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CADILLAC OPTICAL CORPORATION  
104 EAST 25TH STREET, NEW YORK 10, N. Y.



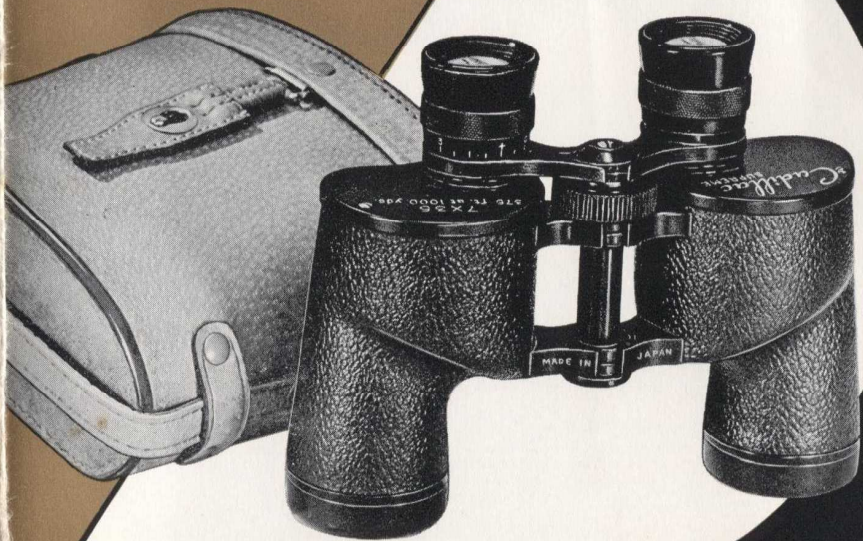
**FIRST CLASS MAIL**

**PRINTED MATTER**

Delta County Sportsmen's Club  
612 S. 12th St.  
Escanaba, Michigan  
Attn: Mr. Victor H. Powers, Secretary



# Binoculars



FOR THOSE WHO WANT THE FINEST

**CONFIDENTIAL****Dealer's Price List****"CADILLAC SUPREME" Prism Binoculars**

Page	Model Number		List Price	Dealer's Net Price
9	7008	6x24 CF WIDE ANGLE AT	\$ 39.00	\$23.70
10	7010	6x30 IF FEATHERWEIGHT AT	42.50	25.50
	7012	6x30 CF FEATHERWEIGHT AT	45.00	27.00
11	7020	7x35 IF FEATHERWEIGHT AT	51.50	30.90
	7024	7x35 CF FEATHERWEIGHT AT	56.50	33.90
	7022	7x35 CF LIGHTWEIGHT AT	49.50	29.70
12	7050	7x35 CF FEATHERWEIGHT WIDE RANGE 10° AT	100.00	60.00
13	7026	7x35 CF LIGHTWEIGHT SUPER WIDE ANGLE 11° AT	75.00	45.00
	7052	7x35 CF LIGHTWEIGHT WIDE ANGLE 10° AT	65.00	39.00
14	7030	7x50 IF ZEISS TYPE	39.00	23.40
	7032	7x50 CF ZEISS TYPE	42.50	25.50
15	7035	7x50 IF FEATHERWEIGHT AT	64.00	38.40
	7036	7x50 CF FEATHERWEIGHT AT	68.00	40.80
	7033	7x50 IF LIGHTWEIGHT AT	52.50	31.50
	7034	7x50 CF LIGHTWEIGHT AT	56.50	33.90
16	7038	8x30 IF FEATHERWEIGHT AT	48.00	28.80
	7040	8x30 CF FEATHERWEIGHT AT	52.00	31.20
	7042	8x30 CF LIGHTWEIGHT AT	50.00	30.00
17	7056	9x35 IF LIGHTWEIGHT AT	58.50	35.10
	7058	9x35 CF LIGHTWEIGHT AT	62.50	37.50
18	7060	10x50 CF WIDE FIELD LIGHTWEIGHT AT	66.00	39.60
19	7070	20x60 CF LIGHTWEIGHT AT	105.00	63.00
	3999	TRIPOD ADAPTER	3.75	2.25

IF = Individual focus.      CF = Center focus.      AT = American type.

Complete with deluxe stiff leather carrying case and neck and shoulder strap.

LIST PRICES SUBJECT TO 10% FED. EXCISE TAX.

Prices subject to change without notice.

MADE IN JAPAN FOR

**CADILLAC OPTICAL CORPORATION**

104 EAST 25th STREET

NEW YORK 10, N. Y.

GRamercy 3-2614



## FOREWORD

There are few outdoor amusements which cannot be made more enjoyable by the use of good Binoculars. At the racetracks, on the yacht, in the theatre, while hunting and when at home or on vacation, Binoculars will add interest and knowledge to your enjoyment.

The differences between a first-class and an inferior Binocular, are not always obvious to a person who is new to their use. It is only after some experience that the faults in different Binoculars can be definitely detected, although they may be subconsciously felt to be there from the beginning.

The "CADILLAC SUPREME" Binoculars are designed to meet the exacting requirement of the most critical users. They are marked by quality of finish, workmanship and materials. The curves of the lenses are calculated with the utmost care and the glass used is selected to give the best optical results.

The owner of a "CADILLAC SUPREME" Binocular will appreciate the sharpness of the image, the absence of distortion of any kind and the freedom from color faults. By such qualities it is possible to distinguish details which with an inferior Binocular would be invisible.

Years of constant use will not diminish the optical or mechanical precision of these fine "CADILLAC SUPREME" Binoculars.

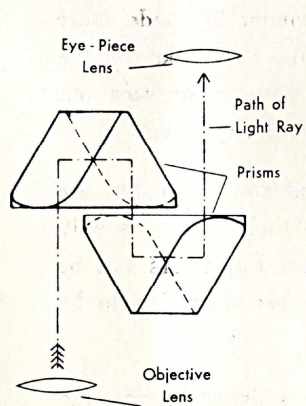
The knowledge, resources and wide experience of the factory manufacturing the "CADILLAC SUPREME" enable them to produce Binoculars with skillfully crafted optics and precise mechanical alignment. The "CADILLAC SUPREME" Binocular line is a perfect example of optical craftsmanship.

*Cadillac*

## THE PURPOSE OF A BINOCULAR

The chief function of a Binocular is that it magnifies the object and enables more detail to be seen.

Binoculars differ fundamentally from field glasses in the addition of a pair of prisms on each side, accounting for the term "prismatic" binocular. The prisms serve to reflect the path of light as shown in the accompanying diagram, greatly increasing the distance light must travel from the objective lens to the eyepiece, and so making possible much greater magnification without increase in the size of the instrument. In addition, a field lens system below the eyepiece provides a much greater field of vision than possible with telescopes or field glasses.



USE OF PRISMS IN BINOCULARS

If the binocular has a magnification of 6 times, an object seen through it will appear six times as large as when seen by the unaided eye. An object 600 yards away when seen through a Binocular of magnification 6 will appear to be the same size as if viewed without its aid at 100 yards. The advantage of this magnification will be at once evident. For example, when studying bird life, it may be not possible to get nearer to the bird than 60 feet, but if a binocular with 6x magnification is used, this distance becomes equivalent to being only 10 feet away. Or again, at a race meeting, a spectator may be far away from the winning post, but with a good binocular of 8 magnification he can see the finish as if he were only one-eighth of his actual distance from the post.

While magnification is the chief advantage of a binocular, there are practical limits to the increase of magnifying power. The higher the magnification the duller the image. Therefore, if two binoculars are identical except that one has a magnification of 6 and the other of 12, the first will give an image four times as bright as the second. With an increase in magnification, therefore, the light will be decreased unless the size of the objective lenses are also increased, and there is a limit to this, as the binocular would become heavy and clumsy.

Another disadvantage of increasing the magnification is that the field of view is reduced. In general, the higher the power the smaller the field of view.

## STEREOSCOPIC EFFECT

A big advantage of a binocular is the increased stereoscopic effect produced by the fact that the objective lenses are about twice as far apart as the eyepieces. When a landscape is seen by the naked eye there is a certain amount of stereoscopic effect, i.e. there appears to be depth in the picture. When observed through a good Prismatic Binocular this stereoscopic effect is increased and the result is very pleasing. The amount of the stereoscopic effect depends largely on the magnification and on the distance apart of the objectives. The greater these are, the greater will be the stereoscopic effect. This is one of the benefits of a Prismatic Binocular as compared with a Galilean Field-glasses.

### WHAT DOES "6 x 30", "7 x 50" MEAN?

It is usual to mark a binocular with the magnification and the size of the objective aperture in millimeters. Thus, an inscription 6 x 30 indicates that the object is magnified 6 times and that the objective aperture is 30 millimeters in diameter. The same way the number 7 on a 7 x 50 Binocular refers to the magnification while the figure 50 indicates the diameter of the objective lens.

The magnification in a binocular is obtained by the combination and arrangement of its various lenses. The objective lenses at the ends of the instrument serve to gather the light into a concentrated image. The lenses at each eyepiece serve as a compound magnifying glass for the examination of the image.

### LIGHT TRANSMISSION

The greater the diameter of the objective the more light will gather into the image and the brighter the image will appear. There are two characteristics which affect the brilliance of illumination in a binocular. The first is the light gathering power, which expresses the area of light gathered into the instrument and, as stated above, is determined by the diameter of the objective. The second is the light transmission, that is, the percentage of the light entering the Binocular which eventually reaches the eye, and which is determined by the design of the optical system of the binocular and the quality of the optical work. Each separate lens and prism in a binocular involves a certain inevitable loss of light. An inferior binocular may transmit only 50% of its potential light and intensity to the eye. Therefore, in binoculars of the best quality the lenses and prisms must be made of optical glass of the highest transparency possible.

It is a well-known optical phenomenon that under normal conditions, a loss of over 50% of light occurs on passing through an air-to-glass surface. An optical instrument such as a binocular containing many air-to-glass surfaces must, therefore, fail to transmit to the eyes a considerable portion of the light it receives. "Coating" of the lens surfaces eliminates this loss and restores the light to the transmitted beam. This coating is evident as a dark blue film when seen by reflected light. "Coating" therefore, has two obvious advantages:

- (1) The image or field of view is considerably brighter due to the increased transmission of light.
- (2) Contrast and definition are improved because of the almost complete elimination of stray light reflected to and fro between the various lens surfaces.

#### RELATIVE BRIGHTNESS (Luminosity)

This term refers to the relative amount of light transmitted by a binocular. It is determined by dividing the diameter of the objective lenses by the magnification and square the result. Thus a 6 x 30 Binocular has a relative brightness of 25 ( $30 : 6 = 5^2 = 25$ ) a 8 x 30 Model one of 14 etc. It will be seen that higher magnification decreases luminosity, and a larger objective lens increases it. This is important where the binocular is to be used in poor light, as by hunters, navigators etc. For use in good light conditions, the larger objectives, causing extra bulk and weight, are unnecessary.

#### EXIT PUPIL

By holding a binocular at a distance of, say, 12 inches from the eyes, directed towards the sky, a small circular beam of light, usually called the "exit pupil" can be seen in each eyepiece. The diameter of the exit pupil is, or should be, equal to the diameter of the objective aperture divided by the magnification. A binocular of 6 X with an objective aperture of 30 mm diameter has therefore an exit pupil of 5mm diameter. A 10 x 50 have the same exit pupil of 5mm, while a 6 x 15 Binocular has an exit pupil of only 2.5 mm.

In the brightest daylight the pupil of the human eye contracts to a minimum and in the darkness it expands to a maximum. Therefore if the exit pupil of the binocular is larger than the pupil of the eye, as it often happens under good daylight conditions, the eye cannot receive all the available light; the eye even does not want to receive all the available light. The contracting of the eye pupil shows its endeavor to cut down the light to an amount that it can use with comfort.—In dull weather or at night when the eye pupils widen the difference in light transmission becomes important.

The diameter from edge to edge of the view seen through a binocular is termed the "field of view." It is usually expressed as the distance across, in yards, of the field 1,000 yards from the binocular. It may also be stated in degrees as the angle subtended by lines from the binocular to the two edges of the field. A wide field of view is highly desirable, permitting a larger area to be examined without moving the "glass," and making it easier to locate a specific object. In general the field of view decreases with increase in power, 12 or 16x binoculars having a limited field. The field is not, however, a function of the power; the so-called wide angle models have special optical construction providing a wider field than normal, and are correspondingly more expensive. To compare the actual field of view of two models mathematically, take the *square* of the linear field. Thus in the latter example the ratio will be  $(110)^2$  to  $(150)^2$ , or 12,100 to 22,500; model B has 90% *greater* field of view than model A.

#### COLLIMATION (Alignment)

Every binocular must be individually adjusted to align its optical axis. Even a slight shift in the relative position of its lenses and (especially) prisms will throw it out of "collimation." For this reason an inexperienced person should never tamper with the lenses or adjustment. In the "Cadillac Supreme" binoculars, the optical elements are not only perfectly aligned, but are designed to maintain alignment even under rough service; should a good quality instrument be set out of adjustment, the necessary recollimation is not too difficult for a skilled specialist. Inferior binoculars may leave the factory in imperfect alignment, may be more readily knocked out of adjustment in transport or in use, and require difficult and costly servicing to readjust. In better binoculars the prisms are fastened to metal brackets, which are then secured to the body. Poorly made types have the prisms simply cemented into place; if dislodged, or if cleaning and dismantling becomes necessary, a stiff repair bill can be expected. A binocular which is not in perfect collimation will produce different images for each eye. An untrained person will not detect this condition unless very pronounced, as the eyes accommodate to record a single image, but in so doing cause considerable strain. If used for more than a very short period, the resulting eyestrain often causes severe headache, dizziness or nausea. Reliable distributors will not reship imported binoculars without having each one checked, and adjusted if necessary.

On the individual focusing model the two eye-pieces are adjustable independently.

Central focusing adjustment

Eye lens.

Field lens

Prisms are fastened by U-shaped clamps greatly increasing shock resistance.

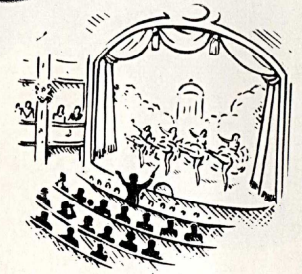
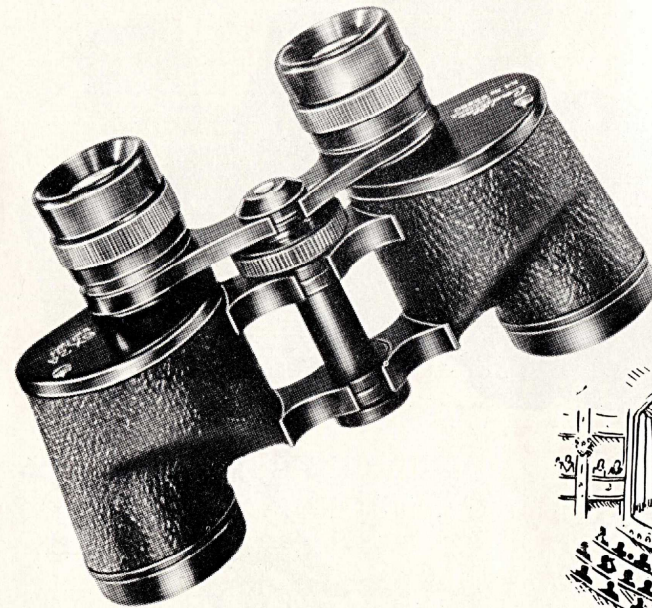
The larger the objective lens assembly the greater the light gathering power.

Loop for neck strap.

Deep morocco grain covering.



THE CHOICE OF THOSE WHO KNOW THE BEST



The "Cadillac Supreme"

WIDE ANGLE 6 x, 24 BINOCULAR

Specially designed Prismatic Binocular combined widest field of view with convenient size, for general use. Small and extremely light in weight. A popular glass for ladies and others to whom compactness and lightness of weight are important considerations. Central focus adjustment. Complete with genuine leather carrying case with shoulder and neck straps. **Model No. 7008**

**Specification:** Magnification 6 times. Objective lenses 24 mm. Exit pupil 4 mm. Field of view 569 feet at 1000 yards distance. Relative brightness 16. Angular field 11°. Weight 15 ozs. Height closed: 3.3/4". Width closed: 5.1/2". \*Lenses and Prisms internally coated. Made in Japan for Cadillac Optical Corporation.

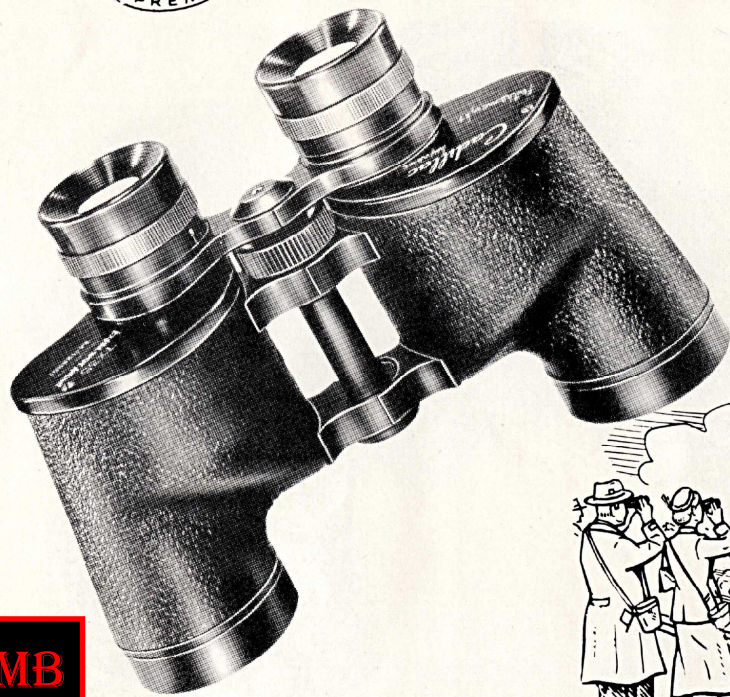
**\$3900\***

\*Subject to 10% Federal Excise Tax.

Cadillac



THE HALLMARK OF EXCELLENCE AND PRECISION



MB

The most magnificent "WIDE RANGE"

*"Cadillac Supreme"* Featherweight

7 x, 35 BINOCULAR

The superb Binocular of top performance and highest quality. Extra large field. Takes in almost double the area of the regular 7 x 35 model. Rapidly locates and holds the fastest moving object. Superlative definition and highly color-corrected achromatic lenses. Enables you to see more and in clear, sharp detail. Oversize eyelenses and prisms yet featherweight construction. Magnesium alloy body. Central focusing adjustment. Complete with genuine leather carrying case with shoulder and neck straps. **Model No. 7050**

**Specification:** Magnification 7 times. Objective lenses 35 mm. Exit pupil 5 mm. Field of view 525 feet at 1000 yards distance. Relative brightness 25. Angular field 10°. Weight 25 ozs. Height closed: 5". Width closed: 7.½". Lenses and Prisms internally coated. Made in Japan for Cadillac Optical Corporation.

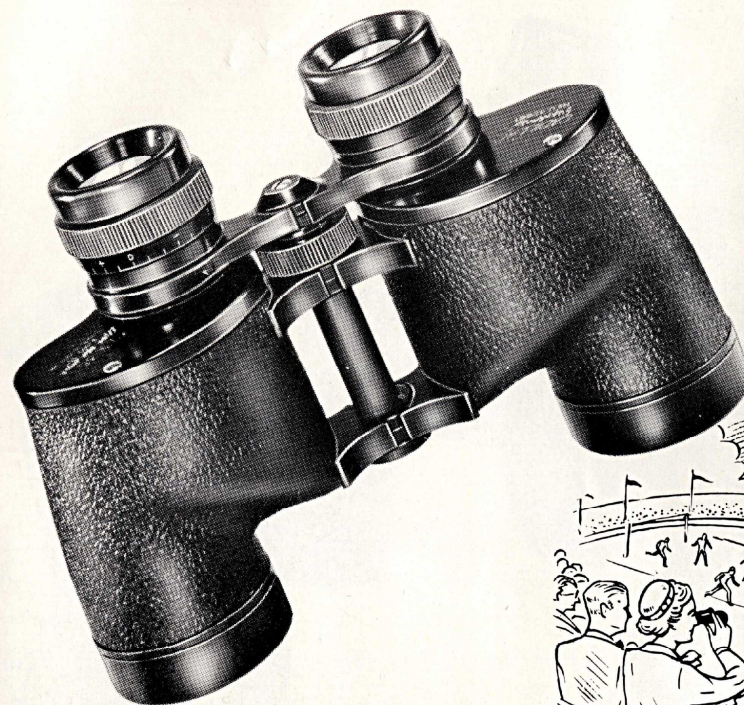
\$100<sup>00</sup>\*

\*Subject to 10% Federal Excise Tax.

Cadillac



THE BINOCULARS TO BE PROUD OF



The *"Cadillac Supreme"*

SUPER WIDE ANGLE 7 x, 35 BINOCULAR

Specially designed Binocular of exceptional optical performance. With its extreme large field of view it covers about 130% more area as the ordinary 7 x 35 model. The glass with the widest field of view on the market. Aluminum body. Central focusing adjustment. Complete with genuine leather carrying case with shoulder and neck straps.

**Model No. 7026**

**Specification:** Magnification 7 times. Objective lenses 35 mm. Exit pupil 5 mm. Field of view 569 feet at 1000 yards distance. Relative brightness 25. Angular field 11°. Weight: 29 ozs. Height closed: 5". Width closed: 7.¼". Lenses and Prisms internally coated. Made in Japan for Cadillac Optical Corporation.

\$75<sup>00</sup>\*

**Model No. 7052** With 10° Angular field, 525 feet Field of view at 1000 yards distance. Height closed: 5.¼". Width closed: 6.¾". Weight: 29 ozs.

\$65<sup>00</sup>\*

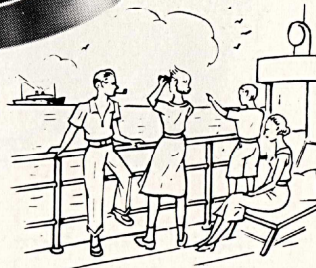
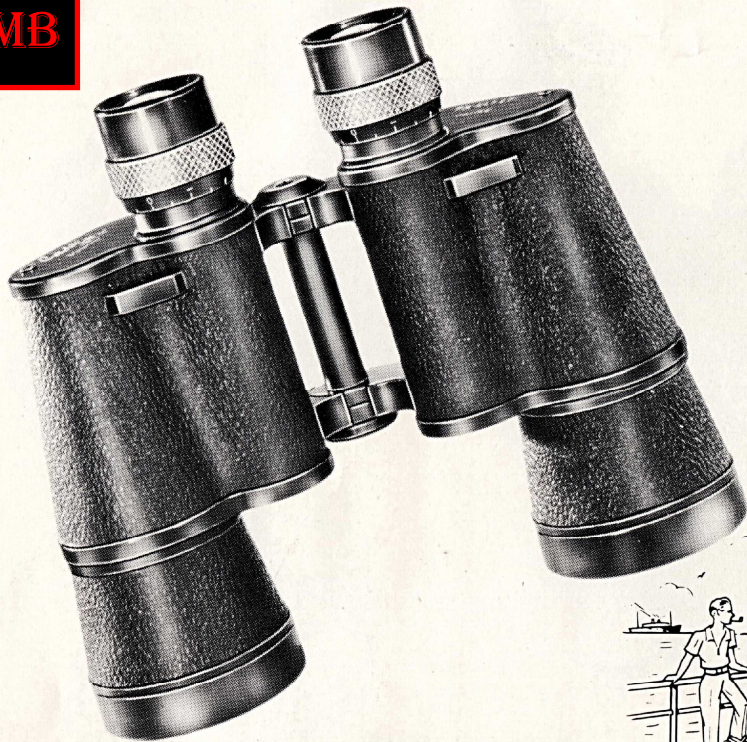
\*Subject to 10% Federal Excise Tax.

Cadillac



THE JEWEL OF BINOCULARS

MB



The "Cadillac Supreme"

7 x, 50 BINOCULAR

Zeiss type model. Perfect for marine. Serves equally well for woodland hunting. The extra large objective lenses of 50 mm. diameter add new brightness dimensions to its seven power magnification. Achromatic—color-corrected—lenses. Lightweight. Complete with genuine leather carrying case, shoulder and neck straps.

**Specification:** Magnification 7 times. Objective lenses 50 mm. Exit pupil 7.1 mm. Field of view 376 feet at 1000 yards distance. Relative brightness 50. Angular field 7.1°. Height closed: 6.3/4". Width closed: 7.1/2". Lenses and Prisms internally coated. Made in Japan for Cadillac Optical Corporation.

**Model No. 7030** Individual focusing adjustment. Weight: 32 ozs. **\$39<sup>00</sup>\***

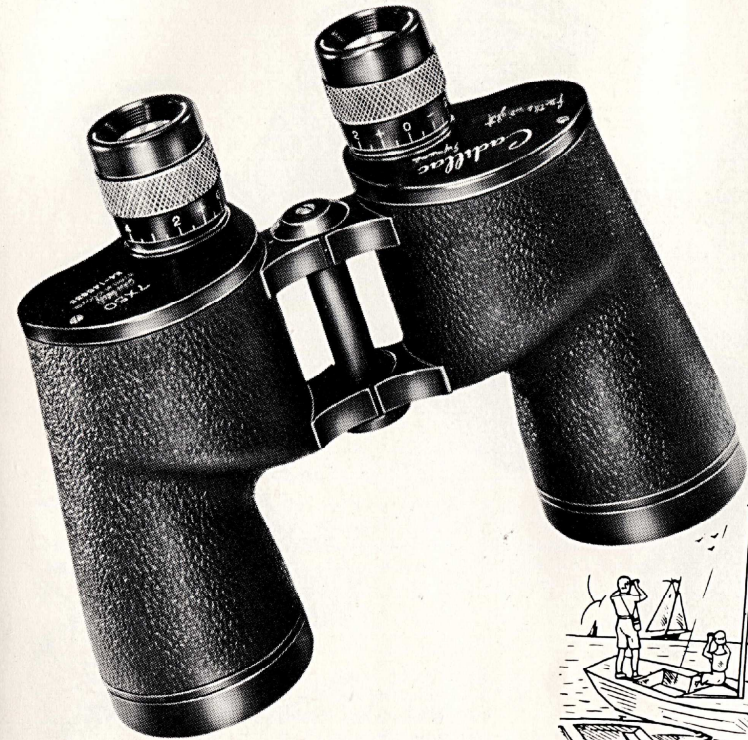
**Model No. 7032** Central focusing adjustment. Weight: 34 ozs. **\$42<sup>50</sup>\***

\*Subject to 10% Federal Excise Tax.

Cadillac



FOR A WORLD OF PLEASURE



The "Cadillac Supreme" FEATHERWEIGHT

7 x, 50 BINOCULAR

Navy model. Recommended for navigation and yachting. The extra large objective lenses gather all available light. Give remarkable image brightness, where other models fail. Achromatic—color—corrected lenses. Magnesium alloy body. Complete with genuine leather carrying case with shoulder and neck straps.

**Specification:** Magnification 7 times. Objective lenses 50 mm. Exit pupil 7.1 mm. Field of view 376 feet at 1000 yards distance. Relative brightness 50. Angular field 7.1°. Height closed: 6.3/4". Width closed: 7.1/2". Lenses and Prisms internally coated. Made in Japan for Cadillac Optical Corporation.

**Model No. 7035** Individual focusing adjustment. Weight: 30 ozs. **\$64<sup>00</sup>\***

**Model No. 7036** Central focusing adjustment. Weight: 33 ozs. **\$68<sup>00</sup>\***

Also available with Aluminum body—Lightweight.

**Model No. 7033** Individual focusing adjustment. Weight: 36 ozs. **\$52<sup>50</sup>\***

**Model No. 7034** Central focusing adjustment. Weight: 40 ozs. **\$56<sup>50</sup>\***

\*Subject to 10% Federal Excise Tax.

Cadillac



FAMED FOR PERFECTION

MB



The "Cadillac Supreme" FEATHERWEIGHT

8 x, 30 BINOCULAR

General purpose model on account of its compactness and high power. Especially welcomed by travellers, hunters and racing enthusiasts. Magnesium alloy body. Color-corrected achromatic lenses. Complete with genuine leather carrying case with shoulder and neck straps.

Specification: Magnification 8 times. Objective lenses 30 mm. Exit pupil 3.75 mm. Field of view 393 feet at 1000 yards distance. Relative brightness 14.1. Angular field 7.5°. Height closed: 4 1/2". Width closed 6 1/4". Lenses and Prisms internally coated. Made in Japan for Cadillac Optical Corporation.

Model No. 7038 Individual focusing adjustment. Weight: 17 ozs. \$48<sup>00</sup>\*

Model No. 7040 Central focusing adjustment. Weight: 18 ozs. \$52<sup>00</sup>\*

Model No. 7042 Aluminum body—Lightweight. With central focusing adjustment only. Weight: 19 ozs. \$50<sup>00</sup>\*

\*Subject to 10% Federal Excise Tax.

Cadillac



THE SYMBOL OF QUALITY



The "Cadillac Supreme" 9 x, 35 BINOCULAR

A high power glass designed for long range, hunting as in mountainous country or open flats. Also recommended for mountain climbing, fire and game wardens etc. Highly color-corrected achromatic lenses. Aluminum body. Lightweight. Complete with genuine leather carrying case with shoulder and neck straps.

Specification: Magnification 9 times. Objective lenses 35 mm. Exit pupil 3.9 mm. Field of view 395 feet at 1000 yards distance. Relative brightness 15.2. Angular field 7.5°. Height closed: 5 3/8". Width closed: 6 1/4". Lenses and Prisms internally coated. Made in Japan for Cadillac Optical Corporation.

Model No. 7056 Individual focusing adjustment. Weight: 23 ozs. \$58<sup>50</sup>\*

Model No. 7058 Central focusing adjustment. Weight: 25 ozs. \$62<sup>50</sup>\*

Also available with Magnesium body - Featherweight - fully coated Model No. 7057 Individual focusing adjustment. Weight: 18 ozs. \$64<sup>50</sup>\*

Model No. 7059 Central focusing adjustment. Weight: 20 ozs. \$68<sup>50</sup>\*

\*Subject to 10% Federal Excise Tax.

Cadillac





# Cadillac Optical Corporation

104 EAST 25<sup>TH</sup> STREET  
NEW YORK 10, N. Y.

GRAMERCY 3-2614  
December 3, 1956

Delta County Sportmen's Club  
612 S. 12th St.  
Escanaba, Michigan

Attention: Mr. Victor H. Powers, Secretary

Gentlemen:

Thank you for your letter of recent date in which you expressed interest in our "Cadillac" Binoculars.

"Cadillac" Binoculars are the finest on the market of supreme optical and mechanical quality.

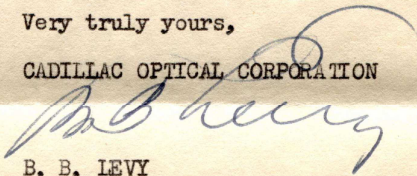
Enclosed please find our offers on these outstanding binoculars. It gives you all the information you need. Catalog and other information is being mailed separately. Please give it your attention and if you have any questions do not hesitate to contact us.

Your discount on the suggested retail price is a full 40% off.

We would welcome the opportunity to be of service to you.

Very truly yours,

CADILLAC OPTICAL CORPORATION

  
B. B. LEVY

BBL/mbt  
Enclosures

MB



# Cadillac Optical Corporation

104 EAST 25<sup>TH</sup> STREET  
NEW YORK 10, N. Y.

GRAMERCY 3-2614

To Our Franchised Dealers:

The demand for "Cadillac" Binoculars has greatly increased.

We have found it advisable to add the following models, due to specific requests:

#7057 - 9x35, IF, featherweight, magnesium body, weight: 18 ozs. only

Suggested List Price     \$64.50  
Dealers' Net Price         \$38.70

#7059 - 9x35, CF, featherweight, magnesium body, weight: 20 ozs. only

Suggested List Price     \$68.50  
Dealers' Net Price         \$41.10

Specification for the above two models:

Magnification 9 times, Objective lenses 35 mm.  
Exit pupil 3.9 mm. Field of view 395 feet at  
1000 yards distance. Relative brightness 15.2.  
Angular field 7.5°. Height closed: 5-3/8".  
Width closed: 6 1/4". Made in Japan.

-----  
#7062 - 10x50, CF, featherweight, magnesium body, weight: 32 ozs. only

Suggested List Price     \$75.00  
Dealers' Net Price         \$45.00

Specification:

Magnification 10 times. Objective lenses 50 mm.  
Exit pupil 5 mm. Field of view 367 feet at  
1000 yards distance. Relative brightness 25.  
Angular field 7°. Height closed: 7".  
Width closed: 7 1/4". Made in Japan.

-----  
These three models are fully coated, inside and outside surfaces of the objective and ocular lenses.

Display "Cadillac" Binoculars . . . the finest on the market!

Only selected products carry the "Cadillac" name.

