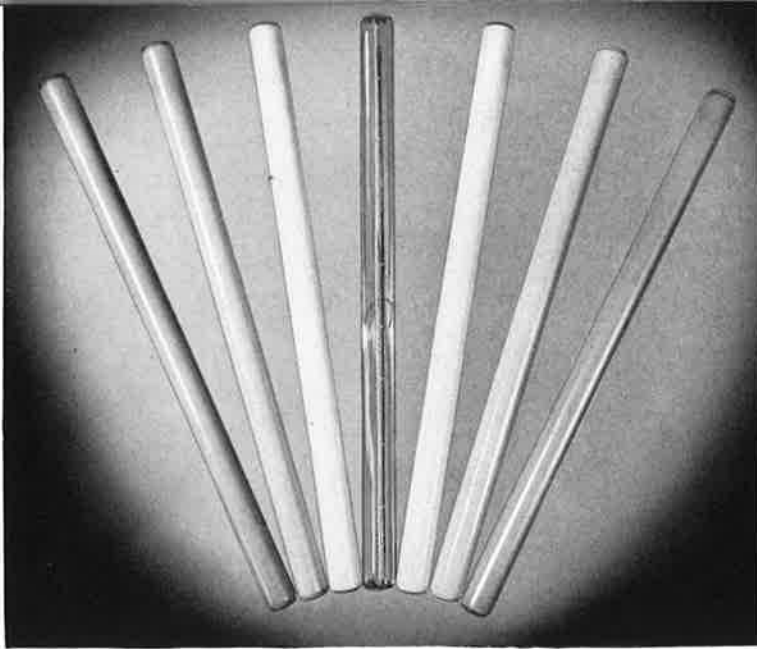
■ Type D lamps are supplied to meet a demand for a ten cent lamp largely for use in the home. They are high quality lamps of proven efficiency and performance and are manufactured with extreme care and of good materials, but are not subjected to as rigid inspection for defects in appearance as MAZDA lamps.

These lamps are shipped only in packages of 60 lamps of the same wattage, voltage and finish, and

lamps of different wattage, voltage and finish may not be combined to make a standard package except that 30-watt, G-19 lamps of different colors (but not inside frosted) may be combined to make a standard package, provided the quantity of lamps of any one color is a multiple of six. They may not be combined with large MAZDA lamps to make up a standard package quantity.

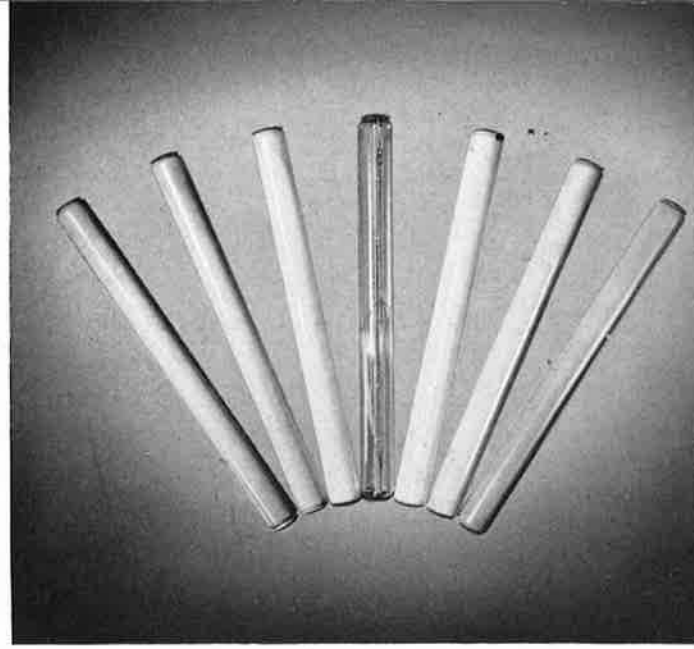
Watts	Bulb	Screw Base	Standard Package Quantity	List Price
7½	G-11 Outside Coated White or Red	Medium	60	\$0.10
15	A-15 Inside Frosted	Medium	60	.10
30	G-19 Inside Frosted or Outside Coated in Red, Blue, Green, Amber-Orange, Rose, White, Ivory and Flametint	Medium	60	.10
60	A-19 Inside Frosted	Medium	60	.10





Watts 30 and 60

Finishes: Clear, White, Straw, Orange, Moonlight Blue, Emerald, Surprise Pink



40

## MAZDA LUMILINE LAMPS—110, 115 and 120 Volts

*With Disc Bases*

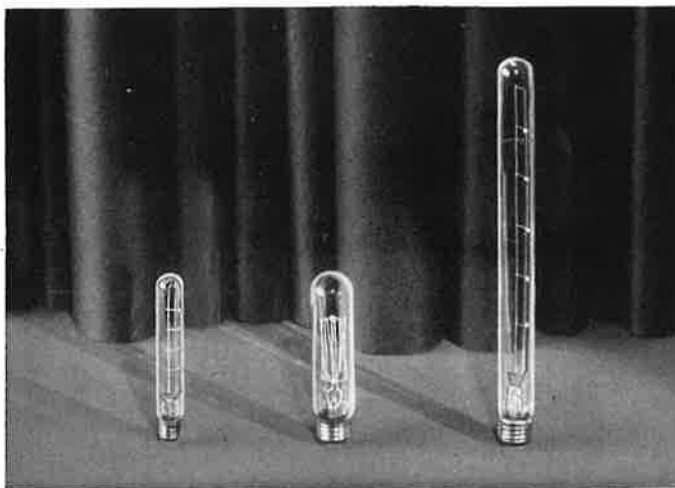
■ This type of lamp introduces a new departure in lamp design. Instead of the conventional screw base, this lamp has a contact cap at each end with the filament stretching between the two end contacts.

Specially designed sockets or "lamp holders" of small dimensions make possible the use of lumiline lamps to form continuous lines of clear or colored

light of low brightness. The lamps may be used either exposed or in narrow trough reflectors. Their application is ideally suited to modern decorative concepts for built-in illumination or applied decoration where space limitation is a factor; for lighted displays, niches, small coves, signs, mirrors, paintings, luminous panels, and the like.

Watts	Standard Bulb Finishes	Maximum Over-all Length, Inches	Base	Standard Package Quantity	List Price	
					Clear	Outside White and Colored
30	T-8 Clear, White, Straw, Orange, Moonlight Blue, Emerald and Surprise Pink	17 $\frac{3}{4}$	Disc	24	\$0.95	\$1.05
40	T-8 Clear, White, Straw, Orange, Moonlight Blue, Emerald and Surprise Pink	11 $\frac{3}{4}$	Disc	24	.85	.95
60	T-8 Clear, White, Straw, Orange, Moonlight Blue, Emerald and Surprise Pink	17 $\frac{3}{4}$	Disc	24	.95	1.05

## TUBULAR BULB MAZDA LAMPS—110, 115 and 120 Volts



Watts 25

25

40

### *With Conventional Screw Base*

■ Low wattage tubular bulb lamps are available for use in showcase lighting, in shallow depth displays, and in small trough-type reflectors.

The growing demand for these lamps and other tubular lamps has been occasioned by the greater appreciation by designers and lighting users of lighted displays, luminous elements and new luminous architectural forms.

Watts	Bulb	Screw Base	Std. Pkg. Qty.	List Price
25	T-6 $\frac{1}{2}$ Clear	Intermediate	60	\$0.45
25	T-10 Clear	Medium	60	.35
40	T-8 Clear	Medium	24	.90



# MAZDA THREE-LITE LAMPS

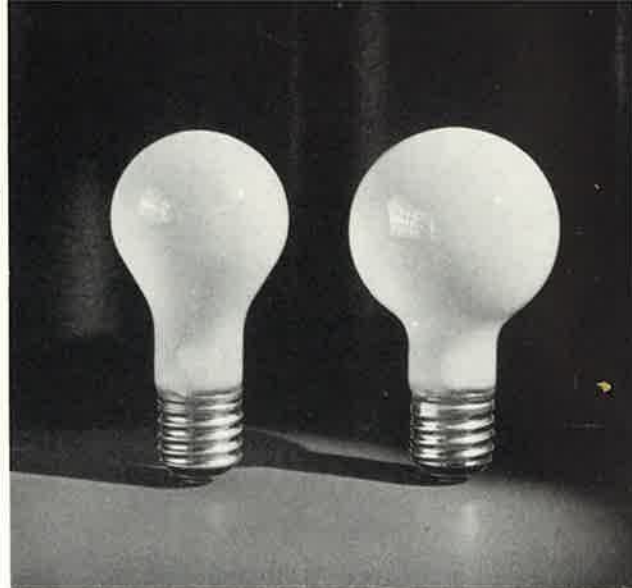
110, 115 and 120 Volts

■ MAZDA Three-Lite lamps, with two separate filaments in a single bulb, have introduced a new flexibility in lighting, since each filament of different wattage may be lighted separately or in combination with the other to permit the use of three levels of illumination.

Thus with a single lamp, the user can adjust the illumination to suit the needs—the lower wattage for decoration and casual use, an intermediate step, up to full brilliancy for full utility where seeing requirements dictate higher levels of illumination.

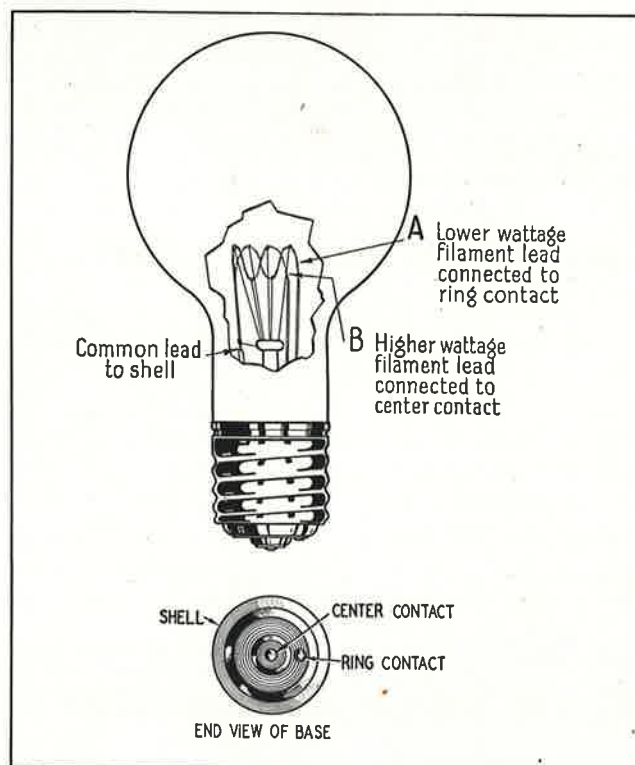
These lamps are particularly applicable to the newer type study and reading lamps and to indirect and semi-indirect floor lamps. They are designed for base-down burning and are adaptable to wall urns and any use where lamps are normally operated in base-down position.

The lamps are inside frosted to assure complete diffusion and to avoid uneven light streaks and harsh lines of cutoff on ceiling and sidewalls when used in indirect portables and wall urns.



Watts 50-100-150

100-200-300



Watts	Bulb	Approximate Lumens	Base	Standard Package Quantity	List Price Inside Frosted
50-100-150	PS-25	50-Watt, 515 100-Watt, 1400 150-Watt, 1915	3-Contact Mogul	60	\$0.60
100-200-300	G-30	100-Watt, 1310 200-Watt, 3360 300-Watt, 4670	3-Contact Mogul	24	.80

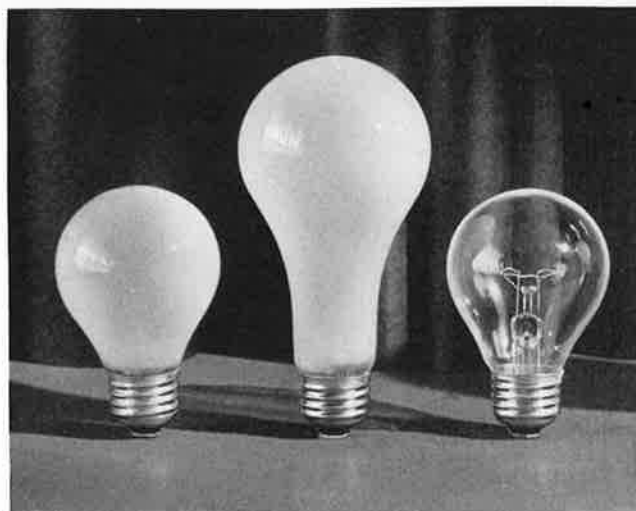


## VIBRATION AND ROUGH SERVICE—110, 115 and 120 Volts

■ These lamps are not recommended for general lighting service as they are more expensive and give less light than the corresponding general service lamps.

**Rough Service**—This type of lamp is for use where subjected to severe shock and bumps such as with extension cords in garages and similar applications. It is not suitable to withstand vibration.

**Vibration Service**—This lamp is especially made to withstand high-frequency vibration such as produced by high-speed machinery. It is not recommended for horizontal burning.



Watts            50                                  100                                  50  
Rough Service      Rough Service      Vibration Service

Watts	Bulb	Screw Base	Std. Pkg. Qty.	List Price
<b>ROUGH SERVICE</b>				
50	A-19 Inside Frosted	Medium	120	\$0.34
100	A-23 Inside Frosted	Medium	60	.55
<b>VIBRATION SERVICE</b>				
50	P-19 Clear	Medium	120	.25

## COUNTRY HOME SERVICE—28-32 Volts

■ These lamps are designed for operation on battery-generator sets as used on farms and in other places where central station service is not available. The lamps are the same in appearance as the lamps for General Lighting service. Orders should specify "Country Home—28-32 volts" to distinguish them from trainlighting lamps. The prices apply only to lamps which are designed for an average voltage as determined by the manufacturer, suitable for operation on 28-32-volt circuits, and do not apply to individual voltages within this range.

Watts	Bulb Inside Frosted	Screw Base	Std. Pkg. Qty.	List Price
15	A-17	Medium	120	\$0.23
25	A-19	Medium	120	.23
50	A-21	Medium	120	.25
100	A-23	Medium	60	.38

## HIGH VOLTAGE SERVICE—220, 230, 240, 250 and 260 Volts

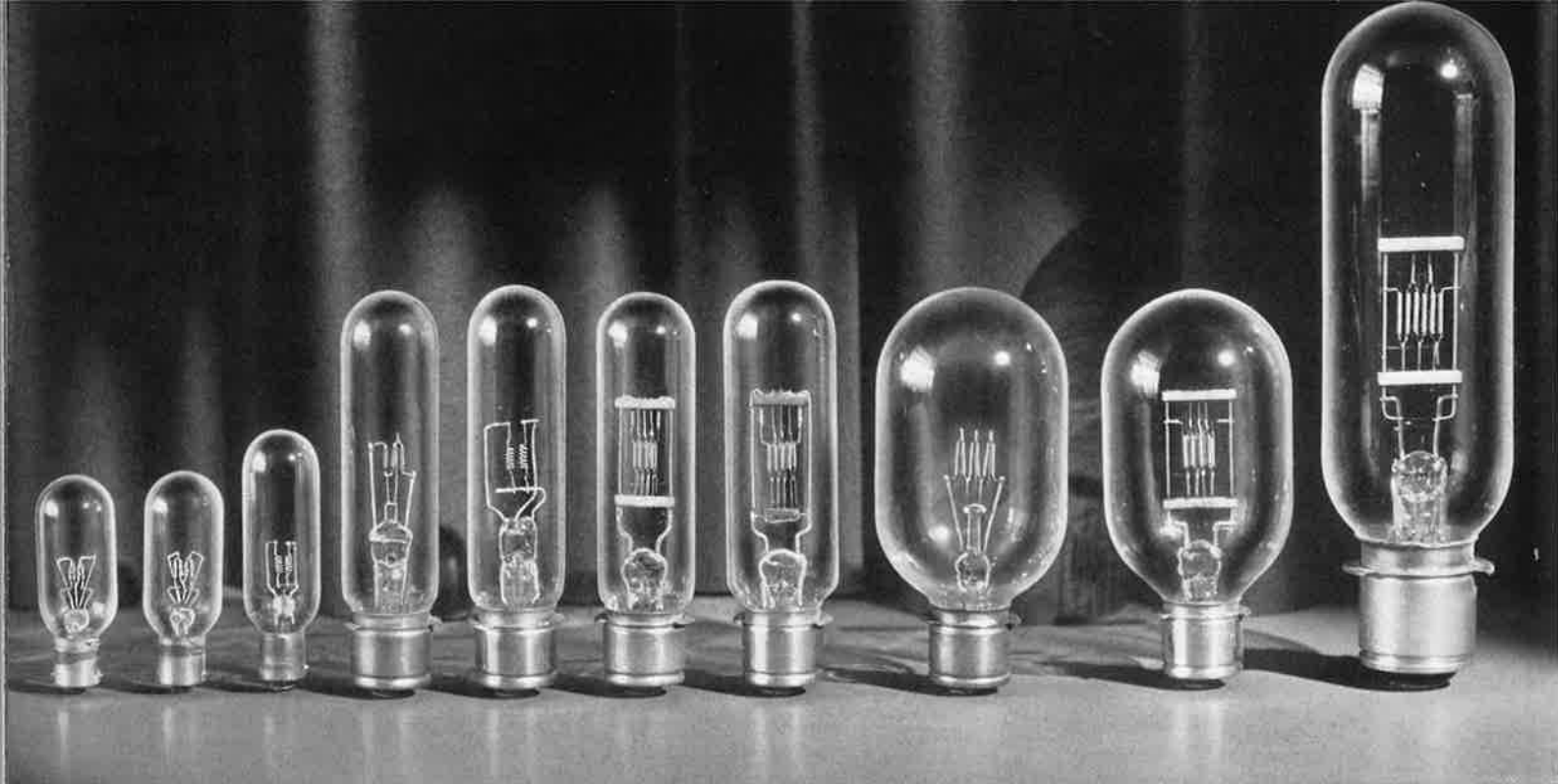
■ These lamps, which are less rugged and less efficient, are made available for use in the few locations where the usual 110, 115 and 120-volt service is not supplied.

These lamps will operate in any position of burning, but the lumen maintenance, particularly in lamps of higher wattage sizes, is best when burned vertically base up. The data on lumen maintenance given in the technical summary apply to this burning position only.

Watts	Bulb	Approx. Lumens	Screw Base	Std. Pkg. Qty.	List Price		
					Clear	Inside Frosted	White Bowl
25	A-19	213	Medium	120	.....	\$0.26	.....
†50	A-21	475	Medium	120	.....	.26	.....
100	A-23	1100	Medium	60	.....	.38	.....
200	PS-30	2920	Medium	24	\$0.85	.90	\$0.90
300	PS-35	4560	Mogul	24	1.25	1.35	1.35
500	PS-40	8350	Mogul	12	2.15	2.30	.....
750	PS-52	13125	Mogul	6	4.25	.....	.....
1000	PS-52	19000	Mogul	6	4.75	.....	.....

† This lamp in 275 and 300 volts for mine lighting service can be obtained at a list price of 40 cents.





Watts 50 100 200 200 300 500 750 500 1000 1000

## MOTION PICTURE AND STEREOPTICON PROJECTION SERVICE—100, 105, 110, 115 and 120 Volts

■ MAZDA projection lamps are characterized by extreme concentration of light source, made possible by a highly developed technique in the forming, treating, and mounting of filaments; by bulbs that withstand high temperatures, thus making possible very small bulb volume for a given wattage; and by accuracy in placement of the light source.

The lamps of 100-volt rating are of special interest. With only a small rheostat and an inexpensive voltmeter on the projector it is possible to adjust the voltage exactly. Thus satisfactory lamp performance is assured with full advantage of the high output of light from a lamp of comparatively short life rating.

Watts	Bulb	Base	Filament Form	Rated Average Laboratory Life, Hours	Light Center Length, Inches	Standard Package Quantity	List Price Clear
50	T-8	S. C. Bay. Cand.	Monoplane	50	1 $\frac{3}{8}$	24	\$1.10
100	T-8	S. C. Bay. Cand.	Monoplane	50	1 $\frac{3}{8}$	24	1.40
¶200	T-8	S. C. Bay. Cand.	Monoplane	25	1 $\frac{3}{8}$	24	2.00
*200	T-10	Medium Prefocus	Monoplane	50	2 $\frac{3}{16}$	24	2.20
¶300	T-10	Medium Prefocus	Monoplane	25	2 $\frac{3}{16}$	24	3.10
¶500	T-10	Medium Prefocus	Biplane	25	2 $\frac{3}{16}$	24	5.50
¶750	T-12	Medium Prefocus	Biplane	25	2 $\frac{3}{16}$	24	6.75
*500	T-20 (short)	Medium Prefocus	Monoplane	50	2 $\frac{3}{16}$	6	3.00
¶1000	T-20 (short)	Medium Prefocus	Biplane	25	2 $\frac{3}{16}$	6	8.00
†1000	T-20 (long)	Mogul Prefocus	Monoplane	50	3 $\frac{7}{16}$	6	6.50

These lamps are designed for operation in the vertical position base down but can be burned within 25 degrees of this position without materially affecting their performance.

¶ These lamps are designed for use with air blast cooling. They should be used only in equipment designed to give adequate cooling; usage otherwise may result in unsatisfactory lamp performance and damage to the equipment for which the lamp manufacturer cannot assume responsibility.

\* Medium screw base can be supplied with a light center length of 3 inches at the same price.

† Mogul screw base can be supplied with a light center length of 4 $\frac{1}{4}$  inches at the same price.

‡ Light center length for prefocus base is distance from center of light source to top of base fin; for bayonet base to top of base pins; for screw base to extreme end of base.

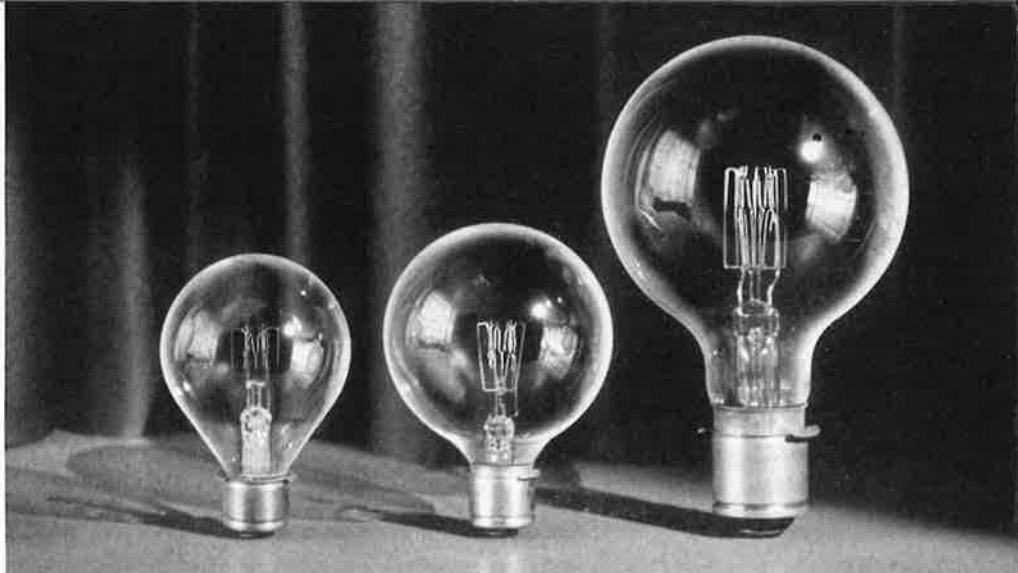


## SPOTLIGHT SERVICE

110, 115 and 120 Volts

■ Spotlights with prefocus sockets and prefocus base lamps require no focusing adjustments for lamp or spherical mirror. This facilitates operation and assures better light control. With prefocused lamps, the mirror adds approximately 50 per cent to the light in the beam.

For narrow beams of high intensity, the lamps for projection service listed on page 18 and on page 20 for "modeling" service in studios are applicable.



Watts

100

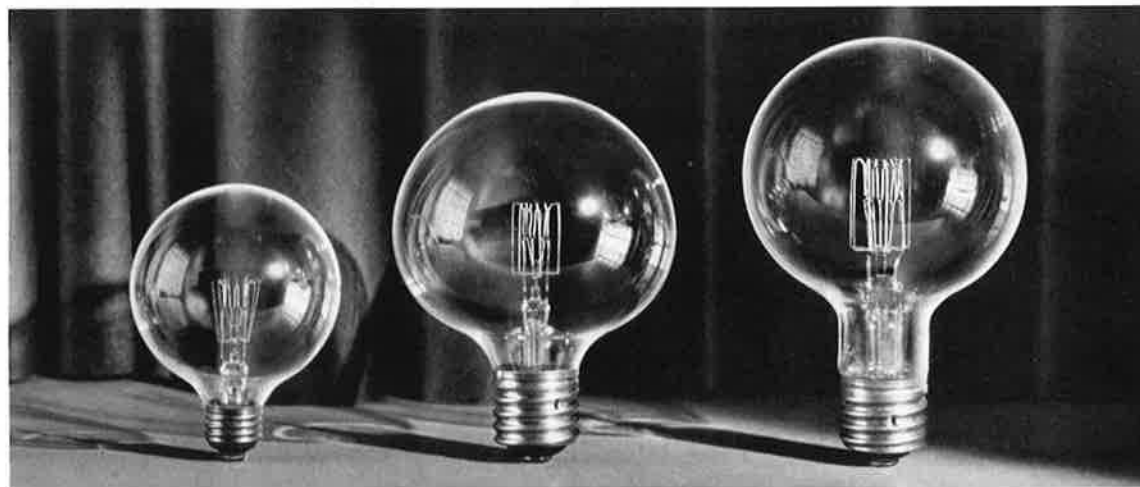
250 and 400

1000

Watts	Bulb	Base	Light Center Length, Inches	Std. Pkg. Qty.	List Price Clear
*100	P-25	Medium Prefocus	2 $\frac{3}{16}$	60	\$1.15
*250	G-30	Medium Prefocus	2 $\frac{3}{16}$	24	1.90
*400	G-30	Medium Prefocus	2 $\frac{3}{16}$	24	3.15
†1000	G-40	Mogul Prefocus	3 $\frac{1}{8}$	12	7.15

\* Medium screw base lamps, with a light center length of 3 inches, can be supplied at 15 cents less than price shown.

† Mogul screw base lamp, with light center length of 4  $\frac{1}{4}$  or 5  $\frac{1}{4}$  inches, can be supplied at \$6.75. Orders should specify light center length.



Watts

250

500

1000

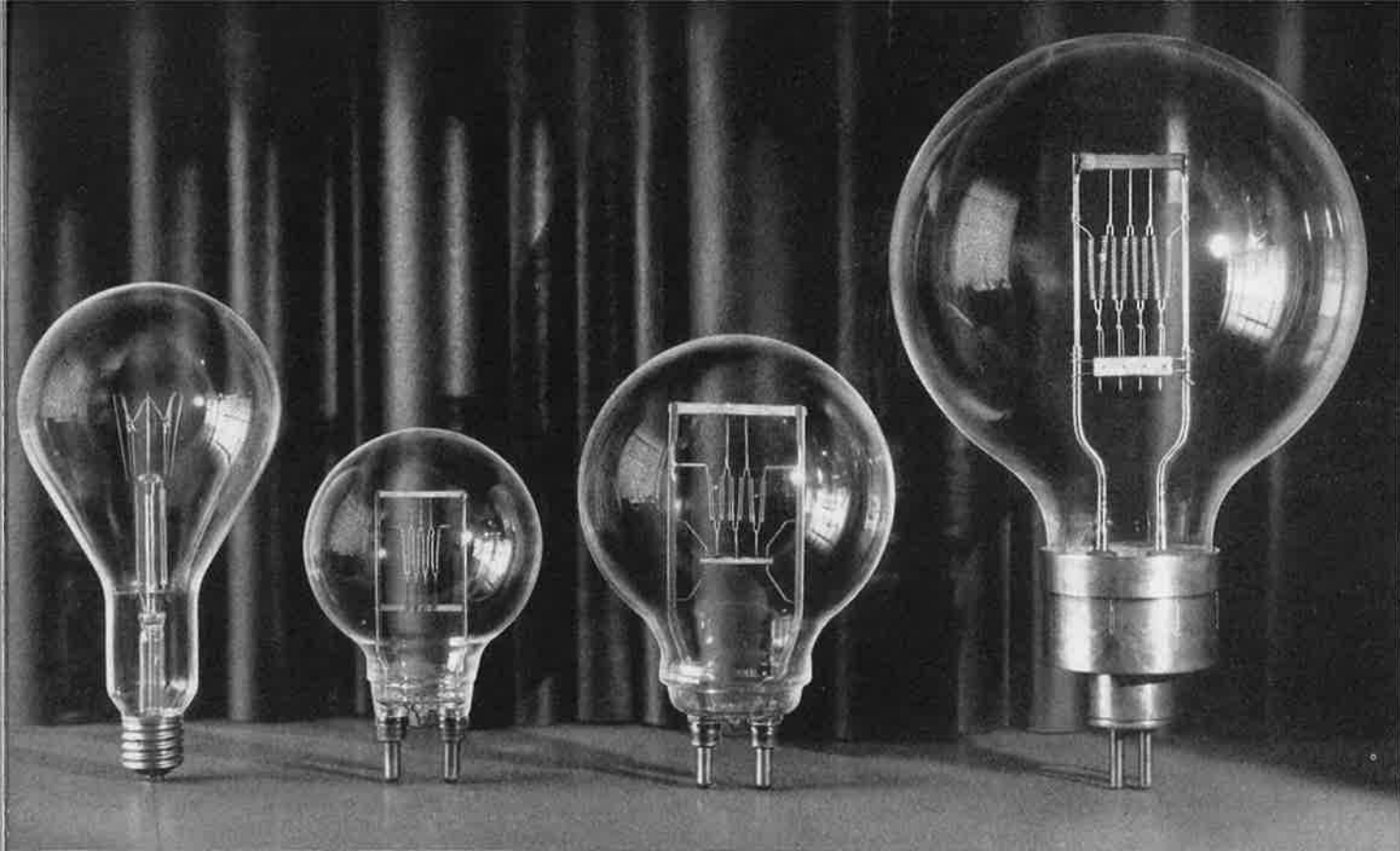
## FLOODLIGHTING SERVICE—110, 115 and 120 Volts

■ These lamps are made with the filament concentrated into a small space for use in floodlighting projectors designed to give a narrow beam of light which can be thrown a relatively long distance. Where it is not necessary to have a closely controlled beam it is usually found more desirable to use the general service lamps listed on page 9 in a projector designed to accommodate them.

The 250-watt, G-30 bulb and the 500-watt, G-40 bulb lamps may be burned in any position except within 45° of vertical base up. The 1000-watt, G-40 bulb lamp may be burned in any position from vertical base down to horizontal.

Watts	Bulb	Screw Base	Light Center Length, Inches	Std. Pkg. Qty.	List Price Clear
250	G-30	Medium	3	24	\$1.75
500	G-40	Mogul	4 $\frac{1}{4}$	12	3.25
1000	G-40	Mogul	5 $\frac{1}{4}$	12	6.75





Watts                      2000                      2000                      5000                      10000

# **MOTION PICTURE PRODUCTION SERVICE** **110, 115 and 120 Volts**

■ The high wattage MAZDA lamps listed below meet the varied and exacting requirements of motion picture production, whether sound or silent, in black and white, or in color.

These lamps are rugged and silent in operation. Their light is definite and constant in color, bringing out the full possibilities of the various film emulsions.

The lamps designated for use with "modeling equipments" have concentrated light sources of high brightness to make possible beams of a high degree

of light concentration. They may be operated from vertically base-down to practically horizontal. The general lighting lamps are universal burning.

In the "Movieflood" lamp, the filament operates at a very high temperature, resulting in an exceptionally high output of light per watt and a still greater increase in photographic efficiency. Furthermore the light is of a color quality suited to the needs of color pictures. The lamps are equally satisfactory for black and white photography and are recommended wherever a minimum of lighting equipment is desired.

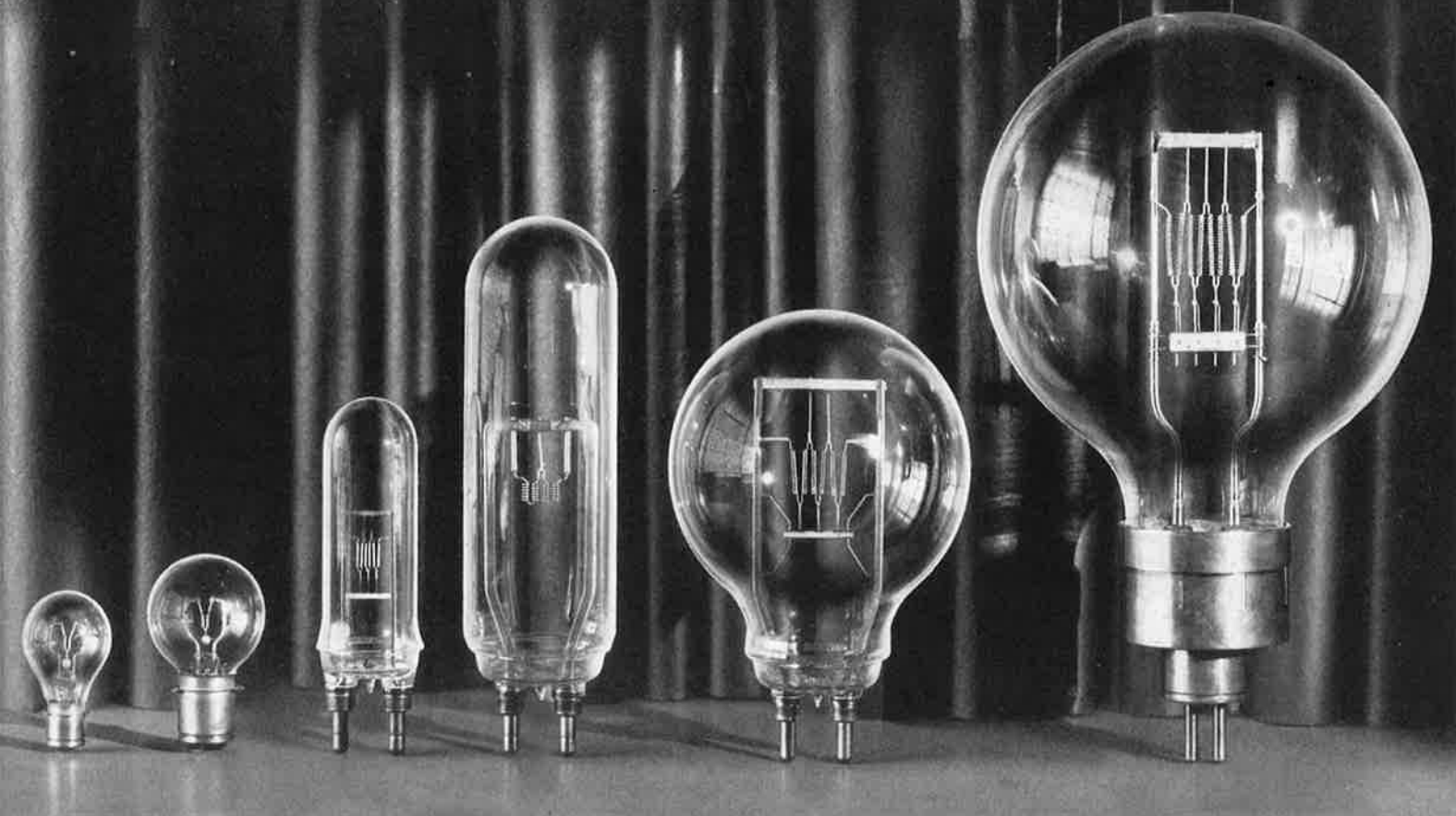
Application	Watts	Bulb	Light Center Length, Inches	Maximum Over-all Length, Inches	Base	Rated Average Laboratory Life, Hours	Standard Package Quantity	List Price Clear
*Modeling	2000	G-48	5	9 <sup>3</sup> / <sub>8</sub>	Mogul Bipost	200	6	\$ 13.00
*Modeling	5000	G-64	6 <sup>1</sup> / <sub>2</sub>	11 <sup>7</sup> / <sub>8</sub>	Mogul Bipost	100	1	40.00
*Modeling	10000	G-96	12	20	Prong	100	1	100.00
Photographic (General Lighting)	1000	PS-52	9 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>8</sub>	Mogul Screw	500	6	4.00
Photographic (General Lighting)	1500	PS-52	9 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>8</sub>	Mogul Screw	500	6	5.75
†Movieflood (Color Photography)	2000	PS-52	9 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>8</sub>	Mogul Screw	†	6	5.25

When the 5000-watt lamp is operated at about ten per cent above its rated voltage, the light is of the same super-photographic efficiency as that from the "Movieflood" and of the same favorable quality for color photography.

\* Burning position—from base down to nearly horizontal.

† Voltage range for operation is 105–120 volts. Rated average laboratory life at 115 volts is 15 hours.





100 and 240      420      1000      3000      5000      10000

## AVIATION SERVICE

■ The development of MAZDA lamps for aviation service has made possible night mail and transport flying. A complete line of aviation lamps is now available.

The bipost and the prefocus bases provide the high degree of accuracy in positioning of light sources with relation to the optical elements which is so necessary to the effective functioning of the several classes of aviation lighting equipment.

Airport code beacons take the 500-watt PS-40 bulb general service lamp fitted with mogul prefocus base, while the airway code beacons use the 200-watt PS-30 bulb general service lamp with mogul prefocus base.

For airport boundary lights, 6.6-ampere series lamps are widely used. The 50-watt and 100-watt general service lamps are employed in obstruction lights.

Watts	Volts	Bulb	Light Center Length, Inches	Base	Burning Position	Rated Average Laboratory Life, Hours	Standard Package Quantity	List Price Clear
<b>AIRCRAFT LANDING LAMPS</b>								
100	12	A-19	1 $\frac{3}{4}$	Medium Prefocus	Any position except	100	12	\$ 2.15
240	12	A-19	1 $\frac{3}{4}$	Medium Prefocus	within 45 degrees of	100	12	5.25
420	12	G-25	1 $\frac{11}{16}$	§Mogul Prefocus	vertically base up	100	12	6.00
<b>AIRPORT FLOODLIGHT LAMPS</b>								
1500	32	T-24	4	Mogul Bipost	Base Down	100	6	15.00
3000	32	T-32	5 $\frac{3}{4}$	Mogul Bipost	Base Down	100	4	25.00
5000	110, 115, 120	G-64	6 $\frac{1}{2}$	Mogul Bipost	Base Down	100	1	40.00
10000	110, 115, 120	G-96	12	Prong	Base Down	100	1	100.00
<b>AIRWAY AND AIRPORT BEACON LAMPS</b>								
1000	110, 115, 120	T-20	4	†Mogul Bipost	Base Down	500	6	6.50
*500	110, 115, 120	T-20	3 $\frac{7}{16}$	Mogul Prefocus	Base Down	800	6	3.90
**1000	30	T-20	4	Mogul Bipost	Base Down	500	6	7.00

§ Mogul screw at \$6.00

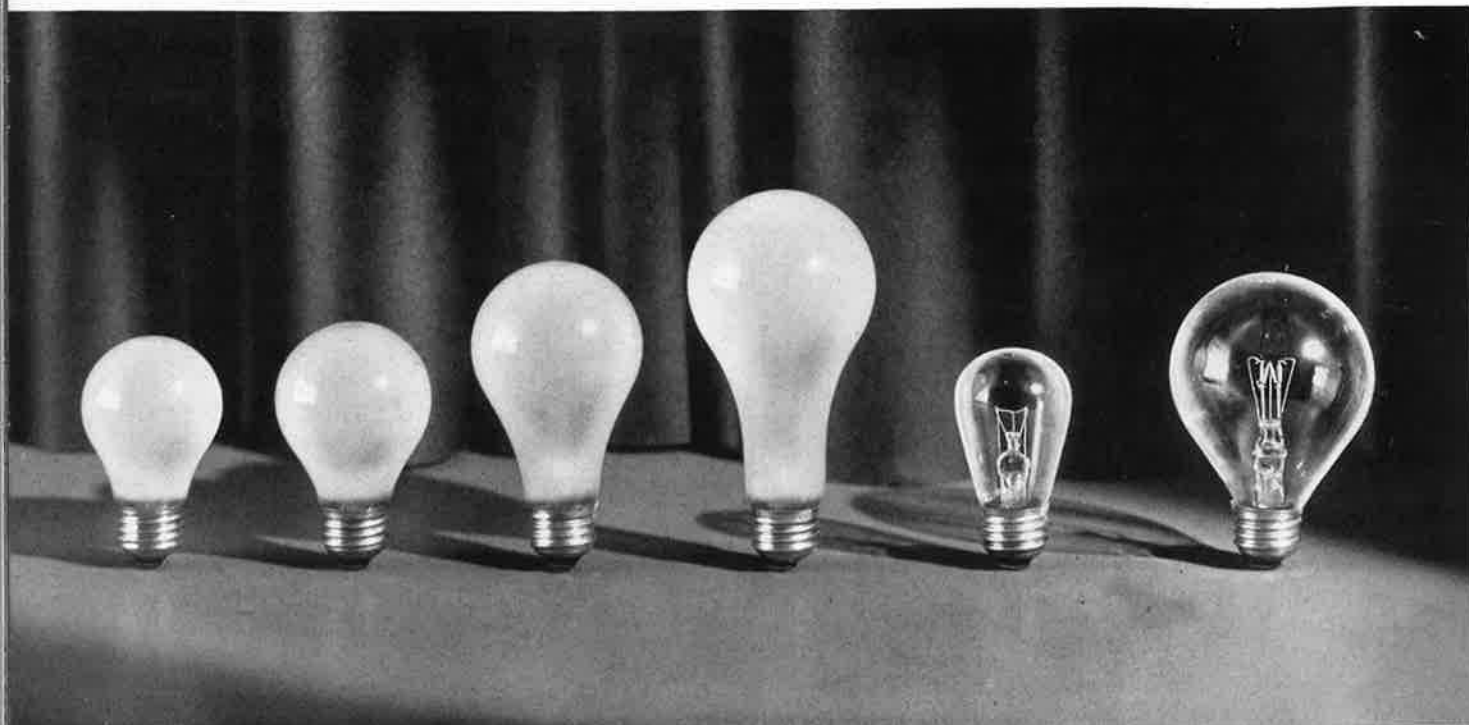
\* This lamp is standard in airway "on-course" lights.

\*\* Used mostly in airport beacons.

† Mogul screw at \$6.50



# TRAIN AND LOCOMOTIVE LIGHTING SERVICE



Watts    15                      25                      50                      100                      15                      100 and 250

**TRAINLIGHTING**—To insure satisfactory lamp performance and economical operation, voltage regulating devices should be adjusted to maintain rated lamp voltage at the socket. Where it is impossible to obtain 32 volts at the lamp sockets, it is recommended that 28-32 volt lamps listed as Country Home Lighting Lamps be used and operated at 30 volts.

Watts	Bulb	Screw Base	Std. Pkg. Qty.	List Price
<b>TRAIN—32 AND 64 VOLTS</b>				
<b>Inside Frosted</b>				
15	A-17	Medium	120	\$0.23
25	A-19	Medium	120	.23
50	A-21	Medium	120	.25
100	A-23	Medium	60	.38
<b>LOCOMOTIVE CAB—34 VOLTS</b>				
15	S-14 Clear	Medium	120	.22
<b>LOCOMOTIVE HEADLIGHT—32 VOLTS</b>				
100	P-25 Clear	Medium	60	1.00
250	P-25 Clear	Medium	60	1.50

**LOCOMOTIVE HEADLIGHTING**—When operated at their rated voltage in suitable headlight equipment protecting them from excessive vibration, these lamps will furnish satisfactory service. Care must be exercised to prevent water from striking the bulb while hot.

The 250-watt lamp, designed especially for road locomotives, employs a new construction of dual supports for the filament to withstand vibration encountered at high speeds. The 100-watt lamp is recommended for switching locomotives.

**LOCOMOTIVE CAB LIGHTING**—The locomotive cab lamp has been designed to insure ruggedness rather than efficient light production. It should be used for all locomotive lighting purposes except headlighting.



# STREET RAILWAY SERVICE (525 to 650 Volts)

## Headlighting

Headlight lamps are for operation in series with 4 lamps of corresponding wattage and voltage used elsewhere in the car.

105, 110, 115, 120, 125 and 130 Volts

Watts	Bulb	Screw Base	Light Center Length, Inches	Std. Pkg. Qty.	List Price
23	A-19 Clear	Medium	2 $\frac{3}{16}$	120	\$0.60
36	A-19 Clear	Medium	2 $\frac{3}{16}$	120	.60
56	P-25 Clear	Medium	2 $\frac{1}{8}$	60	.85
94	P-25 Clear	Medium	2 $\frac{1}{8}$	60	1.10

## Car Lighting

**5-IN-SERIES LAMPS**—These vacuum lamps operate 5-in-series on the trolley voltage and are used for general illumination, destination signs, etc. Individual lamp voltage to the nearest 5-volt step is  $\frac{1}{5}$  of the average trolley voltage applied to the lamp circuit during the period in which the lamps are in use.

The 36- and 56-watt lamps provide more satisfactory performance when operated in the base-up vertical position.

**30-VOLT CUTOUT LAMPS**—These lamps are gas-filled and are more efficient initially and throughout life than the 5-in-series lamps. The number of lamps required per circuit is determined by dividing the trolley circuit voltage by 30. Each lamp is equipped with an automatic short-circuiting element which cuts the lamp out of the circuit and prevents arcing when the lamp burns out.

5-In-Series—105, 110, 115, 120, 125 and 130 Volts

Watts	Bulb	Screw Base	Std. Pkg. Qty.	List Price
23	S-17 Clear	Medium	120	\$0.25
36	A-21 Inside Frosted	Medium	120	.17
56	A-21 Inside Frosted	Medium	120	.24

### CUTOUT LAMPS—30 VOLTS

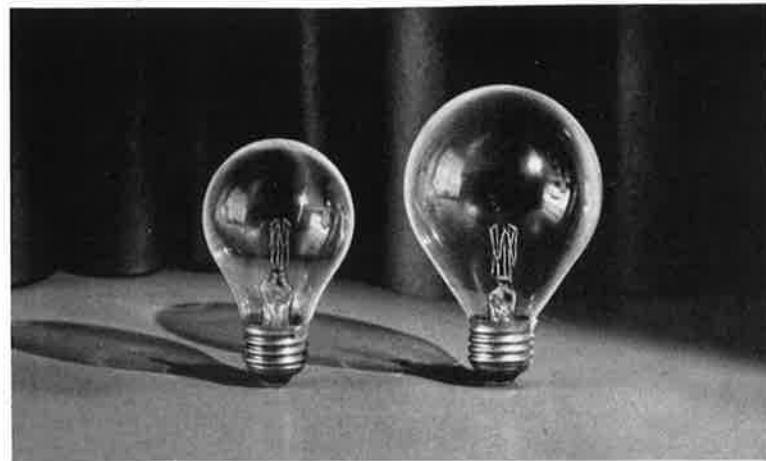
Amps.	Bulb	Screw Base	Std. Pkg. Qty.	List Price
1.0	A-19 Inside Frosted	Medium	120	.30
1.6	A-21 Inside Frosted	Medium	120	.35

## Shop and Yard Lighting

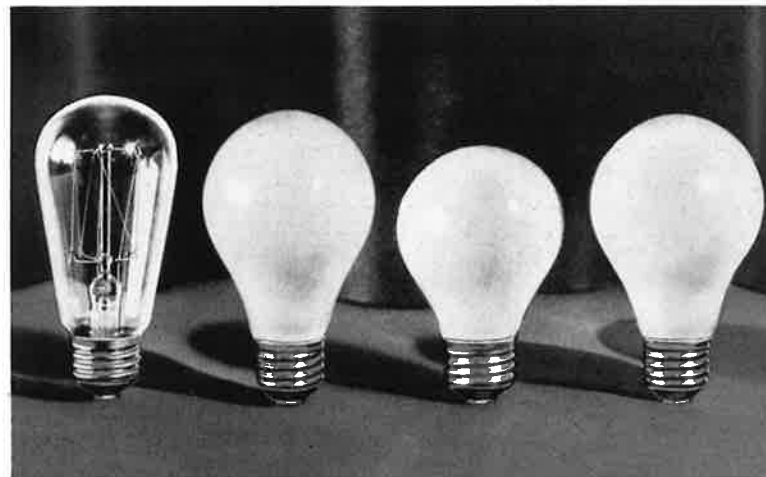
**ARC RESISTING**—These higher wattage lamps, designed to operate 5-in-series, are gas-filled and more efficient than vacuum lamps, and are recommended for illumination of shops and yards. The 101-watt lamp is also used for car lighting in totally-enclosing fixtures. Each lamp contains material in the stem which tends to prevent arcing when filament burnout occurs.

Arc Resisting—105, 110, 115, 120, 125 and 130 Volts

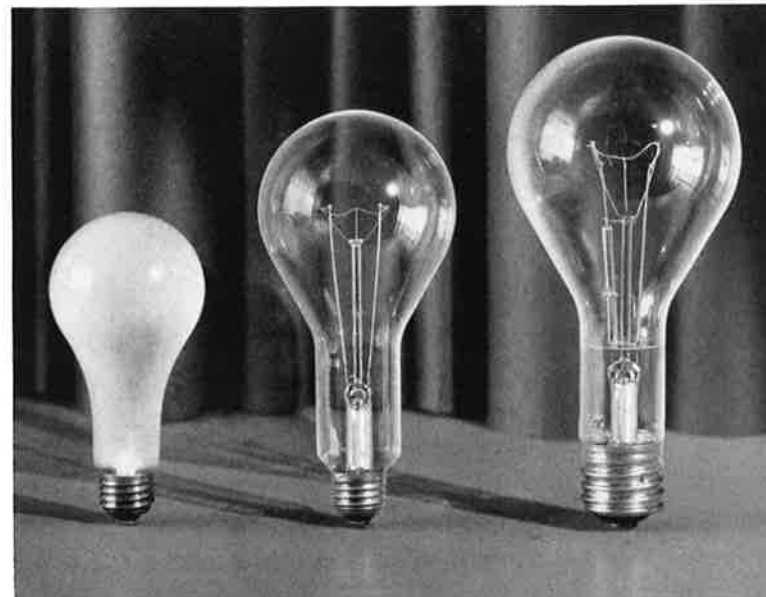
Watts	Bulb	Screw Base	Std. Pkg. Qty.	List Price
101	A-23 Inside Frosted	Medium	60	\$0.50
201	PS-30 Clear	Medium	24	.95
301	PS-35 Clear	Mogul	24	1.55



Watts 23 and 36 56 and 94

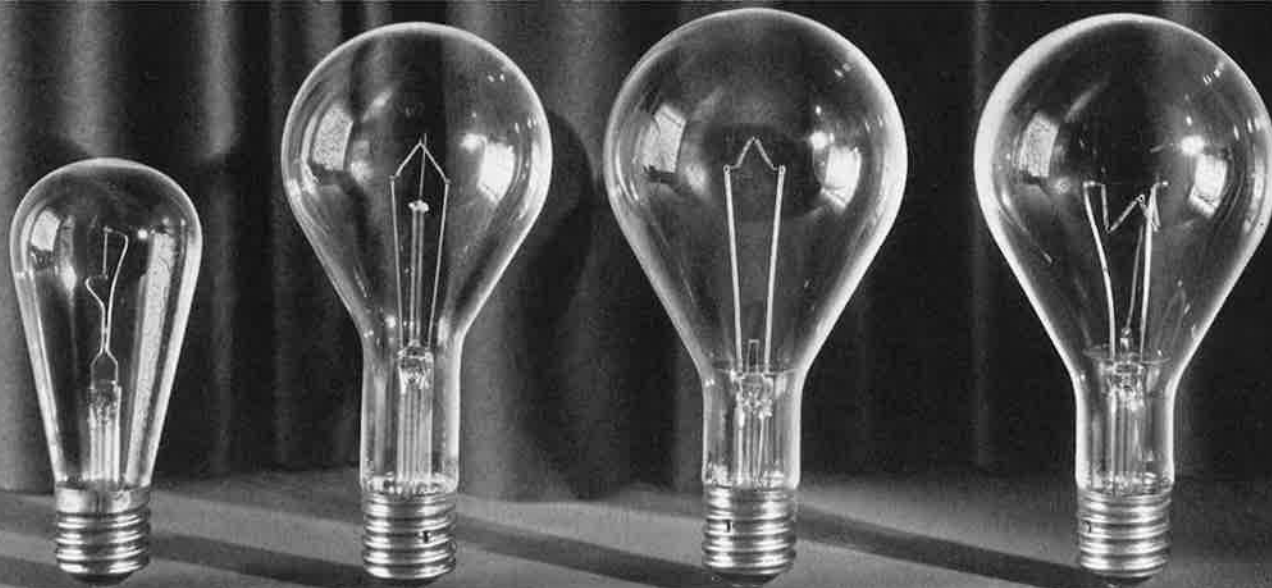


Watts 23 36 and 56 Amps. 1.0 1.6



Watts 101 201 301





Lumens

1000

2500 and 4000

6000, 10000 and 15000

25000

## STREET SERIES LIGHTING SERVICE

■ Street series lamps are designed to meet special requirements of street lighting service. Filaments are formed to produce a favorable light distribution. The mogul screw base is applied in the interest of strength to the smaller as well as the larger lamps. With operation at constant current, bulb blackening is compensated for by a slow increase in wattage and filament temperature, hence the light output is maintained throughout life at a high percentage of initial value.

The performance of street series lamps is affected sharply by current variations. The current in street series circuits should therefore be adjusted as closely as possible to rated value.

Because of the severity of street series service, the average service life of series lamps even under good operating conditions is of the order of 25% less than the average laboratory life of 2000 hours.

Street series lamps are rated in lumens; that is, in total quantity of light emitted. All street lighting

contracts should refer to series lamps in terms of their lumen ratings.

Amps.	Lumens	Average Volts	Bulb	Light Center Length, Inches	Std. Pkg. Qty.	List Price Clear
6.6	1000	9.7	S-24½	5⅜	60	\$0.50
6.6	2500	22.0	PS-35	7	24	1.00
6.6	4000	33.1	PS-35	7	24	1.20
6.6	6000	51.9	PS-40	7	12	1.60
15	4000	14.0	PS-35	*7	24	1.20
20	6000	14.9	PS-40	*7	12	1.60
20	10000	25.0	PS-40	*7	12	2.00
20	15000	37.3	PS-40	*7	12	2.75
20	25000	60.7	PS-52	9½	6	5.00

The above lamps are fitted with mogul screw base.

The 15- and 20-ampere lamps are designed for base up burning position. Lamps ordered for base down burning position may be supplied at the same price. The 25000-lumen lamp is not recommended for base down burning.

\* Base down lamp—6¼" light center length.

## TRAFFIC SIGNAL SERVICE—110, 115 and 120 Volts

■ This especially designed 60-watt clear bulb traffic signal lamp is the recognized standard for traffic signal service. It has a clear bulb, a short light center length and produces sufficient light to make possible a signal indication of requisite brightness. In the interest of public safety it is strongly recommended that no lamp of lower wattage be employed.

Watts	Volts	Bulb	Screw Base	Std. Pkg. Qty.	List Price
60	110, 115, 120	A-21 Clear	Medium	120	\$0.30





# SUMMARY OF PRICES AND TECHNICAL DATA

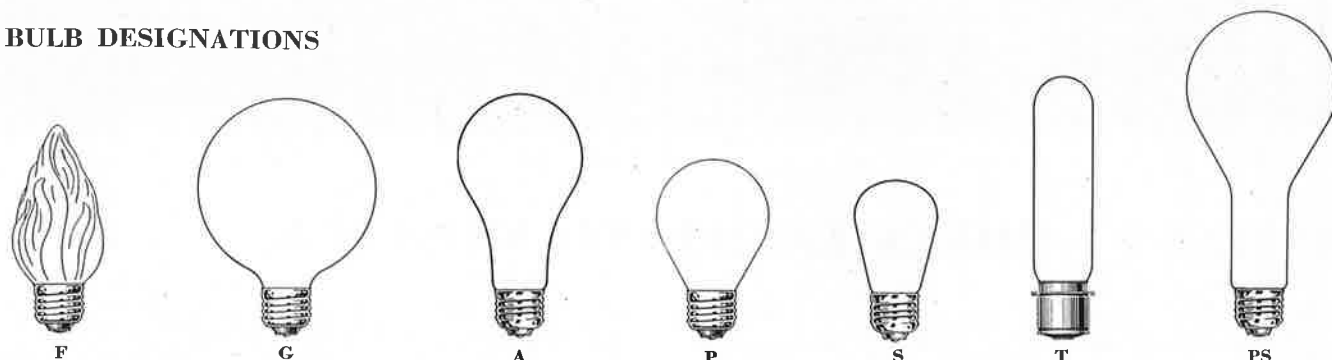
## Large MAZDA Lamps and Type D Lamps

■ The drawings below illustrate the various bulb, base and filament designations referred to in this Catalog. The letter in the bulb designation indicates its shape and the figure its approximate diameter in eighths of an inch.

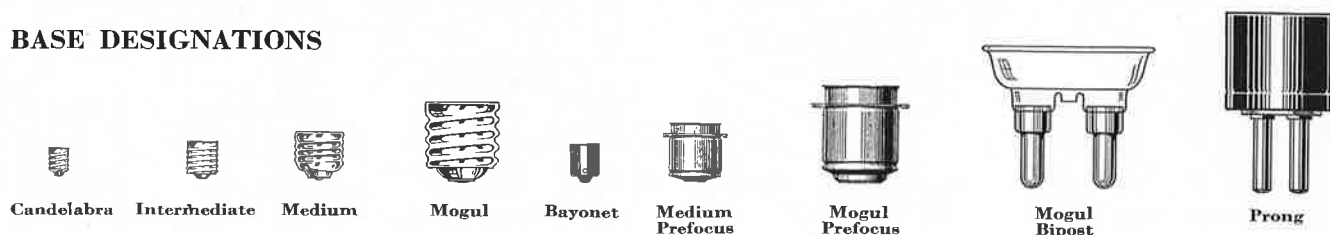
Over-all length is measured from top of bulb to

bottom of base. Light center length of screw base lamps is measured from center of filament to the bottom of the base; of bayonet and prefocus base lamps it is measured from center of filament to the top of the base pins or fins and of bipost and prong base lamps it is measured from center of filament to the shoulder.

### BULB DESIGNATIONS

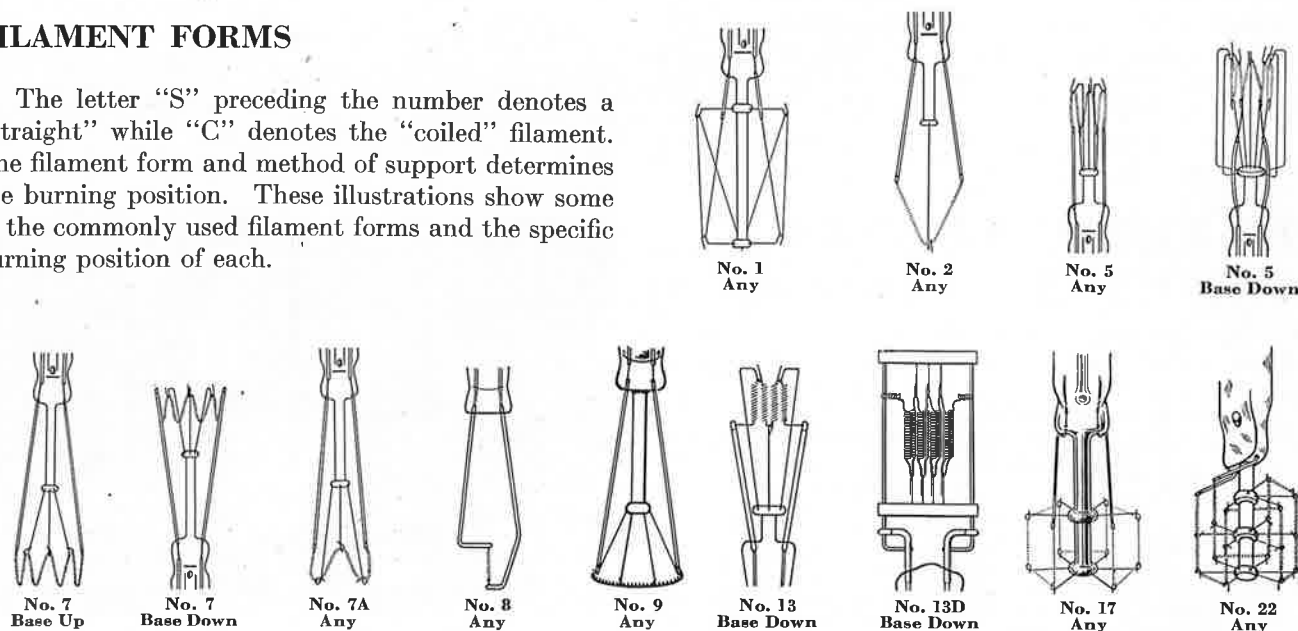


### BASE DESIGNATIONS



### FILAMENT FORMS

The letter "S" preceding the number denotes a "straight" while "C" denotes the "coiled" filament. The filament form and method of support determines the burning position. These illustrations show some of the commonly used filament forms and the specific burning position of each.





Watts	Bulb	List Price	Std. Pkg. Qty.	MAZDA B or MAZDA C Lamp	Rated Initial Lums.	Rated Initial Lums. per Watt	Lums. per Watt at 70% of Rated Life	Rated Aver. Lab. Life (Hrs.)	Base	Max. Over-all Inches	Aver. Light Center Length, Inches	Fil. Const.	Position of Burning
<b>MAZDA LAMPS FOR 110, 115 and 120-Volt Circuits</b>													
6	S-6 clear.....	\$0.20	120	B	38	6.3	.....	1500	Cand.	1 7/8	.....	C-7A	Any
6	S-14 clear.....	.15	120	B	38	6.4	.....	1500	Med.	3 1/2	2 1/2	C-9	Any
6	S-14 I. F.....	.15	120	B	38	6.3	.....	1500	Med.	3 1/2	2 1/2	C-9	Any
6	S-14 colored†.....	.20	120	B	.....	.....	.....	1500	Med.	3 1/2	.....	C-9	Any
10	S-11§.....	.20	120	B	76	7.6	.....	1500	Inter.	2 5/8	1 5/8	C-7A	Any
10	S-14 clear.....	.15	120	B	78	a 7.8	a 7.3	1500	Med.	3 1/2	2 1/2	C-9	Any
10	S-14 I. F.....	.15	120	B	77	a 7.7	a 7.2	1500	Med.	3 1/2	2 1/2	C-9	Any
10	S-14 colored†.....	.20	120	B	.....	.....	.....	1500	Med.	3 1/2	.....	C-9	Any
10	S-14 nat. col.□.....	.40	120	B	.....	.....	.....	1500	Med.	3 1/2	.....	C-9	Any
10	S-14 nat. col.+.....	.50	120	B	.....	.....	.....	1500	Med.	3 1/2	.....	C-9	Any
15	A-17 I. F.....	.15	120	B	140	a 9.3	a 8.3	1000	Med.	3 5/8	2 3/8	C-7A	Any
15	F-10 F. T., white, ivory	.35	60	B	.....	.....	.....	750	Cand.	3 1/8	.....	C-7A	Any
25	A-19 I. F.....	.15	120	B	258	a 10.3	a 8.9	1000	Med.	3 11/16	2 1/2	C-7A	Any
25	A-19 colored†.....	.20	120	B	.....	.....	.....	1000	Med.	3 11/16	.....	C-7A	Any
25	A-19 nat. col.□.....	.40	120	B	.....	.....	.....	1000	Med.	3 11/16	.....	C-7A	Any
25	A-19 nat. col.+.....	.50	120	B	.....	.....	.....	1000	Med.	3 11/16	.....	C-7A	Any
25	A-19 day. clear.....	.30	120	B	.....	.....	.....	1000	Med.	3 11/16	2 1/2	C-7A	Any
25	G-18 1/2 F. T., wh., ivory	.30	120	B	.....	.....	.....	750	Med.	3 11/16	.....	C-7A	Any
25	G-25 F. T., white, ivory	.35	60	B	.....	.....	.....	750	Med.	4 7/8	.....	C-7A	Any
25	F-15 F. T., white, ivory	.20	120	B	.....	.....	.....	750	Med.	4 1/2	.....	C-8	Any
25	T-6 1/2 clear.....	.45	60	B	238	9.5	.....	1000	Inter.	5 1/2	.....	C-8	Any
25	T-10 clear.....	.35	60	B	243	a 9.7	a 8.2	1000	Med.	5 5/8	.....	S-1	Any
30	T-8 clear Lumiline.....	.95	24	B	234	7.8	.....	1500	Disc	17 3/4	.....	C-8	Any
30	T-8 col. (▲) Lumiline.....	1.05	24	B	.....	.....	.....	1500	Disc	17 3/4	.....	C-8	Any
40	A-19 I. F.....	.15	120	C	440	b 11.0	b 9.9	1000	Med.	4 1/4	2 3/8	C-9	x Any
40	A-21 nat. col.□.....	.40	120	B	.....	.....	.....	1000	Med.	4 1/8	.....	C-7A	Any
40	A-21 nat. col.+.....	.50	120	B	.....	.....	.....	1000	Med.	4 1/8	.....	C-7A	Any
40	G-25 F. T., white, ivory	.35	60	B	.....	.....	.....	750	Med.	4 7/8	.....	C-7A	Any
40	T-8 cl.....	.90	24	B	400	10.0	8.4	1000	Med.	11 1/8	.....	C-8	Any
40	T-8 clear Lumiline.....	.85	24	B	332	8.3	.....	1500	Disc	11 3/4	.....	C-8	Any
40	T-8 col. (▲) Lumiline.....	.95	24	B	.....	.....	.....	1500	Disc	11 3/4	.....	C-8	Any
50	A-19 I. F. Rough Serv.....	.34	120	B	450	a 9.0	a 7.5	1000	Med.	3 11/8	2 1/2	C-22	Any
50	A-19 day. clear.....	.35	120	B	.....	.....	.....	1000	Med.	3 11/8	2 1/2	C-7A	Any
50	P-19 cl. Vibration.....	.25	120	B	545	a 10.9	a 8.2	1000	Med.	3 11/8	2 1/2	C-9	Any but Horiz.
100	PS-25 I. F. Three-Lite	.60	60	C	515 1400 1915	10.3 14.0 12.8	.....	1000	Three Contact Mogul	6 1/2	5	2 C-9	Any
60	A-21 I. F.....	.15	120	C	762	b 12.7	b 11.7	1000	Med.	4 11/16	3 3/8	C-9	x Any
60	A-21 day. I. F.....	.30	120	C	495	.....	.....	1000	Med.	4 11/16	3 3/8	C-9	x Any
60	A-21 I. F. silv. bowl.....	.50	120	C	.....	.....	.....	1000	Med.	4 11/16	3 3/8	C-9	Base up
60	A-21 nat. col.□.....	.45	120	C	.....	.....	.....	1000	Med.	4 11/16	.....	C-9	Any
60	A-21 nat. col.+.....	.55	120	C	.....	.....	.....	1000	Med.	4 11/16	.....	C-9	Any
60	A-21 cl. Traf. Signal.....	.30	120	C	654	10.9	.....	2000	Med.	4 1/8	2 1/8	C-9	Base down or Horiz.
60	T-8 clear Lumiline.....	.95	24	B	528	8.8	.....	1500	Disc	17 3/4	.....	C-8	Any
60	T-8 col. (▲) Lumiline.....	1.05	24	B	.....	.....	.....	1500	Disc	17 3/4	.....	C-8	Any
75	A-21 I. F.....	.20	60	C	1065	b 14.2	b 12.6	750	Med.	5 5/8	3 3/8	C-9	x Any
75	A-21 I. F. silv. bowl.....	.70	60	C	.....	.....	.....	750	Med.	5 5/8	3 3/8	C-9	Base up
100	A-23 I. F.....	.20	60	C	1530	b 15.3	b 13.7	750	Med.	6 1/4	4 3/8	C-9	x Any
100	A-23 day. I. F.....	.35	60	C	*988	.....	.....	750	Med.	6 1/4	4 3/8	C-9	x Any
100	A-23 I. F. silv. bowl.....	.70	60	C	.....	.....	.....	750	Med.	6 1/4	4 3/8	C-9	Base up
100	A-23 I. F. Rough Serv.....	.55	60	C	1150	11.5	10.0	1000	Med.	6 1/8	4 3/8	C-17	Any
150	A-25 I. F.....	.25	60	C	2535	b 16.9	b 15.0	750	Med.	6 11/16	5 1/4	C-9	x Any
150	A-25 clear.....	.25	60	C	2535	b 16.9	b 15.0	750	Med.	6 11/16	5 1/4	C-9	x Any
150	A-25 W. B.....	.30	60	C	*2460	.....	.....	750	Med.	6 11/16	5 1/4	C-9	Base up
150	A-25 day. clear.....	.50	60	C	*1650	.....	.....	750	Med.	6 11/16	5 1/4	C-9	x Any
150	A-25 day. I. F.....	.55	60	C	*1650	.....	.....	750	Med.	6 11/16	5 1/4	C-9	x Any
150	A-25 I. F. silv. bowl.....	.80	60	C	.....	.....	.....	750	Med.	6 11/16	5 1/4	C-9	Base up
200	PS-30 clear.....	.45	24	C	3400	b 17.0	b 14.8	1000	Med.	8 1/8	6	C-9	x Any
200	PS-30 I. F.....	.50	24	C	3400	b 17.0	b 14.8	1000	Med.	8 1/8	6	C-9	x Any
200	PS-30 W. B.....	.50	24	C	*3300	.....	.....	1000	Med.	8 1/8	6	C-9	Base up
200	PS-30 day. clear.....	.80	24	C	*2210	.....	.....	1000	Med.	8 1/8	6	C-9	x Any
200	PS-30 day. I. F.....	.85	24	C	*2210	.....	.....	1000	Med.	8 1/8	6	C-9	x Any
200	PS-30 I. F. silv. bowl.....	1.10	24	C	.....	.....	.....	1000	Med.	8 1/8	6	C-9	Base up

§ Clear or inside colored in red, blue, green, yellow, amber-orange, flament and white.

† Inside colored in red, blue, green, yellow, amber-orange and old rose.

‡ Inside colored in red, blue, green, yellow, amber-orange, flament, ivory and old rose.

(▲) Outside colored white, straw, orange, moonlight blue, emerald and surprise pink.

• Silvered bowl lamps should be used only in porcelain sockets and in fixtures so designed that the temperatures of the lamp and fixture do not exceed limits for satisfactory operation.

□ Natural colored in amber, blue and green. Amber regularly furnished in light shade. Dark shade amber (used in photographic work) can be furnished at same price. Blue shade does not include daylight blue or photographic blue.

+ Natural colored ruby regularly furnished in light shade. Dark shade ruby (used in photographic work) can be furnished at same price.

• This lamp not to be burned in enclosing globe.

a Lumens per watt listed are for 115-volt lamps only. For 110-volt lamps add 0.05; for 120-volt lamps subtract 0.05

b Lumens per watt listed are for 115-volt lamps only. For 110-volt lamps add 0.15; for 120-volt lamps subtract 0.15

x Will operate in any position, but lumen maintenance is best when burned vertically base up and lumens per watt values at 70% of rated life

• apply to this burning position only.

\* Approximate value.



Watts	Bulb	List Price	Std. Pkg. Qty.	MAZDA B or MAZDA C Lamp	Rated Initial Lums.	Rated Initial Lums. per Watt	Lums. per Watt at 70% of Rated Life	Rated Aver. Lab. Life (Hrs.)	Base	Max. Over-all Length, Inches	Aver. Light Center Length, Inches	Fil. Const.	Position of Burning	
MAZDA LAMPS FOR 110, 115 and 120-Volt Circuits—Continued														
300 300 300	PS-35 clear PS-35 I. F. PS-35 W. B.	\$0.75 .80 .80	24 24 24	C C C	5520 5520 *5350	18.4 18.4 .....	b 15.8 ..... .....	1000 1000 1000	Mog. Mog. Mog.	9 $\frac{7}{8}$ 9 $\frac{7}{8}$ 9 $\frac{7}{8}$	7 7 7	C-7A C-7A C-7A	x Any x Any Base up	
100 200 300	G-30 I. F. Indirect Three-Lite.....	.80	24	C	1310 3360 4670	13.1 16.8 15.5	.....	1000	Three Contact Mogul	6 $\frac{3}{4}$	3 $\frac{3}{4}$	2 C-7A	Base down	
300 300 300 300	PS-35 day. clear PS-35 day. I. F. PS-35 I. F. silv. bowl	1.20 1.30 1.60	24 24 24	C C C	*3590 *3590 .....	..... ..... .....	.....	1000 1000 1000	Mog. Mog. Mog.	9 $\frac{7}{8}$ 9 $\frac{7}{8}$ 9 $\frac{7}{8}$	7 7 7	C-7A C-7A C-7A	x Any x Any Base up	
500 500 500	PS-40 clear PS-40 I. F. PS-40 W. B.	1.40 1.50 1.50	12 12 12	C C C	9800 9800 *9510	19.6 19.6 .....	b 16.4 ..... .....	1000 1000 1000	Mog. Mog. Mog.	9 $\frac{13}{16}$ 9 $\frac{13}{16}$ 9 $\frac{13}{16}$	7 7 7	C-7A C-7A C-7A	x Any x Any Base up	
500 500 500	PS-40 day. clear PS-40 day. I. F. PS-40 I. F. silv. bowl	2.15 2.30 2.60	12 12 12	C C C	*6370 *6370 .....	..... ..... .....	.....	1000 1000 1000	Mog. Mog. Mog.	9 $\frac{13}{16}$ 9 $\frac{13}{16}$ 9 $\frac{13}{16}$	7 7 7	C-7A C-7A C-7A	x Any x Any Base up	
750 750	PS-52 clear PS-52 W. B.	3.75 3.95	6 6	C C	14550 *14100	19.4 .....	17.4 .....	1000 1000	Mog. Mog.	13 $\frac{3}{8}$ 13 $\frac{3}{8}$	9 $\frac{1}{2}$ 9 $\frac{1}{2}$	C-7A C-7A	x Any Base up	
1000 1000	PS-52 clear PS-52 W. B.	4.00 4.20	6 6	C C	20700 *20080	20.7 .....	17.2 .....	1000 1000	Mog. Mog.	13 $\frac{3}{8}$ 13 $\frac{3}{8}$	9 $\frac{1}{2}$ 9 $\frac{1}{2}$	C-7A C-7A	x Any Base up	
1500 1500	PS-52 clear PS-52 W. B.	5.75 5.95	6 6	C C	33000 *32000	22.0 .....	15.3 .....	1000 1000	Mog. Mog.	13 $\frac{3}{8}$ 13 $\frac{3}{8}$	9 $\frac{1}{2}$ 9 $\frac{1}{2}$	C-7A C-7A	x Any Base up	
TYPE D LAMPS—110, 115 and 120 Volts Only														
7 $\frac{1}{2}$ 15	G-11 outside wh. & red A-15 I. F.	.10 .10	60 60	Vac. Vac.	..... 144	..... 9.6	.....	1400 750	Med. Med.	2 $\frac{3}{4}$ 3 $\frac{1}{2}$	..... .....	C-7A C-9	Any Any	
30 60	G-19 (Ø) A-19 I. F.	.10 .10	60 60	Vac. Gas F.	336 I.F. 828	11.2 I.F. 13.8	.....	500 500	Med. Med.	3 $\frac{3}{8}$ 4 $\frac{5}{8}$	..... .....	C-9 C-9	Any Any	
MAZDA LAMPS FOR HIGH VOLTAGE SERVICE—220, 230, 240, 250 and 260 Volts														
Watts	Volts	Bulb	List Price	Std. Pkg. Qty.	MAZDA B or MAZDA C Lamp	Rated Initial Lums.	Rated Initial Lums. per Watt	Lums. per Watt at 70% of Rated Life	Rated Aver. Lab. Life (Hrs.)	Base	Max. Over-all Length, Inches	Aver. Light Center Length, Inches	Fil. Const.	Position of Burning
25	230	A-19 I. F.	\$0.26	120	B	213	c 8.5	c 8.0	1000	Med.	3 $\frac{1}{8}$	2 $\frac{1}{2}$	C-17	Any
50 50 50	230 275 300	A-21 I. F. A-21 I. F. Mine A-21 I. F. Mine	.26 .40 .40	120 120 120	B B B	475 435 435	c 9.5 8.7 8.7	c 8.1 ..... .....	1000 1000 1000	Med. Med. Med.	4 $\frac{7}{8}$ 4 $\frac{7}{8}$ 4 $\frac{7}{8}$	2 $\frac{7}{8}$ 2 $\frac{7}{8}$ 2 $\frac{7}{8}$	C-17 C-17 C-17	Any Any Any
100	230	A-23 I. F.	.38	60	C	1100	d 11.0	d 10.5	1000	Med.	6 $\frac{1}{4}$	4 $\frac{3}{8}$	C-9	x Any
200 200 200	230 230 230	PS-30 clear PS-30 I. F. PS-30 W. B.	.85 .90 .90	24 24 24	C C C	2920 2920 *2830	d 14.6 d 14.6 .....	d 12.9 ..... .....	1000 1000 1000	Med. Med. Med.	8 $\frac{1}{8}$ 8 $\frac{1}{8}$ 8 $\frac{1}{8}$	6 6 6	C-9 C-9 C-9	x Any x Any Base up
300 300 300	230 230 230	PS-35 clear PS-35 I. F. PS-35 W. B.	1.25 1.35 1.35	24 24 24	C C C	4560 4560 *4420	d 15.2 d 15.2 .....	d 13.4 ..... .....	1000 1000 1000	Mog. Mog. Mog.	9 $\frac{7}{8}$ 9 $\frac{7}{8}$ 9 $\frac{7}{8}$	7 7 7	C-7A C-7A C-7A	x Any x Any Base up
500 500	230 230	PS-40 clear PS-40 I. F.	2.15 2.30	12 12	C C	8350 8350	16.7 16.7	d 14.8 .....	1000 1000	Mog. Mog.	9 $\frac{13}{16}$ 9 $\frac{13}{16}$	7 7	C-7A C-7A	x Any x Any
750	230	PS-52 clear	4.25	6	C	13125	17.5	15.5	1000	Mog.	13 $\frac{3}{8}$	9 $\frac{1}{2}$	C-7A	x Any
1000	230	PS-52 clear	4.75	6	C	19000	19.0	16.2	1000	Mog.	13 $\frac{3}{8}$	9 $\frac{1}{2}$	C-7A	x Any
MAZDA LAMPS FOR COUNTRY HOME SERVICE—28-32 Volts														
15 25	28-32 28-32	A-17 I. F. A-19 I. F.	.23 .23	120 120	C C	162 323	10.8 12.9	.....	1000 1000	Med. Med.	3 $\frac{3}{8}$ 3 $\frac{1}{8}$	2 $\frac{3}{8}$ 2 $\frac{1}{2}$	C-9 C-9	x Any x Any
50 100	28-32 28-32	A-21 I. F. A-23 I. F.	.25 .38	120 60	C C	780 1720	15.6 17.2	.....	1000 1000	Med. Med.	4 $\frac{1}{8}$ 6 $\frac{1}{8}$	3 $\frac{3}{8}$ 4 $\frac{3}{8}$	C-9 C-9	x Any x Any

(Ø) Inside frosted or outside colored in red, blue, green, amber-orange, rose, white, ivory and flametint.

\* Silvered bowl lamps should be used only in porcelain sockets and in fixtures so designed that the temperatures of the lamp and fixture do not exceed limits for satisfactory operation.

b Lumens per watt listed are for 115-volt lamps only. For 110-volt lamps add 0.15; for 120-volt lamps subtract 0.15

c Lumens per watt listed are for 220 and 230-volt lamps only. For 240, 250 and 260-volt lamps subtract 0.10

d Lumens per watt listed are for 220 and 230-volt lamps only. For 240, 250 and 260-volt lamps subtract 0.30

x Will operate in any position, but lumen maintenance is best when burned vertically base up and lumens per watt values at 70% of rated life apply to this burning position only.

\* Approximate value.



Watts	Volts	Bulb	List Price	Std. Pkg. Qty.	MAZDA B or MAZDA C Lamp	Rated Initial Lums.	Rated Initial Lums. per Watt	Lums. per Watt at 70% of Rated Life	Rated Aver. Lab. Life (Hrs.)	Am-peres	Base	Max. Over-all Length, Inches	Aver. Light Center Length, Inches	Fil. Const.	Position of Burning
MAZDA LAMPS FOR TRAIN AND LOCOMOTIVE SERVICE															
15 15 15	32 34 64	A-17 I. F. . . . . S-14 clear Cab. . . . . A-17 I. F. . . . .	\$0.23 .22 .23	120 120 120	C B B	162 141 143	10.8 9.4 9.5	9.9 9.4 9.5	1000 1000 1000	. . . . . . . . . . . . . . .	Med. Med. Med.	3 $\frac{5}{8}$ 3 $\frac{1}{2}$ 3 $\frac{5}{8}$	2 $\frac{3}{8}$ 2 $\frac{1}{2}$ 2 $\frac{3}{8}$	C-9 C-9 C-9	x Any Any Any
25 25	32 64	A-19 I. F. . . . . A-19 I. F. . . . .	.23 .23	120 120	C C	323 265	12.9 10.6	12.0 10.6	1000 1000	. . . . . . . . . .	Med. Med.	3 $\frac{1}{8}$ 3 $\frac{1}{8}$	2 $\frac{1}{2}$ 2 $\frac{1}{2}$	C-9 C-9	x Any x Any
50 50	32 64	A-21 I. F. . . . . A-21 I. F. . . . .	.25 .25	120 120	C C	780 635	15.6 12.7	14.3 12.7	1000 1000	. . . . . . . . . .	Med. Med.	4 $\frac{1}{8}$ 4 $\frac{1}{8}$	3 $\frac{3}{8}$ 3 $\frac{3}{8}$	C-9 C-9	x Any x Any
100 100 100	32 32 64	A-23 I. F. . . . . P-25 clear Headlt. . . . . A-23 I. F. . . . .	.38 1.00 .38	60 60 60	C C C	1720 1520 1500	17.2 15.2 15.0	16.3 15.2 15.0	1000 500 1000	. . . . . . . . . . . . . . .	Med. Med. Med.	6 $\frac{1}{8}$ 4 $\frac{3}{4}$ 6 $\frac{1}{8}$	4 $\frac{3}{8}$ 3 4 $\frac{3}{8}$	C-9 C-5 C-9	x Any z x Any
250	32	P-25 clear Headlt. . . . .	1.50	60	C	4375	17.5	. . . . .	500	. . . . .	Med.	4 $\frac{3}{4}$	3	C-5A	z
MAZDA LAMPS FOR STREET RAILWAY SERVICE															
Amperes 1.0 1.6	30 30	A-19 I. F. . . . . A-21 I. F. . . . .	.30 .35	120 120	C C	360 648	12.0 13.5	. . . . . . . . . .	1500 1500	. . . . . . . . . .	Med. Med.	3 $\frac{1}{8}$ 4 $\frac{1}{8}$	2 $\frac{1}{8}$ 2 $\frac{1}{8}$	C-9 C-9	x Any x Any
Watts 23 23	105, 110, 115, 120, 125, 101, 201 301	S-17 clear . . . . . A-19 clear Headlt. . . . .	.25 .60	120 120	B B	1219 1197	8.9 8.0	. . . . . . . . . .	1500 1000	0.214 0.214	Med. Med.	4 $\frac{5}{8}$ 3 $\frac{1}{8}$	2 $\frac{1}{8}$ 2 $\frac{1}{8}$	S-1 C-5	Any Any
36 36		A-19 clear Headlt. . . . . A-21 I. F. . . . .	.60 .17	120 120	B B	1338 1374	8.6 9.5	. . . . . . . . . .	1000 1500	0.342 0.342	Med. Med.	3 $\frac{1}{8}$ 4 $\frac{1}{8}$	2 $\frac{1}{8}$ 2 $\frac{1}{8}$	C-5 C-9	Any x Any
56 56		A-21 I. F. . . . . P-25 clear Headlt. . . . .	.24 .85	120 60	B B	1609 1531	10.2 8.9	. . . . . . . . . .	1500 1000	0.519 0.519	Med. Med.	4 $\frac{7}{8}$ 4 $\frac{3}{4}$	2 $\frac{1}{8}$ 2 $\frac{1}{8}$	C-9 C-5	x Any Any
94		P-25 clear Headlt. . . . .	1.10	60	B	1933	9.4	. . . . .	1000	0.863	Med.	4 $\frac{3}{4}$	2 $\frac{1}{8}$	C-5	Any
101		A-23 I. F. . . . .	.50	60	C	1100	11.0	. . . . .	1500	. . . . .	Med.	6 $\frac{1}{8}$	4 $\frac{3}{8}$	C-9	x Any
201		PS-30 clear . . . . .	.95	24	C	2900	14.5	. . . . .	1000	. . . . .	Med.	8 $\frac{1}{8}$	6	C-9	x Any
301		PS-35 clear . . . . .	1.55	24	C	4830	16.1	. . . . .	1000	. . . . .	Mog.	9 $\frac{7}{8}$	7	C-7A	x Any
MAZDA LAMPS FOR AVIATION SERVICE															
100 240 420 420	12 12 12 12	A-19 clear . . . . . A-19 clear . . . . . G-25 clear . . . . . G-25 clear . . . . .	2.15 5.25 6.00 6.00	12 12 12 12	C C C C	2000 5760 10500 10500	20.0 24.0 25.0 25.0	. . . . . . . . . . . . . . . . . . . .	100 100 100 100	. . . . . . . . . . . . . . . . . . . .	Md. Pf. Md. Pf. Mg. Pf. Mog.	4 $\frac{1}{8}$ 4 $\frac{1}{8}$ 5 $\frac{5}{8}$ 4 $\frac{7}{8}$	h 1 $\frac{3}{4}$ h 1 $\frac{3}{4}$ h 1 $\frac{1}{2}$ 3	C-2 C-2 C-2 C-2	z z z z
500	110, 115, 120	T-20 clear . . . . .	3.90	6	C	8800	17.6	. . . . .	800	. . . . .	Mg. Pf.	9 $\frac{1}{2}$	h 3 $\frac{1}{8}$	C-13B	Base down
1000 1000 1000	30 110, 115, 120	T-20 clear . . . . . T-20 clear . . . . . T-20 clear . . . . .	7.00 6.50 6.50	6 6 6	C C C	24000 20500 20500	24.0 20.5 20.5	. . . . . . . . . . . . . . .	500 500 500	. . . . . . . . . . . . . . .	Mg. Bip. Mg. Bip. Mog.	9 $\frac{1}{2}$ 9 $\frac{1}{2}$ 9 $\frac{1}{8}$	e 4 e 4 4 $\frac{3}{4}$	C-13 C-13 C-13	Base down Base down Base down
1500	32	T-24 clear . . . . .	15.00	6	C	42000	28.0	. . . . .	100	. . . . .	Mg. Bip.	10 $\frac{1}{2}$	e 4	C-13B	Base down
3000	32	T-32 clear . . . . .	25.00	4	C	84000	28.0	. . . . .	100	. . . . .	Mg. Bip.	14	e 5 $\frac{3}{4}$	C-13B	Base down
5000	110, 115, 120	G-64 clear . . . . .	40.00	1	C	145000	29.0	. . . . .	100	. . . . .	Mg. Bip.	11 $\frac{7}{8}$	e 6 $\frac{1}{2}$	C-13	Base down
10000	120	G-96 clear . . . . .	100.00	1	C	295000	29.5	. . . . .	100	. . . . .	Prong	20	e 12	C-13	Base down
MAZDA LAMPS FOR MOTION PICTURE PRODUCTION SERVICE—110, 115 and 120 Volts															
Watts	Bulb		List Price	Std. Pkg. Qty.	MAZDA B or MAZDA C Lamp	Rated Initial Lums.	Rated Initial Lums. per Watt	Rated Aver. Lab. Life (Hrs.)	Base	Max. Over-all Length, Inches	Aver. Light Center Length, Inches	Fil. Const.	Position of Burning		
*1000 *1500 †2000	PS-52 clear . . . . . PS-52 clear . . . . . PS-52 clear . . . . .		\$ 4.00 5.75 5.25	6 6 6	C C C	22500 36000 65000	22.5 24.0 ...	500 500 † 15	Mog. Mog. Mog.	13 $\frac{1}{8}$ 13 $\frac{1}{8}$ 13 $\frac{1}{8}$	9 $\frac{1}{2}$ 9 $\frac{1}{2}$ 9 $\frac{1}{2}$	C-7A C-7A C-7A	x Any x Any x Any		
2000 5000 10000	G-48 clear . . . . . G-64 clear . . . . . G-96 clear . . . . .		13.00 40.00 100.00	6 1 1	C C C	50000 145000 295000	25.0 29.0 29.5	200 100 100	Mg. Bip. Mg. Bip. Prong	9 $\frac{3}{8}$ 11 $\frac{7}{8}$ 20	e 5 e 6 $\frac{1}{2}$ e 12	C-13 C-13 C-13	B. dn. to horiz. Base down Base down		
* Photographic (General Lighting). † Movie flood (Color Photography). 105-120 volts. ¶ Modeling. ‡ Life at 115 volts.															

\* Photographic (General Lighting). † Movieflood (Color Photography). 105-120 volts. ¶ Modeling. ‡ Life at 115 volts.

- ¶ Nominal watts. The actual watts are determined by multiplying the volts by the amperes (the amperes are the same for all voltages).  
†† This lamp, if burned horizontally, will not give as good service as when burned in a vertical position.  
e The light center length of this lamp is exclusive of base prongs; base prong being the small diameter part of metal post.  
† The lumens given cover only lamps of 115 volts. The lumens for other lamps are in proportion to the volts.  
h The light center length of this lamp is the distance from center of light source to top of base fin.  
x Will operate in any position, but lumen maintenance is best when burned vertically base up and lumens per watt values at 70% of rated life apply to this burning position only.  
z Can be burned in any position except within 45 degrees of vertically base up.



Watts	Bulb	List Price	Std. Pkg. Qty.	MAZDA B or MAZDA C Lamp	Rated Initial Lums.	Rated Initial Lums. per Watt	Rated Aver. Lab. Life (Hrs.)	Base	Max. Over-all Length, Inches	Aver. Light Center Length, Inches	Light Source Dimensions in mm		Fil. Const.	Position of Burning
											Width	Height		
MAZDA LAMPS FOR PROJECTION & STEREOPTICON SERVICE—100, 105, 110, 115 and 120 Volts														
50	T-8 clear . . . . .	\$1.10	24	C	790	15.8	50	S.C. Bay.	3½	g 1½	†4.9	†3.5	CC-13	Base down or can be burned within 25 degrees of vertical without materially affecting its performance
100	T-8 clear . . . . .	1.40	24	C	1870	18.7	50	S.C. Bay.	3½	g 1½	†5.5	†4.8	CC-13	
y 200	T-8 clear . . . . .	2.00	24	C	4400	22.0	25	S.C. Bay.	3½	g 1½	†6.2	†6.6	2 CC-8	
200	T-10 clear . . . . .	2.20	24	C	4080	20.4	50	Md. Pf.	5¾	h 2 ⅞	†7.9	†6.9	CC-13	
200	T-10 clear . . . . .	2.20	24	C	4080	20.4	50	Med.	5½	h 2 ⅞	†7.9	†6.9	CC-13	
y 300	T-10 clear . . . . .	3.10	24	C	7050	23.5	25	Md. Pf.	5¾	h 2 ⅞	†7.0	†9.4	2 CC-8	
y 500	T-10 clear . . . . .	5.50	24	C	12250	24.5	25	Md. Pf.	5¾	h 2 ⅞	†8.4	†8.6	C-13D	
500	T-20 clear . . . . .	3.00	6	C	13000	26.0	50	Md. Pf.	5¾	h 2 ⅞	†14.1	†10.7	C-13	
500	T-20 clear . . . . .	3.00	6	C	13000	26.0	50	Med.	5½	h 2 ⅞	†14.1	†10.7	C-13	
y 750	T-12 clear . . . . .	6.75	24	C	19500	26.0	25	Md. Pf.	5¾	h 2 ⅞	†10.1	†9.6	C-13D	
1000	T-20 clear . . . . .	6.50	6	C	27000	27.0	50	Mg. Pf.	9 ½	h 3 ⅞	†15.4	†15.6	C-13	
1000	T-20 clear . . . . .	6.50	6	C	27000	27.0	50	Mog.	9 ½	h 3 ⅞	†15.4	†15.6	C-13	
y 1000	T-20 clear . . . . .	8.00	6	C	27600	27.6	25	Md. Pf.	5¾	h 2 ⅞	†11.6	†11.6	C-13D	

† Approximate average for 115 volts. Dimensions for other standard voltages will be supplied on request.

### MAZDA LAMPS FOR SPOTLIGHT AND FLOODLIGHT SERVICE—110, 115 and 120 Volts

100	P-25 clear Spot...	1.15	60	C	1360	13.6	200	Md. Pf.	5	h 2¾	8	7	C-5	Any except within 45 degrees of vertically base up
100	P-25 clear Spot...	1.00	60	C	1360	13.6	200	Med.	4¾	3	8	7	C-5	
250	G-30 clear Spot...	1.90	24	C	4425	17.7	200	Md. Pf.	5¾	h 2¾	10	8	C-5	
250	G-30 clear Spot...	1.75	24	C	4425	17.7	200	Med.	5¾	3	10	8	C-5	
250	G-30 clear Flood...	1.75	24	C	3700	14.8	800	Med.	5¾	3	12	9	C-5	
400	G-30 clear Spot...	3.15	24	C	7840	19.6	200	Md. Pf.	5¾	h 2¾	11	9	C-5	
400	G-30 clear Spot...	3.00	24	C	7840	19.6	200	Med.	5¾	3	11	9	C-5	
500	G-40 clear Flood...	3.25	12	C	8350	16.7	800	Mog.	7½	4¾	13	10	C-5	
1000	G-40 clear Spot...	7.15	12	C	22000	22.0	200	Mg. Pf.	8½	h 3½	14	13	C-5	Any position from vertical base down to horizontal
1000	G-40 clear Spot...	6.75	12	C	22000	22.0	200	Mog.	7½	4¾	14	13	C-5	
1000	G-40 clear Spot...	6.75	12	C	22000	22.0	200	Mog.	8	5¾	14	13	C-5	
1000	G-40 clear Flood...	6.75	12	C	18700	18.7	800	Mog.	8	5¾	16	15	C-5	

### MAZDA LAMPS FOR STREET SERIES SERVICE

All street series lamps are gas-filled and have mogul bases and clear bulbs. All standard street series lamps have an average rated laboratory life of 2000 hours; because of the severity of street lighting service, the average service life of street series lamps even under good operating conditions, is of the order of 25% less than the average laboratory life.

Amperes	Rated Initial Lumens	Bulb	List Price	Std. Pkg. Qty.	Aver. Volts	Aver. Watts	Rated Initial Lumens per Watt	% Lumens at 70% of Rated Life	Filament Const.	Max. Over-all Length, Inches	Position of Burning and Average Light Center Length, Inches
6.6	1000	S-24½.....	\$0.50	60	9.7	63.7	15.7	100	C-8	7½	x Any, 5¾
6.6	2500	PS-35.....	1.00	24	22.0	145.3	17.2	100	C-2	9½	x Any, 7
6.6	4000	PS-35.....	1.20	24	33.1	218.6	18.3	98	C-2	9½	x Any, 7
15	4000	PS-35.....	1.20	24	14.0	210.5	19.0	95	C-2	9½	Base up, 7 Base down, 6¼
6.6	6000	PS-40.....	1.60	12	51.9	342.9	17.5	95	C-2	9½	x Any, 7
20	6000	PS-40.....	1.60	12	14.9	298.5	20.1	92	C-2	9½	Base up, 7 Base down, 6¼
20	10000	PS-40.....	2.00	12	25.0	500.0	20.0	90	C-7	9½	Base up, 7 Base down, 6¼
20	15000	PS-40.....	2.75	12	37.3	746.3	20.1	85	C-7	9½	Base up, 7 Base down, 6¼
20	25000	PS-52.....	5.00	6	60.7	1213.6	20.6	80	C-7	13½	Base up, 9½

g The light center length of this lamp is the distance from center of light source to top of base pins.

h The light center length of this lamp is the distance from center of light source to top of base fin.

x Will operate in any position, but lumen maintenance is best when burned vertically base up and the % lumens at 70% of rated life apply to this burning position only.

y This lamp should be used only in equipment that provides adequate forced cooling.





## ***Reference Listing of*** **OTHER LAMP SERVICES**

*The following pages are included for general information and reference only and are not a part of the standard large lamp schedules which precede.*

*The lamps shown are not sold under the terms and conditions applying to large MAZDA lamps and Type D lamps.*



# MERCURY (Type H) LAMPS

For use on 110-120 or 220-250 volt circuits with special equipment properly designed to produce the correct starting and operating voltage for the lamp.

■ Mercury lamps have been recently introduced in two wattage sizes. These lamps differ radically in principle from incandescent MAZDA lamps both in their operation and in the color quality of light produced, but are applicable to a wide range of industrial and commercial lighting applications.

These new lamps represent departures from former gaseous conductor and mercury vapor sources in that they are provided with conventional screw bases and are adaptable to common types of reflecting equipment.

The principle of operation is that of a mercury vapor arc or flow of current between the two main electrodes located at the upper and lower parts of the bulb. The operating characteristics of these new light sources are such that each lamp requires a special transformer or regulating device for starting and operation. Several minutes is required for mercury lamps to come up to full brilliance.

## The 400-Watt (Type H) Lamp

The 400-watt Type H mercury lamp consists of an interior arc tube enclosed within an outer tubular bulb. The lamp is supplied either for base up or base down operation and must be burned within 10 degrees of vertical. Orders should specify burning position.

## The 250-Watt (Type H-2) Lamp

This lower wattage mercury lamp, though operating on the same principle, differs somewhat in construction from the 400-watt size. Only a single bulb enclosing the arc stream is used and the lower vapor pressure permits universal burning. It should be used in equipment which protects the lamp from air currents or drafts.

	250 Watts*	400 Watts*
List Price.....	\$7.50	\$12.50
†Standard Package Quantity.....	12	6
Bulb.....	T-9	T-16
Base.....	Medium Screw	Mogul Screw
Maximum Over-all Length.....	8 inches	13 inches
Maximum Diameter.....	1½ inches	2 inches
*Lumens.....	7,500	16,000
Initial Lumens per Watt.....	30	40
Lumens per Watt at 70% Life.....	25	33
Average Life.....	2,000 hours	2,000 hours
Frequency.....	60 cycles	60 cycles
Light Center Length.....	5 inches	7¾ inches
Length of Light Source.....	4½ inches	6 inches
Burning Position.....	Any	Base up
Finish.....	Clear	Clear

\* These are design values. Electrical rating will change slightly with different line voltages.

† A standard package shall consist of lamps of the same specifications.

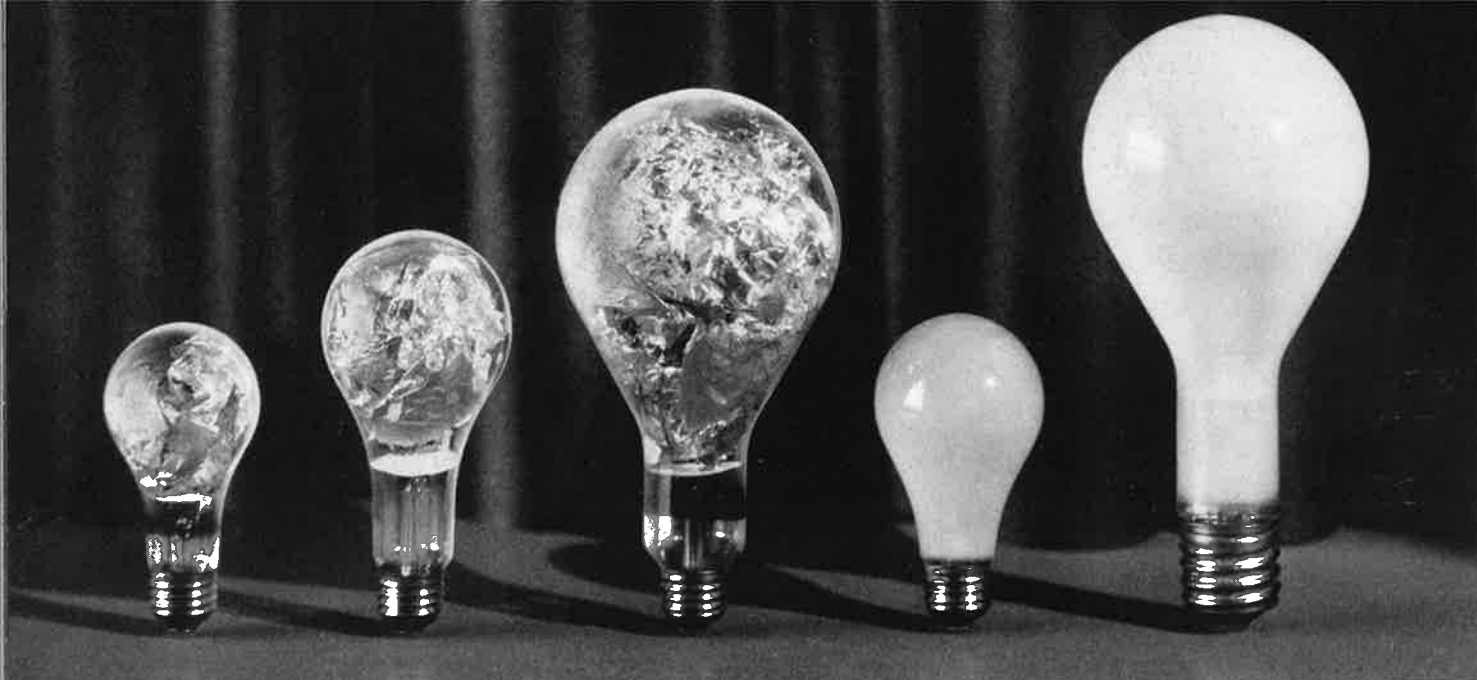


250 Watts



400 Watts





Photoflash No. 10      No. 20      No. 75      Photoflood No. 1      No. 4

## MAZDA PHOTO LAMPS

■ Photoflash lamps make available an enormous volume of highly actinic light in the form of a flash with a duration of about 1/50th second. They are especially applicable for action pictures, which require extremely short exposures, and under conditions where no power supply is available or the installation of a sufficient number of Photoflood lamps would not be convenient. The lamps may be flashed with two or more cells of flashlight or dry battery or on standard lighting circuits.

The No. 10 Photoflash lamp is designed particularly for amateur service, the No. 20 for general and news photography, and the No. 75 for color and large-area work. At the very peak of its flash the light intensity from a No. 75 Photoflash lamp is equivalent to that from more than five hundred general service lamps of the 1000-watt size.

It is recommended that a reflector always be used

with MAZDA Photo lamps to utilize light which would otherwise be wasted. A reflector screens the operator and increases the illumination on the subject by three to five times.

Photoflood lamps, for use on standard lighting circuits, give a large amount of light of high photographic efficiency. The color quality is constant in value and is perfectly suited to the newer panchromatic films and plates. They make home portraits and movie making possible, and greatly facilitate the operations of commercial photographers in their studio and out-of-studio work.

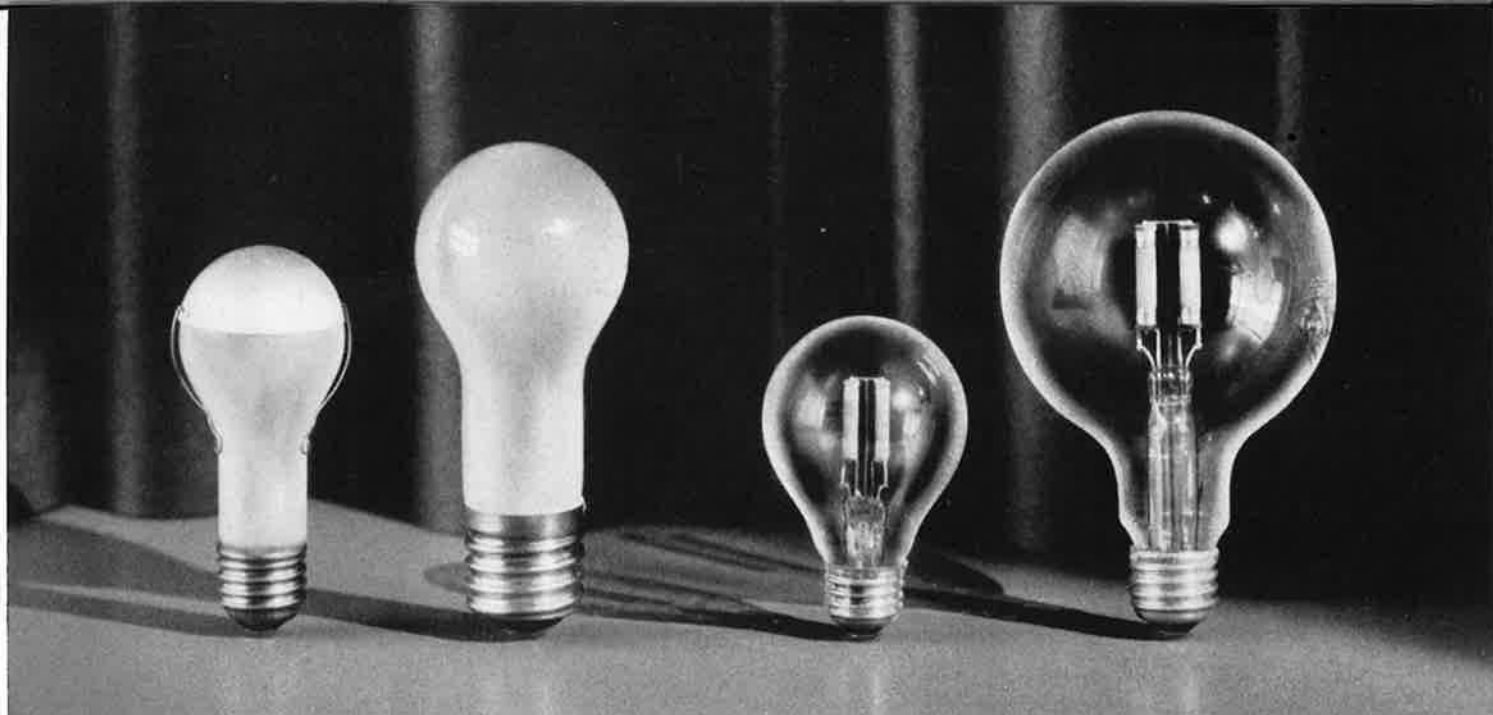
Photographically the light from the Photoflood lamp No. 1 is about equivalent to that obtained from a 750-watt general service lamp. Similarly the No. 4 is at least two and one-half times as effective as the 1000-watt general lighting lamp.

No.	Voltage Range for Operation	Bulb	Diameter Bulb, Inches	Maximum Over-all Length, Inches	Rated Life at 115 Volts, Hours	Standard Package Quantity	List Price
<b>MAZDA PHOTOFLASH LAMPS—CLEAR</b>							
10	3 to 125	A-19	2 $\frac{3}{8}$	4 $\frac{7}{8}$	..	60	\$0.15
20	3 to 125	A-23	2 $\frac{7}{8}$	6 $\frac{1}{8}$	..	60	.25
75	3 to 125	PS-35	4 $\frac{3}{8}$	8 $\frac{5}{16}$	..	24	.75
<b>MAZDA PHOTOFLOOD LAMPS—INSIDE FROSTED</b>							
1	105-120	A-21	2 $\frac{5}{8}$	4 $\frac{15}{16}$	2	60	.25
4	105-120	PS-35	4 $\frac{3}{8}$	9 $\frac{7}{16}$	10	24	2.00
<b>MAZDA PHOTOGRAPHIC ENLARGER LAMP—OUTSIDE WHITE COATED</b>							
..	105-120	A-21	2 $\frac{5}{8}$	4 $\frac{15}{16}$	2	60	.35

The above lamps are fitted with medium screw base except Photoflood No. 4, which has mogul screw base.

Use not more than five Photoflood lamps No. 1 on the usual lighting circuit. Circuits for Photoflood lamp No. 4 should be fused for 10 amperes for each No. 4 lamp employed.





Type

S-2

S-1

G-1

G-5

## MAZDA SUNLIGHT LAMPS AND TYPE G LAMPS

■ Type S-1 and Type S-2 MAZDA lamps are designed for use where a combination lamp emitting ultraviolet radiation and considerable light is desired. G-1 and G-5 lamps are designed for use where ultraviolet radiation is desired and where much light is not essential.

These lamps will not operate on ordinary house lighting circuits except when used in special equipment properly designed to produce the correct starting and operating voltage.

The bulbs of these lamps are of special glass which transmits biologically active ultraviolet but absorbs most of the radiation of wavelengths shorter than those in sunlight.

The manufacturer makes no claims as to the effectiveness of ultraviolet radiation for the maintenance of health and particularly for the cure of disease; the latter being entirely the province of the medical profession.

Approx. Watts	Approx. Volts	Approximate Time* to Produce Mild Erythema (Sunburn) on Untanned Skin with Lamps Operating in Typical Applicator Type Equipments 30° Position—30-in. Distance	Bulb	Max. Over-all Length, Inches	Screw Base	Rated Life, Hours	Standard Package Quantity	List Price
<b>TYPE S-1 MAZDA LAMP</b>								
400	14.5	7 minutes	PS-22 Inside Frosted	6 $\frac{7}{16}$	Mogul	400	6	\$5.75
<b>TYPE S-2 MAZDA LAMP</b>								
130	15	45 minutes	A-17 Inside Frosted With Metal Cap	4 $\frac{7}{8}$	Special	300	12	3.75
<b>TYPE G-1 LAMP</b>								
34	17	90 minutes	A-21 Clear	4 $\frac{1}{4}$	Medium	†300	12	3.50
<b>TYPE G-5 LAMP</b>								
75	15	45 minutes	G-35 Clear	6 $\frac{13}{16}$	Special	†300	6	5.00

\* Considerably longer exposures are necessary to produce vivid reddening.

† While blackening of the bulb begins earlier, this does not seriously affect the ultraviolet output until about 300 hours, when a rapid blackening may take place. When this occurs a new lamp should be substituted.



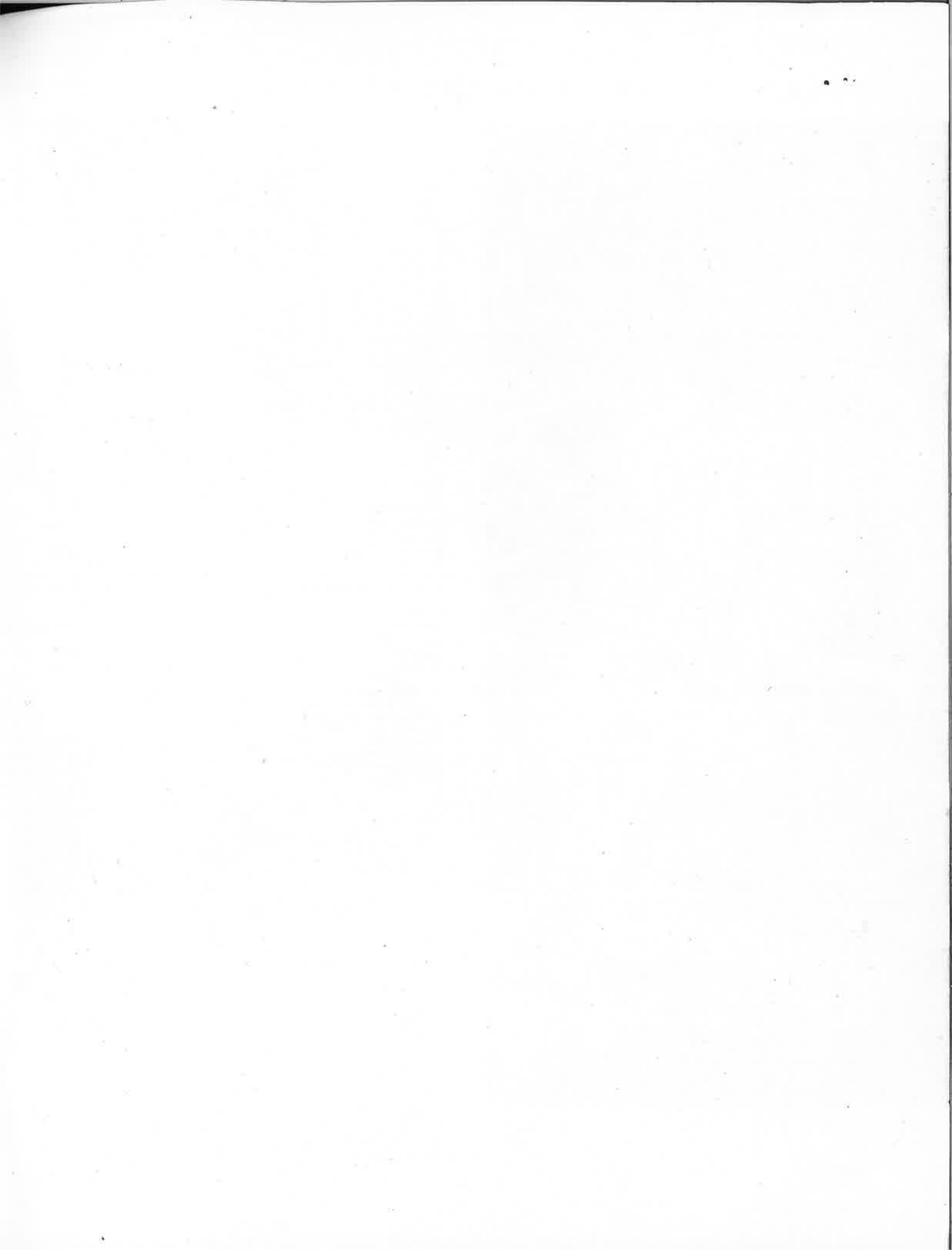
# MAZDA LAMPS FOR EVERY PURPOSE



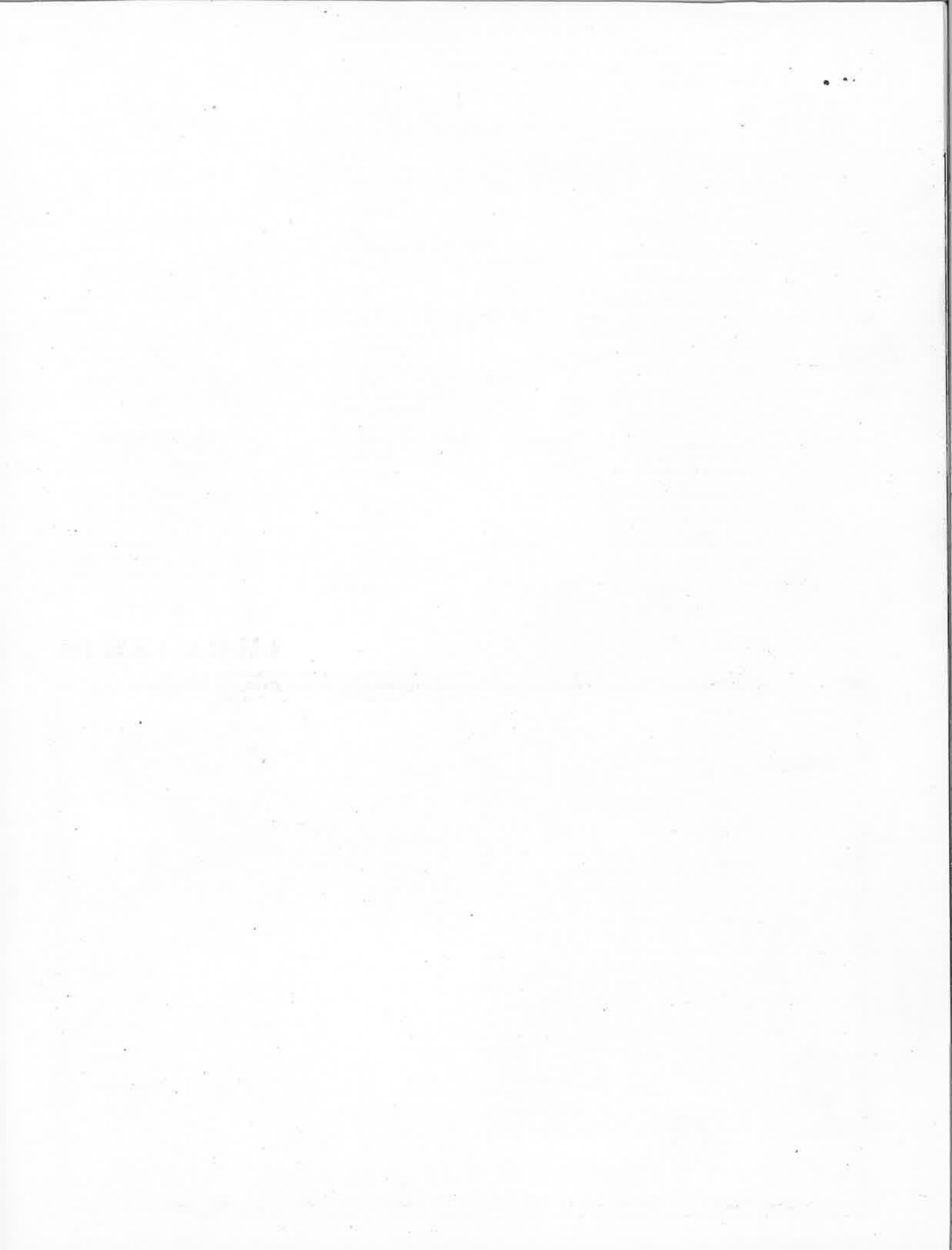
■ To meet specialized services, thousands of types of MAZDA lamps—not listed in the Catalog—are available. Only a partial list of special lamp services is given below—for full information on any special lamp or lighting service, consult the nearest sales office as shown on the inside back cover. Complete study of each specific problem and cooperation between equipment and lamp designers are necessary to insure the proper characteristics of the lamp for most satisfactory performance.

Advertising Projector  
 Altimeter Lamp  
 Annunciator  
 Bake Oven  
 Barrel Inspection  
 Battery Inspection  
 Berthlight  
 Code Beacon  
 Counterfeit Coin Detector  
 Deep Sea Underwater Floodlight  
 Dentiscope  
 Distilling Tube Inspection  
 Diving Lamp  
 Dome Lamp for Battleship  
 Electrocardiograph  
 Elevator Signal  
 Emergency Exit  
 Film Printing  
 Fire Alarm Signal  
 Fire and Police Hand Lantern  
 Furnace Indicator  
 Galvanometer  
 Gunsight  
 High Speed Signal Device  
 Interferometer  
 Lighthouse  
 Lightship  
 Marine Signal  
 Miner's Cap Lamp  
 Motorboat  
 On-course Beacon  
 Ophthalmometer  
 Optical Instrument  
 Oscillograph  
 Photocell Exciter  
 Photographic  
 Photometric Standards  
 Photophone Recorder  
 Pilot Balloon Observation  
 Pilot Lamp for Rectifier  
 Plant Research  
 Police Signal  
 Pyrometer Device  
 Radio Circuit—Resonance Illuminator Indicator  
 Radio Picture Transmission  
 Radio Protector  
 Railway Light Signal  
 Recording Microphotometer  
 Rectifier (Street Series)  
 Reproducer—Home Talking Movie Equipment  
 Resistance Device  
 Scientific Instrument  
 Seismometric Recording Apparatus  
 Sensitometer  
 Spectrograph  
 Sperry Gyroscope  
 Studio Effect Lighting  
 Subway Door Indicator  
 Surgical  
 Switchboard  
 Target Projection  
 Telephone Trouble  
 Television  
 Toy Projector  
 Trench Signal  
 Ultraviolet Transmitting Bulb Lamps  
 X-ray Illuminator  
 X-ray Instrument

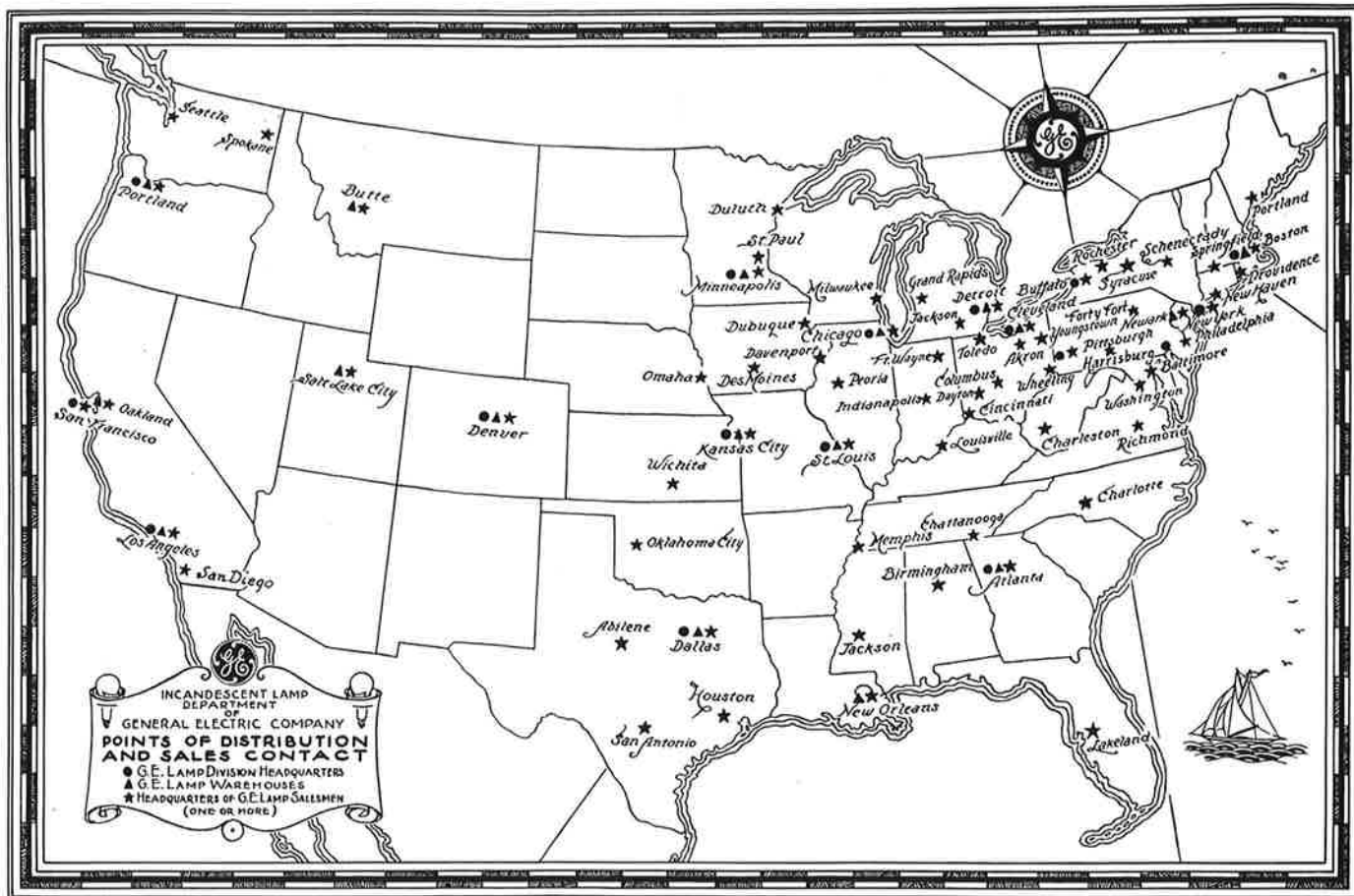












## DIRECTORY

### SALES DIVISIONS

#### ATLANTA

**Southeastern Division**  
Incandescent Lamp Dept. of G.E. Co.  
Red Rock Building, 187 Spring St., N. W.  
Atlanta, Georgia.

#### BOSTON

**New England Division**  
Incandescent Lamp Dept. of G.E. Co.  
United Shoe Machinery Building  
50 High Street, Boston, Mass.

#### BUFFALO

**Empire Division**  
Incandescent Lamp Dept. of G.E. Co.  
901 Genesee Building, Buffalo, N. Y.

#### CHICAGO

**Midland Division**  
Incandescent Lamp Dept. of G.E. Co.  
Continental Illinois Bank Building  
230 South Clark St., Chicago, Illinois.

#### CLEVELAND

**Buckeye Division**  
Incandescent Lamp Dept. of G.E. Co.  
Terminal Tower, Cleveland, Ohio.

#### DALLAS

**Southwestern Division**  
Incandescent Lamp Dept. of G.E. Co.  
General Electric Building  
1801 North Lamar St., Dallas, Texas.

#### DENVER

**Rocky Mountain Division**  
Incandescent Lamp Dept. of G.E. Co.  
650 Seventeenth St., Denver, Colo.

#### DETROIT

**Michigan Division**  
Incandescent Lamp Dept. of G.E. Co.  
1249 Washington Blvd., Detroit, Mich.

#### KANSAS CITY

**Midwest Division**  
Incandescent Lamp Dept. of G.E. Co.  
2406 Power and Light Building  
Kansas City, Missouri.

#### LOS ANGELES

**South Pacific Division**  
Incandescent Lamp Dept. of G.E. Co.  
Edison Building  
601 West Fifth St., Los Angeles, Calif.

#### MINNEAPOLIS

**Northern Division**  
Incandescent Lamp Dept. of G.E. Co.  
523 Marquette Ave., Minneapolis, Minn.

#### NEW YORK

**Atlantic Division**  
Incandescent Lamp Dept. of G.E. Co.  
General Electric Building, 570 Lexington Ave.  
New York, N. Y.

#### PHILADELPHIA

**Continental Division**  
Incandescent Lamp Dept. of G.E. Co.  
Mitten Building, 1405 Locust St.  
Philadelphia, Pa.

#### PITTSBURGH

**Allegheny Division**  
Incandescent Lamp Dept. of G.E. Co.  
Koppers Building, 436 Seventh Ave.  
Pittsburgh, Pa.

#### PORTLAND

**North Pacific Division**  
Incandescent Lamp Dept. of G.E. Co.  
Terminal Sales Building  
1220 S. W. Morrison Street  
Portland, Oregon.

#### SAN FRANCISCO

**Pacific Division**  
Incandescent Lamp Dept. of G.E. Co.  
Russ Building, 235 Montgomery Street  
San Francisco, Calif.

#### ST. LOUIS

**Mississippi Valley Division**  
Incandescent Lamp Dept. of G.E. Co.  
Landreth Building, 320 North 4th Street  
St. Louis, Missouri.

### WAREHOUSES

**Atlanta Lamp Warehouse**  
488 Glenn St., S.W., Atlanta, Georgia.

**Butte Lamp Warehouse**  
827 S. Montana St., Butte, Mont.

**Chicago Lamp Warehouse**  
3636 S. Iron Street, Chicago, Illinois

**Cleveland Lamp Warehouse**  
1133 East 152nd Street, Cleveland, Ohio.

**Dallas Lamp Warehouse**  
703 McKinney Avenue, Dallas, Texas.

**Denver Lamp Warehouse**  
1863 Wazee Street, Denver, Colorado.

**Detroit Lamp Warehouse**  
700 Antoinette Street, Detroit, Mich.

**East Boston Lamp Warehouse**  
156 Porter Street, East Boston, Mass.

**Kansas City Lamp Warehouse**  
819 E. Nineteenth St., Kansas City, Mo.

**Los Angeles Lamp Warehouse**  
5205 Santa Fe Ave., Los Angeles, Calif.

**Minneapolis Lamp Warehouse**  
410 Third Ave., No., Minneapolis, Minn.

**Newark Lamp Warehouse**  
133 Boyd Street, Newark, New Jersey.

**New Orleans Lamp Warehouse**  
733 Tchoupitoulas St., New Orleans, La.

**Oakland Lamp Warehouse**  
1648 Sixteenth Street, Oakland, Calif.

**Portland Lamp Warehouse**  
1238 N. W. Glisan Street, Portland, Oregon.

**Salt Lake City Lamp Warehouse**  
350 Pierpont St., Salt Lake City, Utah.

**St. Louis Lamp Warehouse**  
4142 N. Union Blvd., St. Louis, Missouri.

### FACTORIES

Bridgeville, Pa.

Cleveland, O.

East Boston, Mass.

Newark, N. J.

Niles, O.

Oakland, Calif.

Providence, R. I.

St. Louis, Mo.

Warren, O.

Youngstown, O.

■ Sales Division headquarters of the Incandescent Lamp Department of General Electric are located in seventeen leading cities throughout the United States, with branch sales offices in other important centers. Complete warehousing facilities guarantee 24-hour distribution anywhere in the country.



*Lamps bearing the famous General  
Electric monogram assure you of good  
light at low cost. Look for this  
monogram on every lamp you buy.*

