

RUGO

**ROUTE SIGNS
DESTINATION SIGNS**

**VENTILATORS
ELECTRIC HEATERS**

DUPLICATE # 2
10/1/88
FROM [illegible]

TELEWELD

Franklin Park, Illinois

UTILITY
DELUXE
WASHABLE
SIGN
CLOTH



TONTINE

WASHABLE SIGN CLOTH

UTILITY
STANDARD
HOLLAND
SIGN
CLOTH

**MANUFACTURED
BY THE
RAILWAY UTILITY CO.
CHICAGO, ILLINOIS**

MADE IN U.S.A.

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DELETED



TELEWELD, INC.

Subsidiaries and Divisions

TELEWELD, INC.	railroad track and switch maintenance service, track maintenance equipment, non-destructive testing equipment.
RAILWAY UTILITY COMPANY	electric heaters, ventilators and signs for mass transportation. Complete sheet metal design and manufacturing facilities.
TELEMATICS, INC.	custom design and manufacture of electronic and electro-mechanical devices, memory controls, automatic systems, prototype equipment.
TANKS, INC.	designers and builders of iron and steel tanks and pressure vessels for industrial and commercial use.
TELEWELD OF CANADA, LTD.	handling the Canadian operations.

General Offices: 11535 W. FRANKLIN AVENUE, FRANKLIN PARK, ILLINOIS

SIDE DESTINATION SIGN



Type S-907

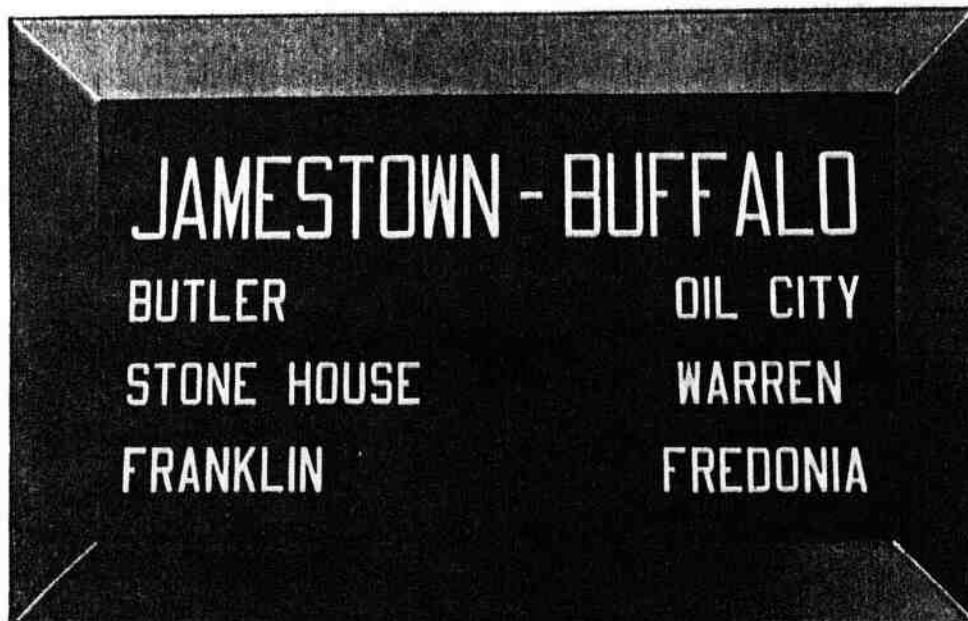
Size 31 3/4" x 32 1/4" x 4"

View from interior of car showing side destination sign designed and manufactured for a major east coast subway system, with rigidized stainless steel cover matching the decor of the car. Glazed both sides, sign mounts in standard window frame. Completely weatherproof, yet magazine is easily removed on a pivot for service.

Sign is illuminated by fluorescent tubes, or as specified, with quick access for changing tubes or bulbs. Lighting changes for passengers' convenience so that only curtain indicating direction of travel of the vehicle is illuminated. Top curtain is for one destination, center the opposite destination and lower curtain for the route.

Clear, easy-to-read destinations and routes can be seen from interior or exterior of car. Exclusive RUCO curtains are seamless for longer wear and trouble-free operation, with up to 24 different designations (in duplicate) printed on each continuous curtain. Precision engineered interior sign controls work easily and efficiently.

GATE DESTINATION SIGN



Type A-118, Illuminated
Size 27½" x 18" x 5"

The RUCO Gate Destination Sign shown incorporates all of the best design and construction details that have made RUCO the finest name in the printed curtain and illuminated sign field since 1905.

The curtain is easily turned from one route series to another with a special crank inserted at bottom. The RUCO all steel gear train prevents the usual bind in curtain rollers, thus allowing the operator to easily change the destination reading.

The RUCO Gate Destination Sign is available in any size, in stainless steel, aluminum or 18 gauge sheet steel. The sign may be ordered in either surface, semi-flush or flush mounting.

GATE NUMBER SIGN

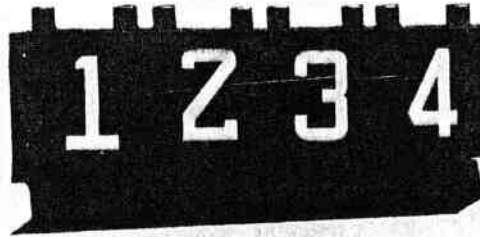
Illuminated

**Type A-119****Size 18" x 27½" x 5"****Type A-120 (Not Illustrated)****Size 27½" x 18" x 5"**

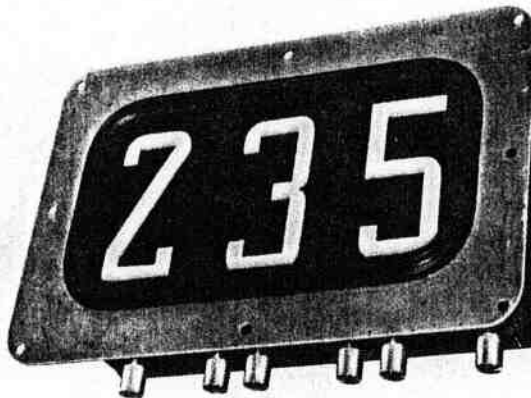
The Gate Number Sign above has been developed to meet the most modern interior and exterior architectural requirements for mass transportation facilities such as railroad stations, air terminals and bus depots.

Made from heavy gauge stainless steel with either glass or plexiglass glazing and raised numerals (color and size as required). Can be flush or surface mounted. Sign has piano hinge front panel for easy access to interior for replacement of lamps. Standard length lamps 110/60, or as required.

RUN NUMBER SIGNS



Type S-901, 4 numeral



Type S-902, 3 numeral

Illuminated, manually operated run number signs shown are precision built for the interiors of mass transportation cars.

Made of 18 gauge steel, or your specifications, these signs can be built to any number of digits and size and finished to your specifications. The curtain is easily turned without binding. Curtain material and mountings as required.

TYPICAL INSTALLATIONS



St. Louis Car Co. Trolley Bus Built for Milwaukee Electric Railway and Light Co. Equipped with a Utility Hinged Front Destination Sign.

STANDARD SIGN CURTAINS

UTILITY SIGNS
ARE OF MODERN DESIGN

ALL GEARS ARE
SOLID CUT-STEEL

BRONZE-BUSHED
THROUGHOUT

HEAVILY PLATED

TO RESIST RUST

SILENT OPERATION
POSITIVE ACTION.

ENGRAVED TYPE
FROM WOOD BLOCKS

PRINTED ON
HEAVY CYLINDER PRESS

BEST GRADE INK
BLACK OR RED

WITH OR WITHOUT
METAL STRIP EDGES

ALL-METAL ROLLERS
ADJUSTABLE TYPE

WITH OR WITHOUT
METAL SIGN BOXES

STANDARD PITCH
STEEL GEARS USED

ESSENTIAL PARTS ARE
ALL INTERCHANGEABLE

GUARANTEED TO MEET
ALL SPECIFICATIONS

MADE AND SOLD BY
RAILWAY UTILITY COMPANY

Front of Curtain

The Utility standard sign curtain is made of a high grade of Holland cloth which is especially suited for this particular service. The cloth is clear and has a smooth uniform finish. The cloth is well made and because of the strong fabric used in its construction, renders a very satisfactory period of wear.

The curtain, after being printed, is easily read at long distances, because the sign is exceedingly legible either in the daylight or when illuminated from the rear at night.

The ink used for the curtain background or for letters is of a special mixture, and contains ingredients which tend to render the sign curtain practically impervious to moisture, dirt, and dust. This special grade of ink preserves its elasticity, which prevents cracking, scratching, flaking or peeling, and will not fade.

The sign curtains may be printed in any one, or combination, of the four styles shown on these two pages. The Utility curtain is made up of sections printed separately by the wood block engraving process.

By using the wood block engraving process we are able to produce letters and figures of any size, width of face, and style, thus making it easy to obtain the best possible results with the list of names and width of curtain specified for printing. For best results with sign curtains whenever space is available, the height of the type should not be less than 4 inches for the front signs and 3 inches for the side signs.

Utility sign curtains, unless otherwise specified, are supplied without the edges of the curtains being reinforced with a continuous metal binding.

In the rear of this catalog can be found a sample piece of our standard Holland sign cloth that has been printed with red ink.

UTILITY

UTILITY

DELUXE WASHABLE SIGN CURTAINS

The cloth used in the making of the Utility waterproof washable sign curtains is manufactured by E. I. du Pont de Nemours and Company Inc. and is sold under the trade name of "Tontine." "Tontine" cloth has been produced by the du Pont Company for the past twenty years, and is today recognized as the best selling washable sign curtain cloth on the market.

Water in no way will affect "Tontine" because the cotton base fabric has been impregnated with dissolved cotton, which results in the waterproof finish becoming an integral part of the cloth. This cloth is frequently used for outdoor signs where it withstands considerably more abuse from the elements than would ever be encountered in an enclosed sign box.

"Tontine" excels in durability, because rain, moisture, sun, washing, and vermin do not affect or deteriorate the cloth thus giving longer and more satisfactory service. The fact that "Tontine" cloth is made up of uniformly woven high grade base muslin of 68-68 thread count which gives the cloth a tensile strength far exceeding the U. S. Government Specifications of CCC-C-521 of 51 pounds warp and 40 pounds woof, indicates ruggedness and greater longevity.

The lettering is printed on the sign curtains with a waterproof washable ink that was developed especially for use on a washable sign curtain. This special ink will not fade, peel, flake off, or scratch because it has been impregnated in the curtain cloth by a heavy cylinder press. The curtain after having been printed by the wood block engraving process is exceedingly legible either in the daylight or when illuminated from the rear at night.

The sign curtain is made up in sections printed separately in any one, or in combination, of the four styles shown on these two pages.

In the front of this catalog can be found a sample piece of the waterproof washable "Tontine" cloth that has been printed with the special ink.

UTILITY
UTILITY

UTILITY SIGNS
AREA OF MODERN DESIGN
ALL GEARS USED
SOLID CUT-STEEL
BRONZE-BUSHED
THROUGHOUT
HEAVILY PLATED
TO RESIST RUST
SILENT OPERATION
POSITIVE ACTION
ENGRAVED TYPE
FROM WOOD BLOCKS
PRINTED ON
HEAVY CYLINDER PRESS
BEST GRADE INK
BLACK OR RED
WITH OR WITHOUT
METAL STRIP EDGES
ALL METAL ROLLERS
ADJUSTABLE TYPE
WITH OR WITHOUT
METAL SIGN BOXES
STANDARD PITCH
STEEL GEARS USED
ESSENTIAL PARTS ARE
ALL INTERCHANGEABLE
GUARANTEED TO MEET
ALL SPECIFICATIONS
MADE AND SOLD BY
RAILWAY UTILITY COMPANY

Rear of Curtain

SIGN CURTAIN TYPE SIZES

	Height	Face
UTILITY	2 -inch	No. 1
UTILITY	2 -inch	No. 2
UTILITY	2 -inch	No. 3
UTILITY	2½-inch	No. 1
UTILITY	2½-inch	No. 2
UTILITY	3 -inch	No. 1
UTILITY	3 -inch	No. 2
UTILITY	3 -inch	No. 3
UTILITY	4 -inch	No. 1
UTILITY	4 -inch	No. 2
UTILITY	4 -inch	No. 3
UTILITY	4 -inch	No. 4
UTILITY	4½-inch	No. 1
UTILITY	4½-inch	No. 2

Type Used on Utility Roller Sign Curtains

On this and the following page are illustrations showing, to an eighth scale reproduction, the relative height and face of various sizes of type that are used in the production of the Utility standard curtains. The distance between the centers of the rollers will determine the size of the type, unless otherwise specified, and the face of the type will be determined by the relation between the length of the

(Cont. on bottom of Page 11)

SIGN CURTAIN TYPE SIZES

UTILITY	Height 4½-inch	Face No. 3
UTILITY	4½-inch	No. 4
UTILITY	4½-inch	No. 5
UTILITY	5 -inch	No. 1
UTILITY	5 -inch	No. 2
UTILITY	5 -inch	No. 3
UTILITY	6 -inch	No. 1
UTILITY	6 -inch	No. 2
UTILITY	6 -inch	No. 3

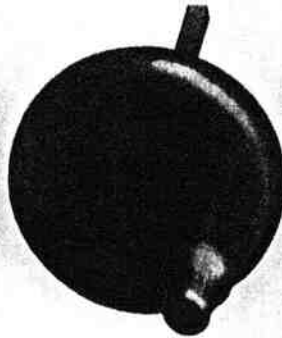
Type Used on Utility Roller Sign Curtains

name and the space available. In cases where the name specified to be printed is too long to make it practical to print in one line on the available space, two lines may be substituted. When two lines of printing are substituted for one line, it will be done as follows:—two lines of 2 inch type in place of one line of 4, 4½, and 5 inch type.

GENERAL DESCRIPTION



Assembly "L"

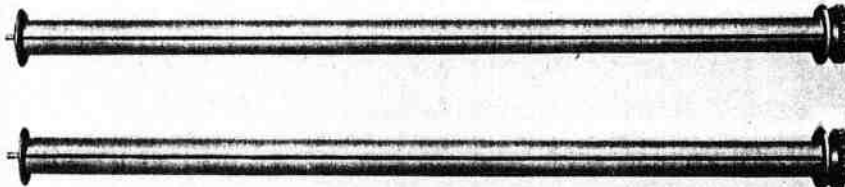


Assembly "I"

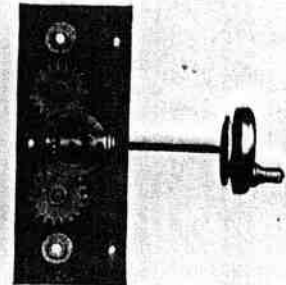
Utility signs are equipped with either of the two standard bell-cranks (or handles) as illustrated. The bell-cranks are designed to take up the least possible space and still have an attractive appearance. All Utility bell-cranks are furnished with a brushed chromium finish.

Side signs and small signs are equipped with bell-crank assembly "L" unless specified otherwise. This crank does not have a knob, but operates by gripping the knurling around the edge of the bell. The rest of the signs are equipped with the bell-crank assembly "I."

The Utility bell-cranks operate very easily since they turn against no other friction than the freely moving gears of the operating mechanism, and only a slight pressure is needed to depress the bell-crank enough to disengage the positive locking device of the sign mechanism.

Tail Plate
Assembly

Roller Assembly

Mechanism Plate
Assembly

Illustrated above is the standard Utility geared operating mechanism plate and the tail, or support, plate. The bell-crank is in position for rear operation of the sign.

All the gears and gear supports are made of high grade steel, heavily cadmium plated. All the bearings are bronze bushed, which give easy and quiet operation, and long wear.

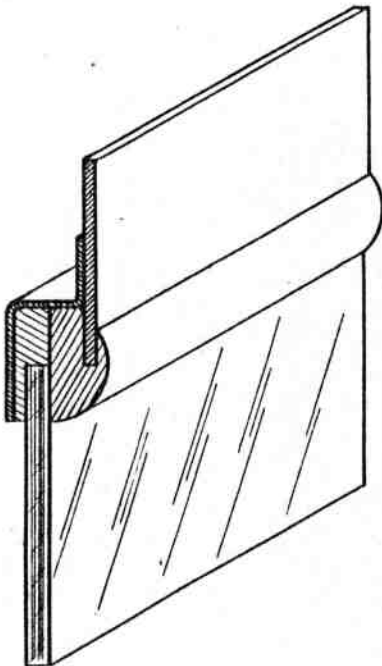
The tail plate has two tail bearings welded to it. In taking the rollers out of the sign box, all that is necessary is to pull the plunger in the tail bearing out and then the end of the curtain roller will slip out. Thus the curtains and rollers can be taken out of the sign without disturbing the operating mechanism, and without the use of tools.

The Utility standard rollers are also illustrated above all assembled and equipped with ~~steel~~ roller end gears, which engage with the gears shown on the operating mechanism plate at the right. One roller is a stud, or solid, roller; while the other is equipped with a substantial spring, which acts as a differential to take care of the change in the diameter of the rollers as the curtain is rolled from one to the other. This spring keeps the exposed part of the sign curtain taut. Since the duty of the spring is simply to take up the slight difference in the diameter of the two rollers and keep the curtain taut it does very little work and will last indefinitely.

GENERAL DESCRIPTION



The method of installing the glass on all the Utility glazed signs, whether furnished with glass or to be supplied with glass by the purchaser, has been standardized by the use of a special rubber moulding.



The rubber moulding gives an attractive and finished appearance to the sign box or sash. This method of installing the glass is water-tight and weather-proof. It also provides an easy and time saving way of replacing broken glass without the use of tools of any sort, and without disturbing the curtains, rollers, or operating mechanism. The appearance of the sign has also been improved by the adding of rounded corners to the sash front, and the elimination of the formerly used glass retainer screws.

The glass rests against and on a rubber cushion which is held in place by a pressed steel frame and welded to the metal sign box or sash plate. The front rubber moulding is installed entirely by hand even around the corners without the use of tools. When a glass has been broken and it is necessary to remove the rubber moulding, all that has to be

done is to push one end of the moulding out and then remove the rest by pulling on the end just pushed out.

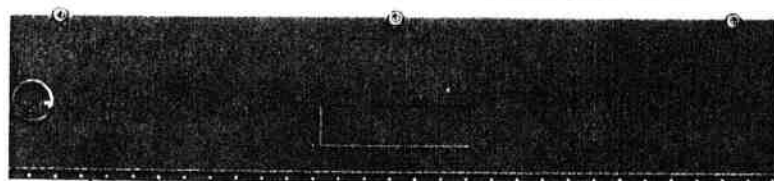
The illustrations show the finished appearance of the rubber moulding, and the construction of the assembled glass moulding.

When ordering glazing for the sign, the $\frac{1}{8}$ inch thick glass should be cut $\frac{5}{8}$ of an inch larger than the dimensions "B" and "E" or "X" and "E" for the glazed signs (see dimension diagrams). The corners should be cut either to a $\frac{7}{8}$ inch radius, or to a 45 degree cutoff of $\frac{7}{16}$ inch on each edge.

GENERAL DESCRIPTION



Front View Semi-Box Hinged Type Sign



Rear View Semi-Box Hinged Type Sign

operators, because of its many improved features, such as: low installation costs; ease and accessibility of installing and changing curtains, rollers and illuminating lamps. It also makes the front glass panel readily accessible for washing and replacing without the necessity of removing the curtain or rollers from the operating mechanism. This sign is all assembled and ready for installation when delivered.

Detailed information on this sign is shown by type No. S-545 and No. S-590.



Front View Semi-Box Sash Type Sign



Rear View Semi-Box Sash Type Sign

The SEMI-BOX — HINGED TYPE SIGN consists of a curtain attached to a pair of steel rollers, and operated by a Utility steel cut gear mechanism which is rigidly mounted to a steel plate. This steel plate forms the inside cover of the sign box compartment and becomes an integral part of the interior body trim. The rest of the sign box compartment and the sign sash is provided by the body builder.

This new type of sign as introduced by the Railway Utility Company has been readily accepted by the car and bus manufacturers and

The SEMI-BOX—SASH TYPE sign was especially designed for the body builder who wishes to include the sign box compartment as a part of the regular body construction, but at the same time eliminate the cost, labor, and necessity of making up and installing the glass sash necessary for the sign, for the sash type sign consists of a sign curtain attached to a pair of steel rollers and operated by a Utility steel cut gear mechanism which is rigidly mounted to a glazed steel sash plate.

The sash plate is of weather proof construction and is ready when delivered to be installed in the opening provided for by the body builder.

Type No. S-582 and No. S-563 show the detailed information on this design of roller sign.

GENERAL DESCRIPTION

The FULL BOX TYPE of sign consists of a curtain attached to a pair of steel rollers which are operated by a Utility steel cut gear mechanism. The operating mechanisms are rigidly mounted in a pressed steel sign box compartment. The steel box entirely encloses the curtain, rollers, and mechanism. With this type of sign the car and bus builder has only to provide a space for the box to fit into, for the sign comes ready for installation as a complete unit.

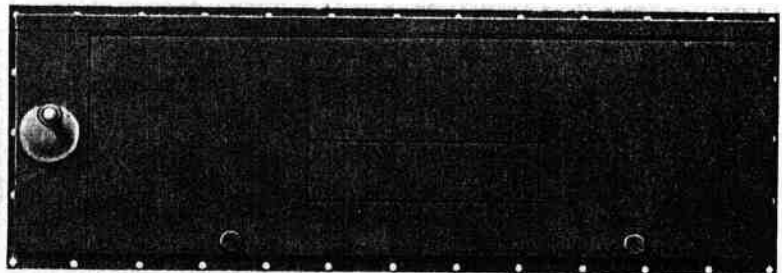
The Utility pressed steel "Box Signs" are made in several designs. For example: — The single and double curtain boxes with a glazed weatherproof front, or sash, for mounting from the outside of the body, represented by types No. S-595 and No. S-605; and the single and double curtain boxes with the front unglazed, for mounting immediately back of a glazed sash which is part of the body, represented by types No. S-610 and No. S-615.

The SIDE SIGNS are of the same general design and construction as the "Full Box" type of sign. They are built to be installed between the side window posts. The side signs are also made in several designs. Those glazed in the front and rear are represented by type No. S-565 and No. S-620. Those unglazed in the front and glazed in the rear are represented by type No. S-597 and No. S-625.

The FRAME TYPE SIGN is manufactured for the car and bus builder who want only to purchase the sign mechanism plate, tail plate, rollers and curtain for installation in the sign box compartment, but at the same time do away with the trouble and additional labor of aligning the plates so that the rollers run true. The "Frame Type" sign consists of a curtain attached to a pair of steel rollers and operated by a Utility steel cut gear mechanism, which is mounted in a rigid pressed steel frame. When delivered, this type of sign is ready to be installed in the sign box compartment provided for in the construction of the body.



Front View Box Type Sign



Rear View Box Type Sign



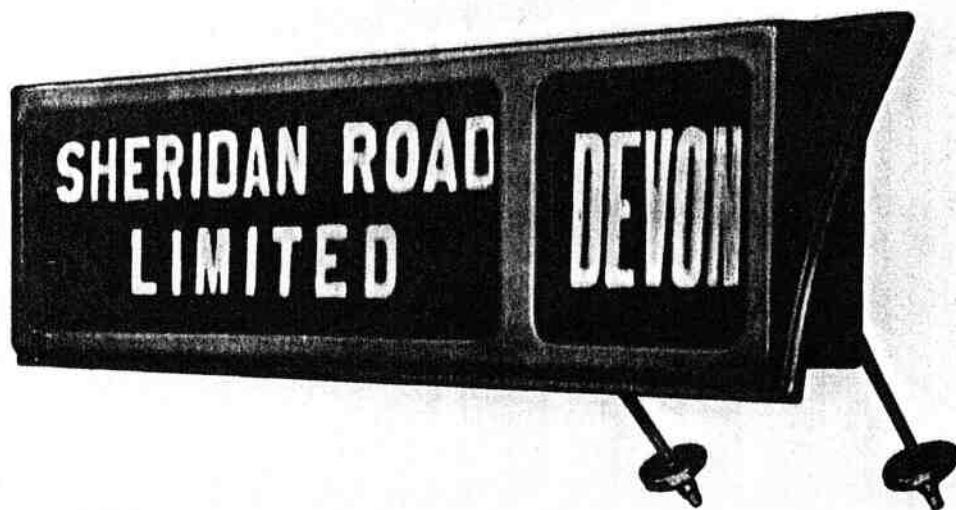
Front View Frame Type Sign



Rear View Frame Type Sign

Detailed information on this type sign is found under the types No. S-600 and No. S-585.

SPECIAL TYPES



Front View Special Type Destination and Route Sign for Double Deck Buses.
No. S-551 LLB



Rear View Special Type Destination and Route Sign for Double Deck Buses.
No. S-551 LLB

SPECIAL TYPES



Front View Special Type Sash Sign No. S-582-614 LB



Rear View Special Type Sash Sign No. S-582-614 LB



Front View Side Sign No. S-625-547 RLR

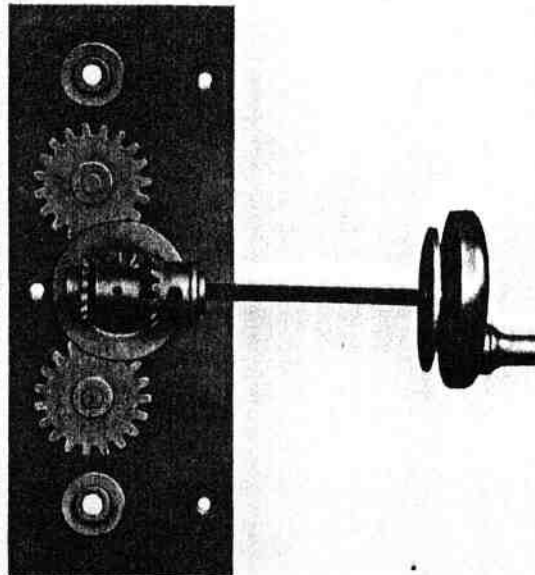


Rear View Side Sign No. S-625-547 RLR

MECHANISM AND TAIL PLATE ASSEMBLY No. S-569



Tail Plate Assembly

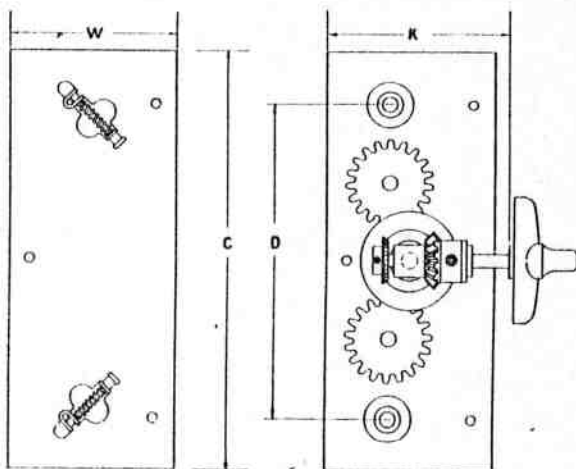


Mechanism Plate Assembly

Shown above is a standard Utility operating mechanism and tail plate assembly No. S-569. The operating mechanism consists of steel-cut gears; bronze bearings; a positive, noiseless, and frictionless locking device; a brushed chromium bell crank; and a steel plate with holes punched in for mounting the mechanism in the sign box compartment. The tail plate consists of a steel plate with holes punched in for mounting, and two spring roller end bearings.

The mechanism and tail plate assemblies are purchased by the car and bus builders who prefer to include the construction of the sign box compartment, the furnishing of the sash front for the sign and the aligning and spacing of the mechanism and tail plate bearings as a part of the regular body construction.

DIMENSION DIAGRAM OF MECHANISM AND TAIL PLATE ASSEMBLY No. S-569



C—Height overall of Plate.

D—Distance between centers of rollers.

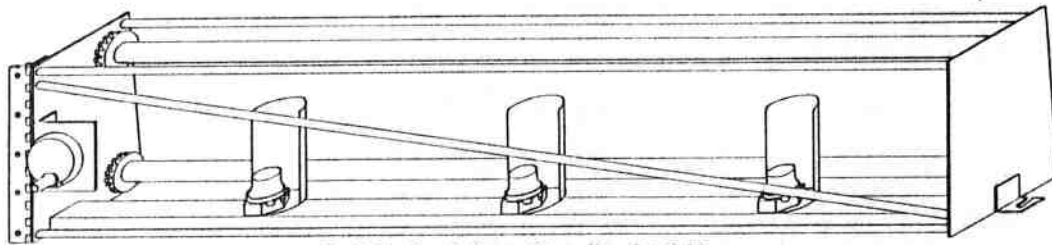
K—Shows depth the body builder is making the box and should be specified.

W—Width of plate.

The dimensions "C" and "W" given in the table below are such that it will be necessary to increase them slightly if more than 25 exposures are to be printed on the sign curtain.

Curtain Printing	D Inches	C Inches	W Inches
2 Inch Type	3½	5¾	2¾
2½ Inch Type	3¾	6¼	3
3 Inch Type	4½	7	3½
4 Inch Type	5½	8	3¾
4½ Inch Type	6	8½	3½
5 Inch Type	6½	9¼	3½
6 Inch Type	7½	10	3½

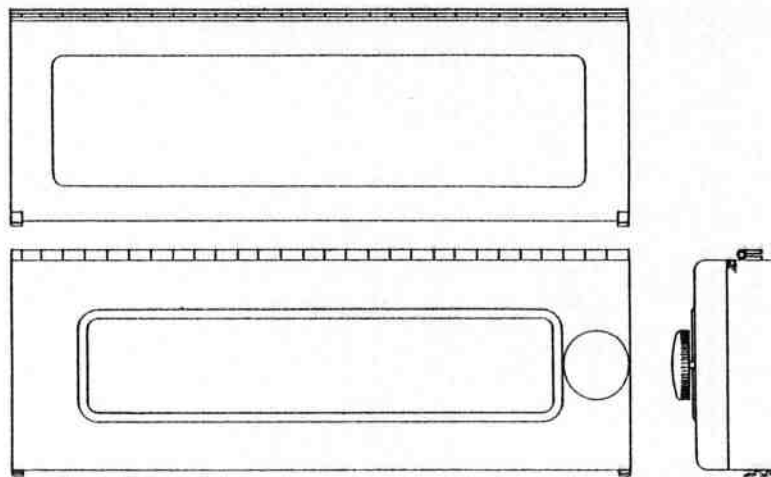
P. C. C. SPECIAL TYPE SIGNS



P. C. C. Front Type Sign No. S-635 LR

The P. C. C. type of sign No. S-635 is similar to the regular frame type of sign except that the two end plates are held together by five seamless tubes welded to the plates instead of a pressed steel frame. The entire frame of the sign can be hinged on either end so as to swing the mechanism plate, rollers, curtain and tail plate clear of the sign box compartment, thus making the glass in front of the sign very accessible for washing and replacing in the case of breakage.

A standard Utility steel-cut gear mechanism is used to operate the sign curtain and spring differential rollers. The mechanism plate can be on either the left or right side of the sign. Three high voltage light sockets and light diffusing screens are furnished, mounted on a two inch pressed steel channel.

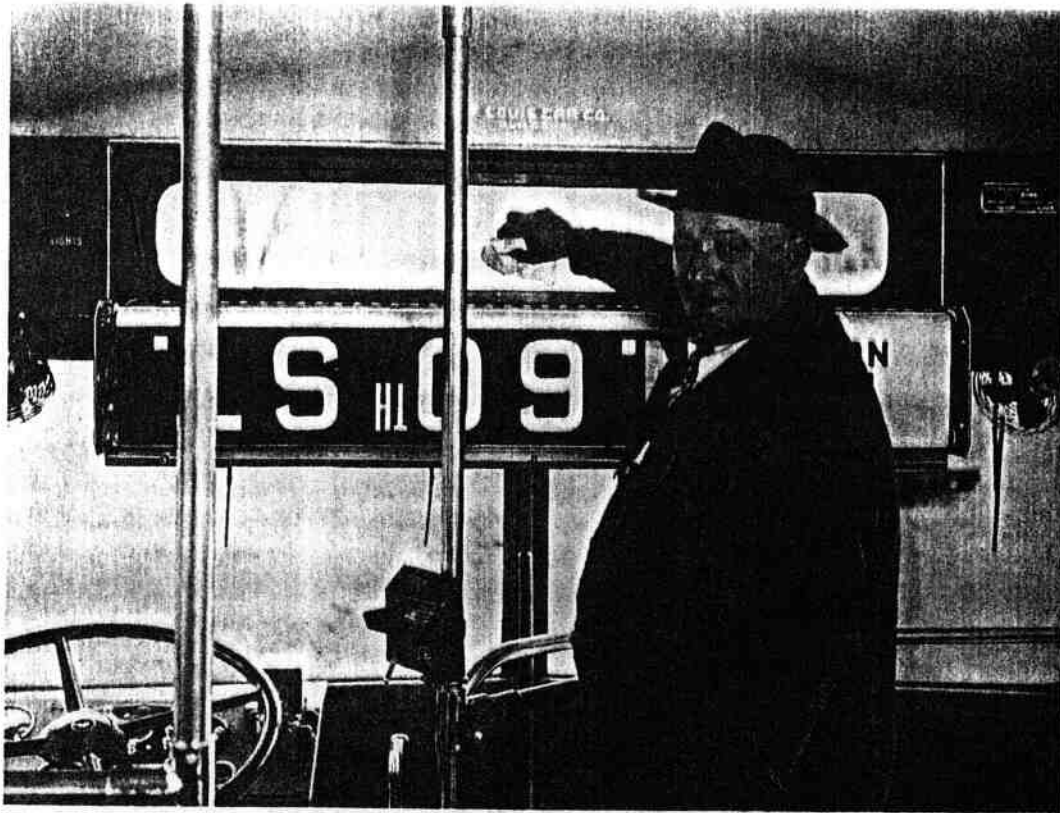


P. C. C. Side Sign No. S-597-611 RR

The P. C. C. Side Sign No. S-597-611 consists of a two section box, the front section being unglazed and the rear section being glazed. The rear section has a radius at the top as well as the bottom, and when the rear section is unhooked from the front section it carries with it a sign curtain, a pair of spring differential rollers, a Utility steel-cut gear mechanism and a tail (or support) plate.

The distinctive feature of this side sign is that the front section of the box has attached to it a continuous hinge across the top for mounting the sign in the car. The bottom corners of the front section are provided with spring steel catches to hold the sign box in place against the window sash. This method of mounting the side sign makes it unnecessary to unhook the two sections of the sign box in order to wash the window sash in front of the sign.

SEMI-BOX HINGED TYPE SIGN



The above picture was inserted to illustrate the many advantages of the Utility Semi-Box Hinged Type of sign. As pictured, the sign is in the open position, showing the great accessibility to the front sash for the purpose of washing the inside of the glass and replacing the glass in the case of breakage. The illustration also shows the ease with which the curtains and rollers may be reached for changing. The illuminating lamps behind the curtain are also very easily changed when the sign is in the open position.

The ease with which this type of sign can be installed in the sign box compartment, built by the body builder, is also apparent, for all that is necessary is to attach the continuous hinge, which is part of the sign cover and furnished by us, to the edge of the sign box compartment.

When closed, the sign is held in position by three strong and positive catches. The catches are of an attractive design and are also marked to show when the catch is in the locked position.

SEMI-BOX HINGED TYPE SIGN No. S-545



Front View Semi-Box Hinged Type Sign No. S-545 LR



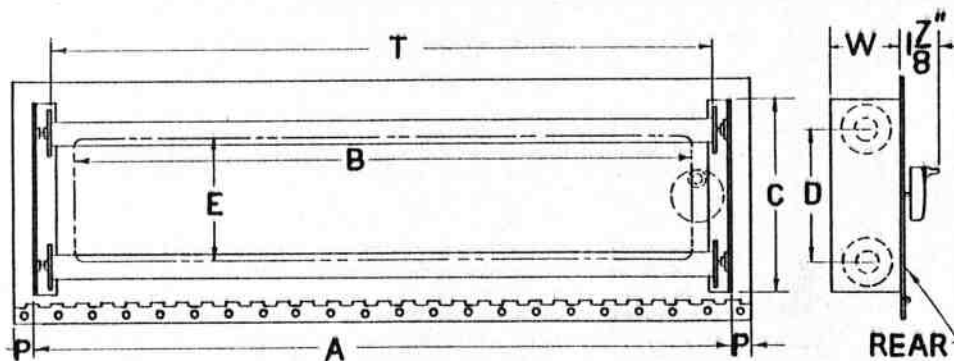
Rear View Semi-Box Hinged Type Sign No. S-545 LR

The standard Utility sign No. S-545 is our semi-box, hinged type sign, with the complete operating mechanism mounted rigidly to a steel plate which forms the inside cover of the sign box compartment and becomes an integral part of the interior body trim. This complete sign assembly is mounted in the space provided by the body builder.

The sign curtain and the spring differential rollers are operated by a standard Utility steel cut gear mechanism. The sign curtains used are made of a high grade of either Holland cloth or washable cloth and are printed by the wood block en-

graving process. For the illumination of the sign either high or low voltage sockets are supplied as desired. Unless specified otherwise, signs having an "A" dimension of 36 inches or less will be provided with two sockets, and signs longer than 36 inches will be provided with three sockets.

DIMENSION DIAGRAM SEMI-BOX HINGED TYPE SIGN No. S-545 LR



- A—Length overall less flanges (to be specified).
- P—Width of flanges (always $\frac{1}{2}$ " unless specified otherwise).
- B—Width of front opening (to be specified).
- C—Height overall less flanges.

- D—Distance between centers of rollers.
- E—Height of front opening.
- T—Distance between roller flanges (equals "A" less 2 inches).
- W—Width of mechanism plate.

The location of the bell-crank can be stated simply by using the following type designation:—For example, the sign pictured above has the type No. S-545 LR. The first letter will either be "R" or "L," depending on whether the bell-crank is to be placed on the right or left side of the sign rollers. The last letter "R" designates that the bell-crank is extending from the back of the sign.

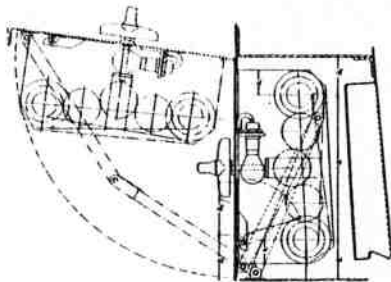
If the bell-crank is to be located inside the sign box, which necessitates a small door being cut in the sign box cover, the marking would be No. S-545 LI.

When the bell-crank is vertically down from the bottom of the sign box, the type designation is No. S-545 LB. This location is not advised for the semi-box type of sign but will be furnished if specified.

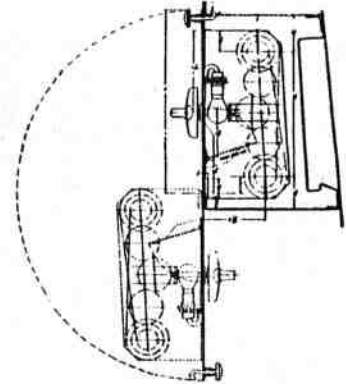
SEMI-BOX HINGED TYPE SIGN No. S-545

The most important and outstanding feature of the Utility semi-box, hinged type of front sign is the assembly of all the essential operating parts mounted as a rigid unit to the inside of the sign box cover, which is provided with a full length continuous hinge. This hinge may be placed at the bottom of the inside cover, which permits an outward and downward swing of the sign box cover with the mechanism attached, and the rollers and curtains in place, to a position clear of the sign box compartment. The continuous hinge can also be put at the top of the inside cover, which will allow the cover, with mechanism, rollers, and curtain all attached to it, to be raised to a position clear of the sign box opening. The cover is held in the raised position by a hinged support. In each case the cover is fastened in the closed position by attractive and positive catches.

By using this construction, it has greatly increased the accessibility to all the sign parts with the minimum of labor. The time required for the renewal of the illuminating lamps and the changing of the rollers and curtains has been decidedly decreased. It also makes the front glass panel readily accessible for washing and replacing, without the necessity of removing or disturbing the curtain or rollers.



Hinged at the Top



Hinged at the Bottom

WHEN ORDERING the Utility standard semi-box type No. S-545 single curtain signs, it is necessary to give complete information on the following items:—Full type designation, which includes the position of the bell-crank; the size of type, and whether it is to be printed with route and destination as illustrated on the preceding page or with just destination; the curtain background desired, which can be white, red, or black; the number of exposures to be printed on the curtain; whether or not the edges of the curtains are to be metal reinforced; the dimensions marked "to be specified" on the dimension diagram and the design of the sign box in which the signs are to be installed; whether the lighting sockets are to be single or double contact, high or low voltage, and whether series or parallel wiring is required.

THE DETAILED DIMENSIONS ARE AS FOLLOWS:

Curtain Printing	D Inches	C Inches	E Inches
2 Inch Type	3½	5⅞	3½
2½ Inch Type	3¾	6¼	3¾
3 Inch Type	4½	7	4¼
4 Inch Type	5½	8	5¼
4½ Inch Type	6	8½	5¾
5 Inch Type	6½	9¼	6½
6 Inch Type	7½	10½	7½

The dimension "C" given in the table is such that it will be necessary to increase it slightly if more than 25 exposures are to be printed on the sign curtain.

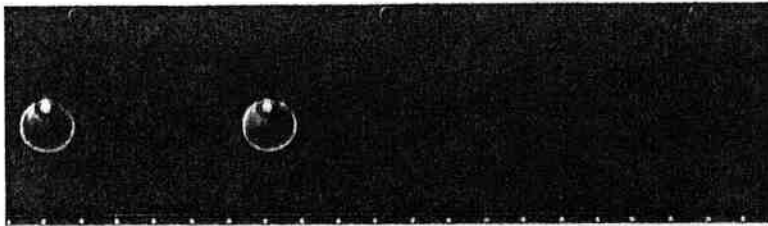
The dimension "W" given in dimension diagram on the preceding page will depend entirely upon the depth of the sign box compartment.

The Utility sign curtain, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently it will not be necessary to carry duplicates in stock.

SEMI-BOX HINGED TYPE SIGN No. S-590



Front View Semi-Box Hinged Type Sign No. S-590 LLR



Rear View Semi-Box Hinged Type Sign No. S-590 LLR

No. S-590 is a standard Utility semi-box hinged type of sign consisting of two curtains attached to two pair of steel rollers, which are operated by two Utility steel cut gear mechanisms. The mechanisms are rigidly mounted to a steel plate which forms the inside cover of the sign box compartment and becomes an integral part of the interior body trim. The complete sign assembly is ready to be mounted in the space provided by the body builder when delivered.

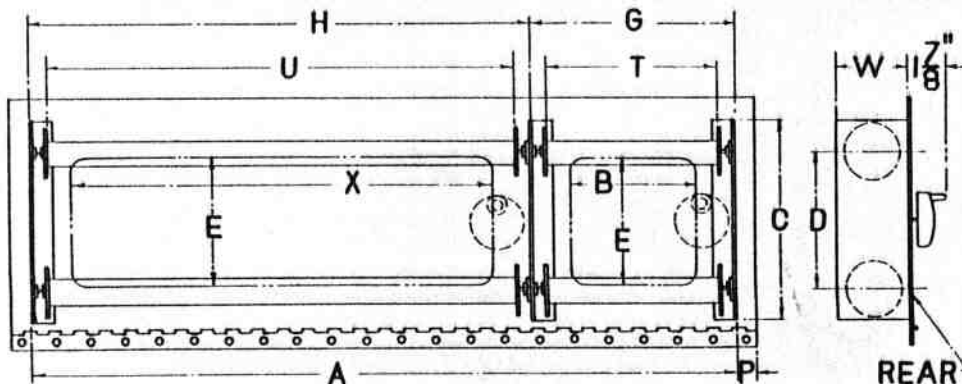
The illumination of the sign can either be high or low voltage, with two sockets being furnished with signs having an "A" dimension of less than 36", and three sockets for signs with an "A" dimension greater than 36".

The location of the bell-crank can be indicated by using the following type designation: — For example the sign shown above is Type S-590 LLR. The first letter may be "R" or "L" and indicates whether the bell-crank is on the right or left of the right hand unit; the second letter ("R" or "L") shows the position of the bell-crank on the left hand unit. The third letter "R" designates that the bell-crank extends horizontally from the rear of the sign.

If the bell-crank is to be located inside of the sign box, which necessitates a small door being cut in the sign box cover, the marking would be Type No. S-590 LLI.

When the bell-crank is vertically down from the bottom of the sign box, the marking would be Type No. S-590 LLB. This location is not advised for the semi-box hinged type sign, but will be furnished if specified.

DIMENSION DIAGRAM SEMI-BOX HINGED TYPE SIGN No. S-590 LLR



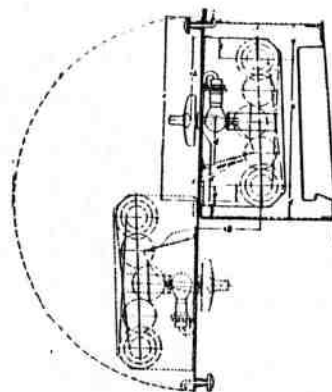
- A—Length overall less flanges (to be specified).
- P—Width of flanges (always $\frac{1}{2}$ " unless otherwise specified).
- B—Width of left front opening (equals "G" less $3\frac{1}{2}$ ").
- X—Width of right front opening (equals "H" less $3\frac{1}{2}$ ").
- C—Height overall less flanges.
- D—Distance between centers of rollers.
- E—Height of front opening.

- G—Distance between left side roller plates (to be specified).
- H—Distance between right side roller plates (to be specified).
- T—Distance between left roller flanges (equal "G" less 2").
- U—Distance between right roller flanges (equal "H" less 2").
- W—Width of mechanism plate.

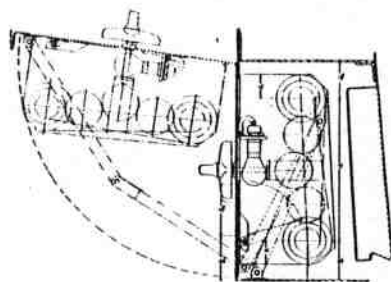
SEMI-BOX HINGED TYPE SIGN No. S-590

The most important and outstanding feature of the Utility semi-box hinged type of front sign is the assembly of all the essential operating parts mounted as a rigid unit to the inside cover of the sign box, which is provided with a full length continuous hinge. This hinge may be placed at the bottom of the inside cover, which permits an outward and downward swing of the sign box cover with the mechanisms attached, and the rollers and curtains in place, to a position clear of the sign box compartment. The continuous hinge can also be put at the top of the inside cover, which will allow the cover, with mechanisms, rollers, and curtains all attached to it, to be raised to a position clear of the sign box compartment. The cover is held in the raised position by a hinged support. In each case, the cover is fastened in the closed position by attractive and positive catches.

By using this construction, it has greatly increased the accessibility to all the sign parts with the minimum of labor. The time required for the renewal of the illuminating lamps and the changing of the rollers and curtains has been decidedly decreased. It also makes the front glass panel readily accessible for washing and replacing, without the necessity of removing or disturbing the rollers or curtains.



Hinged at the Bottom



Hinged at the Top

WHEN ORDERING the Utility standard semi-box type No. S-590 double curtain signs, it is necessary to give complete information of the following items:—Full type designation, which includes the position of the bell-cranks; the size of type wanted on each curtain; the curtain background desired, which can be white, red, or black; the number of exposures to be printed on the curtain; whether the edges of the sign curtains are to be metal reinforced; the dimensions marked "to be specified" on the dimension diagram and the design of the sign box in which the signs are to be installed; and whether the lighting sockets are to be single or double contact, high or low voltage, and whether series or parallel wiring is required.

THE DETAILED DIMENSIONS ARE AS FOLLOWS:

	D Inches	C Inches	E Inches
Curtain Printing			
2 Inch Type	3½	5⅞	3½
2½ Inch Type	4	6¾	3¾
3 Inch Type	4½	7	4¼
4 Inch Type	5½	8	5¼
4½ Inch Type	6	8½	5¾
5 Inch Type	6½	9¼	6½
6 Inch Type	7½	10½	7¾

The "C" dimensions given in the table are such that it will be necessary to increase them slightly if more than 25 exposures are to be printed on the sign curtain.

The dimension "W" given in the dimension diagram on the preceding page will depend entirely on the depth and design of the sign box compartment.

The Utility sign curtain, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently it will not be necessary to carry duplicates in stock.

SEMI-BOX SASH TYPE SIGN

No. S-582



Front View Semi-Box Sash Type Sign No. S-582 LR



Rear View Semi-Box Sash Type Sign No. S-582 LR

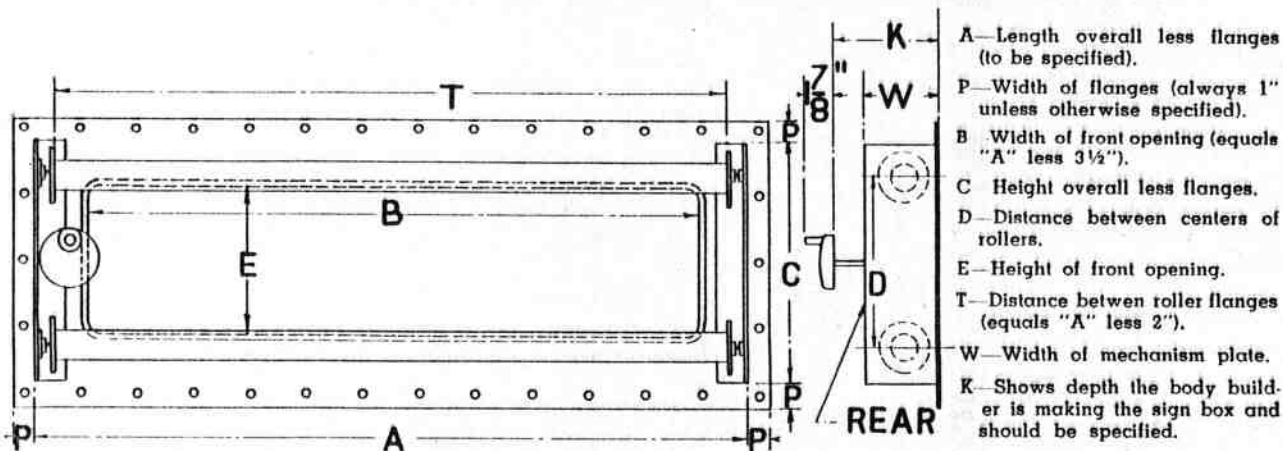
The Utility standard semi-box, sash type sign No. S-582 is a single curtain sign with all the essential operating parts mounted rigidly to a glazed steel sash. The sash completely assembled and being of weatherproof construction is ready, when delivered, to be installed in the opening provided by the body builder.

The signs are operated by a Utility steel cut gear mechanism and equipped with spring differential rollers for the Utility wood block engraved sign curtains. The glass is furnished with the sign, unless specified otherwise, and is held in place by a removable rubber moulding.

The design of the sign is such that the roller, curtain, and glazing can be removed without disturbing the operating mechanism, and without the use of tools.

Since the sign box compartment is constructed by the body builder, the illuminating lights are omitted unless ordered.

DIMENSION DIAGRAM—SEMI-BOX, SASH TYPE SIGN No. S-582 LR



The location of the bell-crank can be stated simply by using the following type designation:—For example, the sign pictured above is type No. S-582 LR. The first letter will either be "R" or "L" depending on whether the bell-crank is to be placed on the right or left side of the sign rollers. The last letter "R" designates that the bell-crank is extending from the rear of the sign.

If the bell-crank extended vertically down from the bottom of the box, the marking would be No. S-582 LB.

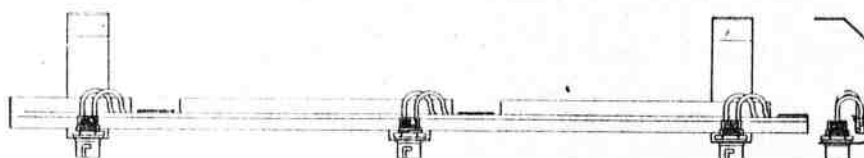
When the operating handles are to be located inside of the box made by the body builder, which necessitates the raising of the rear door in order to operate the sign, the marking would be No. S-582 LI.

SEMI-BOX SASH TYPE SIGN

No. S-582

This type of sign was especially designed for the body builder who wishes to include the sign box compartment as a part of the regular body construction but at the same time eliminate the cost, labor, and necessity of making up and installing a glass sash necessary for the sign.

WHEN ORDERING the Utility standard type No. S-582 single curtain sign, it is necessary to give complete information on the following items:—Full type designation, which indicates the position of the operating bell-crank: The size of type desired, and whether it is to be printed with route and destination as illustrated on catalog sheet No. 21 or with just destination: The curtain background desired, which can be either white, red, or black: The number of exposures to be printed on the curtain: Whether or not the edges of the sign curtains are to be metal reinforced: And all the dimensions on the preceding page marked "to be specified."



Lighting Sockets and Mounting Frame

Light sockets and socket mounting frames, as shown, can be furnished if desired. When ordering, state number of sockets wanted per sign, whether sockets are to be single or double contact, high or low voltage, and whether series or parallel wiring is required.

For glazing the sign, the $\frac{1}{8}$ inch thick glass should be $\frac{3}{8}$ inch larger than the dimension of "B" and "E" or "X" and "E" of a glazed sign. It is also necessary to cut the corners to a $\frac{3}{8}$ inch radius, or to a 45 degree cutoff of $\frac{7}{16}$ inch on each edge.

The dimensions "C" and "W" given in the table below are such that it will be necessary to increase them slightly if more than 25 exposures are to be printed on the sign.

	D	C	E
Curtain Printing	Inches	Inches	Inches
2 Inch Type	3½	5⅞	3½
2½ Inch Type	4	6¾	3¾
3 Inch Type	4½	7	4¼
4 Inch Type	5½	8	5¼
4½ Inch Type	6	8½	5¾
5 Inch Type	6½	9¼	6½
6 Inch Type	7½	10½	7¾

Dimension "W" varies as follows:

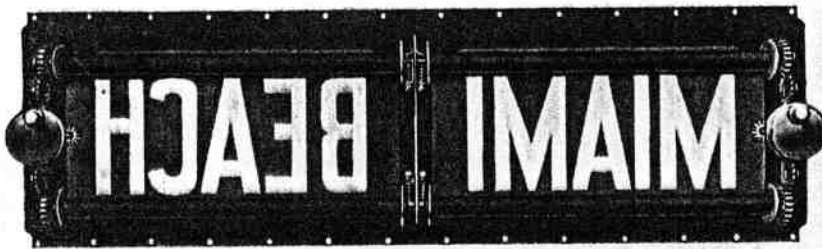
	Size	Dimension
Type Sign	Printing	"W" Inches
	Inches	
S-582 RR or LR.....	2½	3
S-582 RR or LR.....	3	3¼
S-582 RR or LR.....	4—6	3½

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently their use would not in any way disturb your present standards, and it would not be necessary to carry duplicates in stock, insofar as these parts are concerned.

SEMI-BOX SASH TYPE SIGN No. S-563



Front View Semi-Box Sash Type Sign No. S-563 RLR



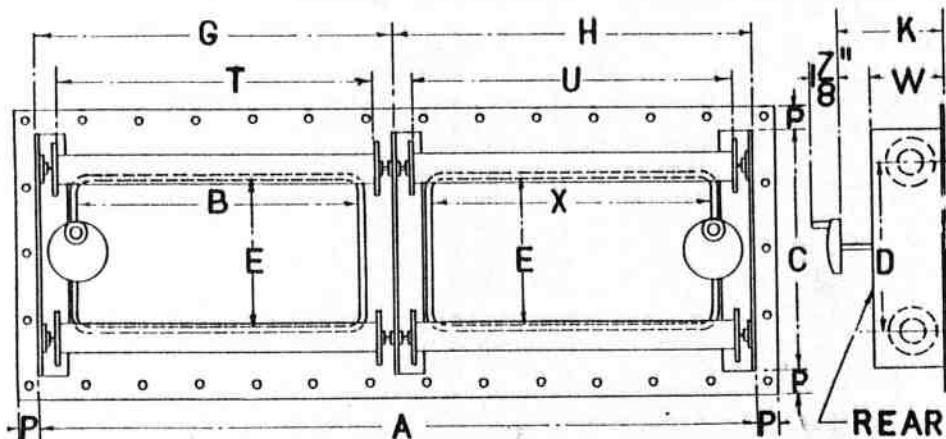
Rear View Semi-Box Sash Type Sign No. S-563 RLR

The semi-box sash type sign No. S-563 is a Utility standard sign consisting of two curtains attached to two pairs of independently operated differential steel rollers. The rollers are operated by two Utility steel cut gear mechanisms which are rigidly mounted to a steel sash plate. The sign is glazed, unless otherwise specified, and being completely assembled and of weatherproof construction, is ready when delivered to be installed in the opening provided by the body builder.

The design of the sign is such that the rollers, curtains and glazing can be removed without disturbing the operating mechanism and without the use of tools.

Since the sign compartment is constructed by the body builder, the illuminating lights are omitted unless ordered.

DIMENSION DIAGRAM—SEMI-BOX SASH TYPE SIGN No. S-563 RLR



- A—Length overall less flanges (to be specified).
- P—Width of flanges (always 1" unless otherwise specified).
- B—Width of left front opening (to be specified).
- X—Width of right front opening (to be specified).
- C—Height overall less flanges.
- D—Distance between centers of rollers.
- E—Height of front openings.
- G—Distance between left side roller plates (equals "B" plus 3½").

- H—Distance between right side roller plates (equals "X" plus 3½").
- T—Distance between left roller flanges (equals "G" less 2").
- U—Distance between right roller flanges (equals "H" less 2").
- W—Width of the mechanism plate.
- K—Shows depth the body builder is making the sign box and should be specified.

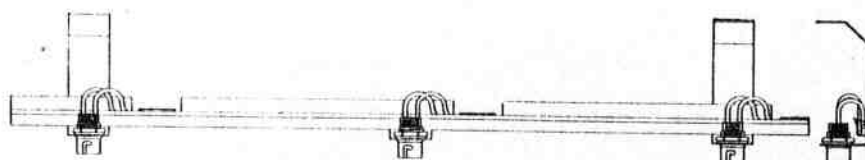
SEMI-BOX SASH TYPE SIGN

No. S-563

The location of the bell-cranks can be indicated by using the following type designation:—For example, take the sign shown on the preceding page, which is the type No. S-563 RLR. The first letter may be "R" or "L" and indicates whether the bell-crank is on the right or left side of the right hand unit; the second letter ("R" or "L") shows the position of the bell-crank on the left hand unit; the third letter "R" designates that the bell-crank extends horizontally from the rear of the box.

If the bell-crank extended vertically down from the bottom of the box, the marking would be No. S-563 RLB.

When the operating handles are to be located inside of the box made by body builder, which necessitates the raising of the rear door in order to operate the sign, the marking would be No. S-563 RLI.



Lighting Sockets and Mounting Frame

WHEN ORDERING the Utility standard type No. S-563 double curtain signs it is necessary to give complete information on the following items:—Full type and number designation, which indicates the position of the operating bell-cranks: The size

of type desired on each curtain: The curtain background wanted, which can be either white, red, or black: The number of exposures to be printed on the curtain: Whether or not the edges of the sign curtains are to be metal reinforced: And all the dimensions on the preceding page marked "to be specified."

Light sockets and socket mounting frames, as shown, can be furnished if desired. When ordering, state number of sockets wanted per sign, whether sockets are to be single or double contact, high or low voltage, and whether series or parallel wiring is required.

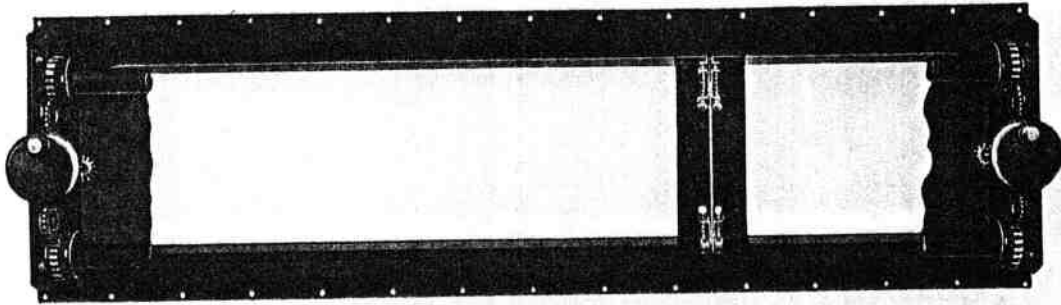
For glazing the sign, the $\frac{1}{8}$ inch thick glass should be cut $\frac{3}{8}$ inch larger than the dimension of "B" and "E" or "X" and "E"; also it is necessary to cut the corners to a $\frac{7}{8}$ inch radius, or to a 45 degree cutoff of $\frac{7}{16}$ inch on each edge.

The dimensions "C" and "W" given in the table below are such that it will be necessary to increase them slightly if more than 25 exposures are to be printed on the sign curtain.

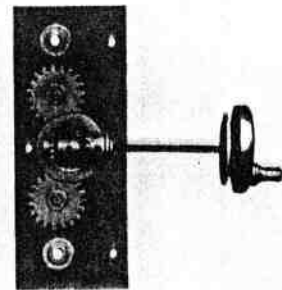
Curtain Printing	D	C	E	Dimension "W" varies as follows:	
	Inches	Inches	Inches	Type Sign	Size Printing Inches
2 Inch Type	3½	5½	3½	S-563RRR or RLR	2½
2½ Inch Type	4	6½	3¾	S-563RRR or RLR	3
3 Inch Type	4½	7	4¼	S-563RRR or RLR	4—6
4 Inch Type	5½	8	5¼	S-563RRB or RLB	2½—6
4½ Inch Type	6	8½	5¾		
5 Inch Type	6½	9¼	6½		
6 Inch Type	7½	10½	7¾		
					Dimension "W" Inches
					3
					3¾
					3½
					5

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently their use would not in any way disturb your present standards, and it would not be necessary to carry duplicates in stock, insofar as these parts are concerned.

SPECIAL ASSEMBLY No. S-630



Double Tail
Plate



Mechanism Plate

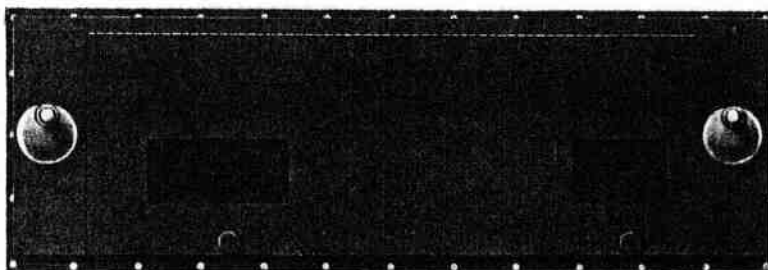
The illustrations on this page show a special assembly No. S-630 of a Utility semi-box, sash type sign, a mechanism plate, and a double tail (or support) plate. The construction of the sign is such that it can be used as a single curtain sign, or upon adding a mechanism plate and a double tail plate the sign can be converted into a double curtain sign.

The change is made, as can be seen in the illustration above, by bolting the mechanism plates to the two end plates which are welded to the front sash plate instead of using the mechanism plates as the end plates and welding them to the front sash plate. The latter construction is like that shown on the two preceding pages, which are not adaptable to changes as No. S-630. The double tail plate is held in place by the rubber moulding steel frame.

This type of sign is adaptable especially to the body builder who builds cars and buses for stock, or purchases sign equipment in large quantities to gain the benefit of the lower production costs, for the body builder with little trouble or labor can give the purchaser of his cars or buses a single or double curtain sign.

This design of sign can be adapted to any of the other types of signs shown in this catalog. More detailed information will be sent upon request.

SPECIAL FEATURE



The illustration above shows the Utility double curtain box type sign equipped with two colored glass peek holes instead of the regular metal, hinged or sliding, peek hole doors. The advantages of using the colored glass peek holes are that it does away with another moving part; the car and bus operators can see at a glance that the correct reading is showing; it shows the operator that the sign lights have been turned on; it keeps the sign door free from dirt caused by operating the peek hole doors; and it adds a bit of color to the interior body trim of the vehicle.

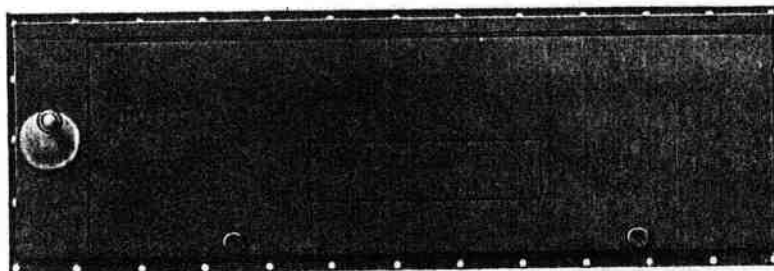
The glass used is a dark shade of the color desired but is clear and transparent so that the readings on the sign curtain can be read through the glass equally well during the day or night and the light from the sign box compartment during night operation will not glare through the glass peek hole and bother the operator.

The colored glass type of peek hole can be of almost any color desired by the purchaser so as to blend in with the rest of the interior body trim and will be installed in place of the metal peek hole on any of the Utility Roller Signs when specified.

BOX TYPE SIGN No. S-595



Front View Box Type Sign No. S-595 LR



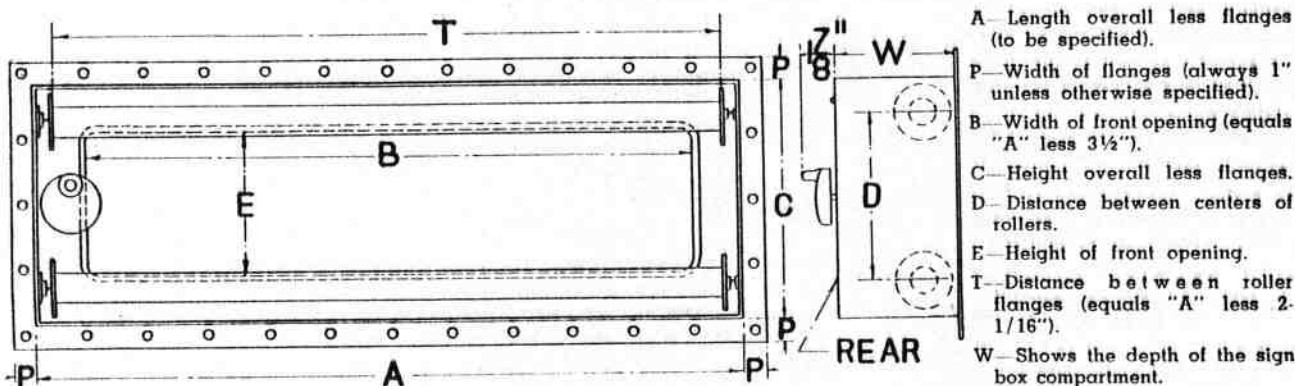
Rear View Box Type Sign No. S-595 LR

The Utility sign No. S-595 is a standard single curtain box type sign. This sign consists of a pressed steel sign box compartment which entirely encloses a curtain, a pair of spring differential rollers, the operating mechanism plate, and the tail (or support) plate. The operating mechanism is made up of Utility steel cut gears and is mounted rigidly within the box.

Important features of the No. S-595 box sign are: — The glazing is installed in the sign by a special rubber moulding which is easily installed and removed without the use of tools of any sort; the sign curtains are of a high grade of either Holland cloth or washable cloth and printed by the wood block engraving process; and the ability to remove the rollers and curtain without disturbing the operating mechanism or the use of tools.

The illuminating lamp sockets that are supplied with the sign can be either high or low voltage, as specified. Signs having an "A" dimension of 36" or less will be supplied with two sockets; signs larger than 36" will be provided with three sockets.

DIMENSION DIAGRAM—BOX TYPE SIGN No. S-595 LR



The location of the bell-crank can be stated simply by using the following type designation:— For example, the sign pictured above is type No. S-595 LR. The first letter will either be "R" or "L" depending on whether the bell-crank is to be placed on the right or left side of the sign rollers. The last letter "R" designates that the bell-crank is extending from the rear of the sign.

If the bell-crank extended vertically down from the bottom of the box, the marking would be No. S-595 LB.

When the operating handles are to be located inside of the box, which necessitates the raising of the rear door in order to operate the sign, the marking would be No. S-595 LI.

BOX TYPE SIGN

No. S-595

The Utility sign No. S-595 is a complete sign box compartment having a flange around the outer edge. This makes it possible for the body builder to install the sign box compartment, and a waterproof sign sash in the space that has been provided for the sign in one operation. No other operations are necessary since the sign is delivered completely assembled. The back of the box is provided with a large door attached by a continuous hinge, for accessibility in installing and changing the illuminating lamps, and in changing the curtain and rollers. The door is also made with a peek hole in it for seeing the curtain when operating the sign.



Box Type Sign No. S-595 LR with rear door in raised position

The illustration on this page gives a view of the rear of the sign box compartment with the rear door in the raised position. This shows the accessibility to the curtain and rollers and the location of the light sockets and peek hole.

For glazing the sign, the $\frac{1}{8}$ inch thick glass should be $\frac{3}{8}$ inch larger than the dimension of "B" and "E" or "X" and "E" of the glazed signs. It is also necessary to cut the corners to a $\frac{3}{8}$ inch radius, or to a 45 degree cutoff of $\frac{7}{16}$ inch on each edge.

WHEN ORDERING the Utility standard type No. S-595 single curtain sign, it is necessary to give complete information on the following items:—Full type designation which includes the position of the operating bell-crank: The size of the type desired, and

whether it is to be printed with route and destination as illustrated on catalog sheet No. 21 and 35 or with just destination: The curtain background desired, which can be either white, red, or black: The number of exposures to be printed on the curtain: Whether or not the edges of the sign curtains are to be metal reinforced: and all the dimensions on the preceding page marked "to be specified."

The dimensions "C" and "W" given in the table below are such that it will be necessary to increase them slightly if more than 25 exposures are to be printed on the sign.

	D	C	E
Curtain Printing	Inches	Inches	Inches
2 Inch Type	3½	5½	3½
2½ Inch Type	3¾	6¼	3¾
3 Inch Type	4½	7	4¼
4 Inch Type	5½	8	5¼
4½ Inch Type	6	8½	5¾
5 Inch Type	6½	9¼	6½
6 Inch Type	7½	10½	7½

Dimension "W" varies as follows:

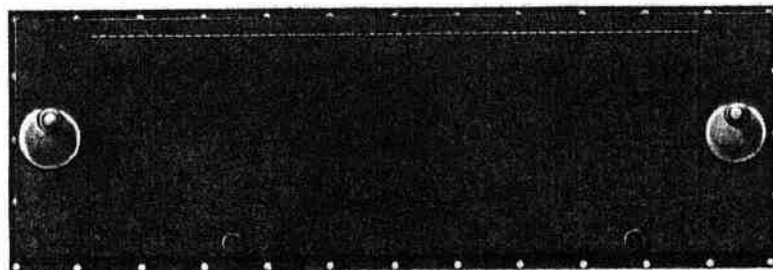
	Size	
Type Sign	Printing	Dimension
	Inches	"W" Inches
S-595 RR or LR.....	2—3	3½
S-595 RR or LR.....	4—6	4½

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently it will not be necessary to carry duplicates in stock.

BOX TYPE SIGN No. S-605



Front View Box Type Sign No. S-605 RLR



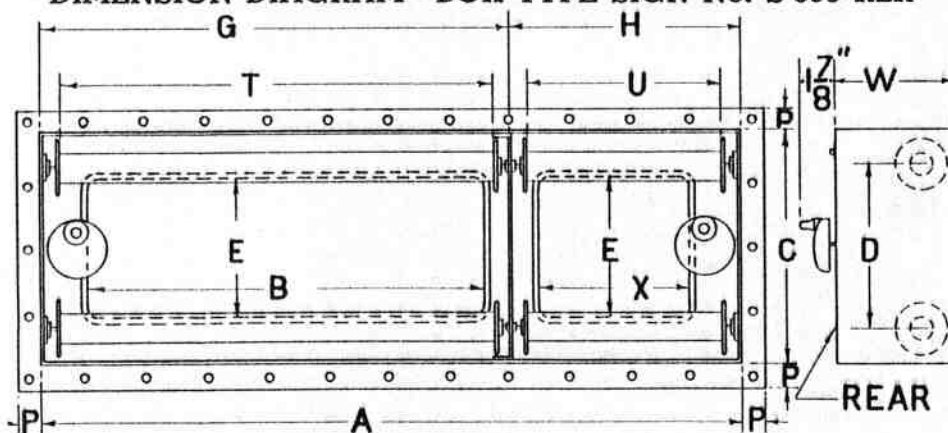
Rear View Box Type Sign No. S-605 RLR

No. S-605 is the Utility standard double curtain glazed box type sign. The sign consists of a pressed steel sign box which entirely encloses two curtains attached to two pairs of spring differential rollers operated by two Utility steel cut gear mechanisms, and also a double tail (or support) plate. The glass for the glazing will be furnished with the sign unless otherwise specified.

Features worth noting are: That the glazing is installed in the sign by a special rubber moulding which is easily installed or removed without the use of tools of any sort; that the sign curtains are of a high grade of either Holland cloth or washable cloth, and are printed by the wood block engraving process; that the sign is equipped with a positive, quiet, and frictionless locking device; and the ability to remove the rollers and curtains without disturbing the operating mechanism, or the use of tools.

The illuminating lamp sockets that are supplied with the sign can be either high or low voltage as specified. Signs having an "A" dimension of 36 inches or less will be supplied with two sockets, and signs longer than 36 inches will be provided with three sockets.

DIMENSION DIAGRAM—BOX TYPE SIGN No. S-605 RLR



- A—Length overall less flanges (to be specified).
P—Width of flanges (always 1" unless otherwise specified).
B—Width of left front opening (to be specified).
X—Width of right front opening (to be specified).
C—Height overall less flanges.
D—Distance between centers of rollers.
E—Height of front opening.
W—Shows the depth of the sign box compartment.

- G—Distance between left side roller plates (equals "B" plus 3 1/2").
H—Distance between right side roller plates (equals "X" plus 3 1/2").
T—Distance between left roller flanges (equals "G" less 2 1/16").
U—Distance between right roller flanges (equals "H" less 2 1/16").

The location of the bell-cranks can be indicated by using the following type designation: — For example take the sign shown above which is the type No. S-605 RLR. The first letter may be "R" or "L" and indicates whether the bell-crank is on the right or left side of the right hand unit; the second letter ("R" or "L") shows the position of the bell-crank on the left hand unit; the third letter "R" designates that the bell-crank extends horizontally from the rear of the box.

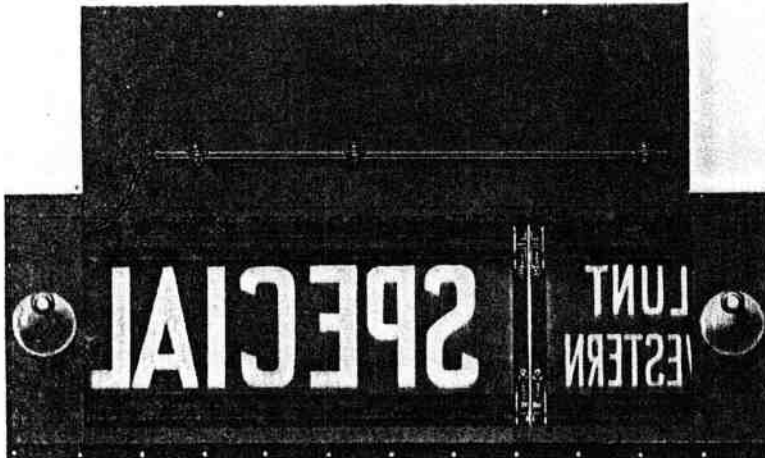
If the bell-crank extended vertically down from the bottom of the box, the marking would be No. S-605 RLB.

When the operating handles are to be located inside of the box, which necessitates the raising of the rear door in order to operate the sign, the marking would be No. S-605 RLI.

BOX TYPE SIGN No. S-605

The Utility sign No. S-605 is delivered completely assembled and supplied with a flange around the outer edge of the box, which makes it possible for the body builder to install in the space that has been provided for the sign, the complete sign box compartment and a weatherproof sign sash in one operation.

The back of the box is provided with a large door attached by a continuous hinge, for accessibility in changing the curtains, rollers and the illuminating lamps. The door is also provided with two peek holes for seeing the curtain while operating the sign.



Box Type Sign No. S-605 RLR with Rear Door in Raised Position

The illustration on this page gives a view of the rear of the sign box compartment with the rear door in the raised position. This shows the accessibility of the curtains and rollers and the location of the light sockets and the peek holes.

For glazing the sign, the $\frac{1}{8}$ inch thick glass should be $\frac{1}{8}$ inch larger than the dimensions of "B" and "E" or "X" and "E" of the glazed signs. It is also necessary to cut the corners to a $\frac{7}{16}$ inch radius, or to a 45 degree cutoff of $\frac{7}{16}$ inch on each edge.

WHEN ORDERING the Utility standard type No. S-605 double curtain signs, it is necessary to give complete information on the following items:—Full type designation, which indicates the position of the bell-cranks; the size of type desired on each curtain; the back-

ground wanted, which can be either white, red or black; the number of exposures to be printed on the curtain; whether or not the edges of the sign curtain are to be metal reinforced; the dimensions on the preceding page marked "to be specified"; and whether the lighting sockets are to be single or double contact, high or low voltage, and whether series or parallel wiring is required.

The dimensions "C" and "W" given in the table below are such that it will be necessary to increase them slightly if more than 25 exposures are to be printed on the sign.

	D	C	E
Curtain Printing	Inches	Inches	Inches
2 Inch Type	3½	5½	3½
2½ Inch Type	3¾	6¼	3¾
3 Inch Type	4½	7	4¼
4 Inch Type	5½	8	5¼
4½ Inch Type	6	8½	5¾
5 Inch Type	6½	9¼	6½
6 Inch Type	7½	10½	7½

Dimension "W" varies as follows:

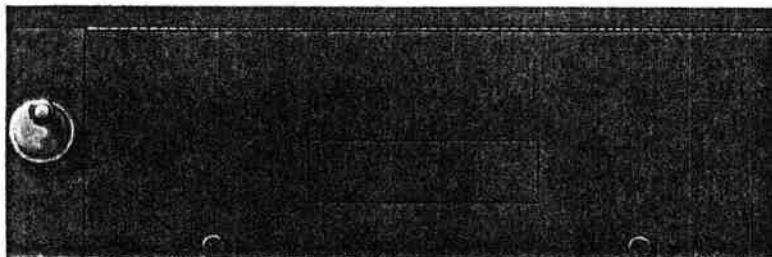
Type Sign	Size	Dimension "W" Inches
	Printing Inches	
S-605 RRR or RLR.....	2—3	3½
S-605 RRR or RLR.....	4—6	4½

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently it will not be necessary to carry duplicates in stock.

BOX TYPE SIGN No. S-610



Front View Box Type Sign No. S-610 LR



Rear View Box Type Sign No. S-610 LR

Box type No. S-610 is a standard single curtain Utility sign. It is an unglazed pressed steel box which entirely encloses the curtain, spring differential rollers, operating mechanism, and the tail (or support) plate. The operating mechanism is made up of Utility steel cut gears heavily cadmium plated and is mounted rigidly within the box.

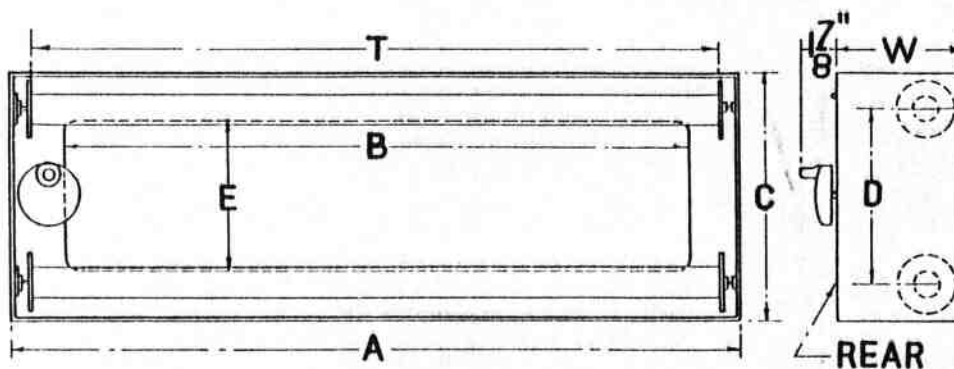
The sign curtains are made of a high grade of either Holland cloth or washable cloth and printed by the wood block engraving process.

The construction of the sign is such that it is unnecessary when installing or changing the curtain and rollers to disturb the operating mechanism, or to use tools.

The sign is also equipped with a locking device that is positive, noiseless, frictionless and easy to operate.

The illuminating lamp sockets that are supplied with the sign can either be high or low voltage as specified. Signs having an "A" dimension of 36 inches or less will be supplied with two sockets; signs longer than 36 inches will be provided with three sockets.

DIMENSION DIAGRAM—BOX TYPE SIGN No. S-610 LR



A—Length overall (to be specified).

B—Width of front opening (equals "A" less $3\frac{1}{2}$ ").

C—Height overall.

D—Distance between centers of rollers.

E—Height of front opening.

T—Distance between roller flanges (equals "A" less $2\frac{1}{16}$ ").

W—Shows the depth of the sign box compartment.

BOX TYPE SIGN

No. S-610

The location of the bell-crank can be stated simply by using the following type designation:—For example, the sign pictured on the preceding page is type No. S-610 LR. The first letter will either be "R" or "L" depending on whether the bell crank is to be placed on the right or left side of the sign rollers. The last letter "R" designates that the bell-crank is extending horizontally from the rear of the sign.

If the bell-crank extended vertically down from the bottom of the box, the marking would be No. S-610 LB.

When the operating handle is to be located inside of the box, which necessitates the raising of the rear door in order to operate the sign, the marking would be No. S-610 LI.

The Utility sign No. S-610 being unglazed means that the sign must be installed immediately behind a sash provided for by the body builder in the regular body construction. As the sign is delivered completely assembled, the sign box compartment can be installed in the space provided by the body builder in one operation.

The back of the box is provided with a large door attached by a continuous hinge, for changing the curtain, rollers and illuminating lamps. The door is also provided with a peek hole for seeing the curtain when operating the sign.

The rear door of the sign box is shown in the raised position in the illustration on catalog sheet No. 32. The illustration also shows the accessibility of the curtain and rollers, and the location of the peek hole and the illuminating lamps.

WHEN ORDERING the Utility standard type No. S-610 single curtain sign, it is necessary to give complete information on the following items:—Full type designation which includes the position of the operating bell-crank; the size of the type desired, and whether it is to be printed with route and destination as illustrated on the preceding page, or with just destination; the curtain background desired, which can be white, red, or black; the number of exposures to be printed on the curtain; whether or not the edges of the sign curtain are to be metal reinforced; and all the dimensions on the preceding page marked "to be specified."

The dimensions "C" and "W" given in the table below are such that it will be necessary to increase them slightly if more than 25 exposures are to be printed on the sign curtain.

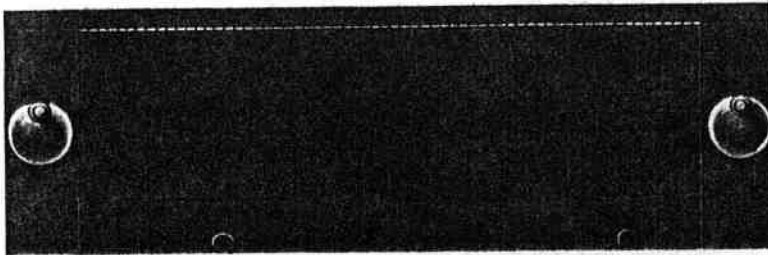
Curtain Printing	D Inches	C Inches	E Inches	Dimension "W" varies as follows:		
2 Inch Type	3½	5⅞	3½	Type Sign	Size Printing	Dimension
2½ Inch Type	3⅞	6¼	3¾		Inches	"W" Inches
3 Inch Type	4½	7	4¼			
4 Inch Type	5½	8	5¼			
4½ Inch Type	6	8½	5¾			
5 Inch Type	6½	9¼	6½			
6 Inch Type	7½	10½	7½			
				S-610 RR or LR	2—3	3½
				S-610 RR or LR	4—6	4½

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently it will not be necessary to carry duplicates in stock.

BOX TYPE SIGN No. S-615



Front View Box Type Sign No. S-615 RLR



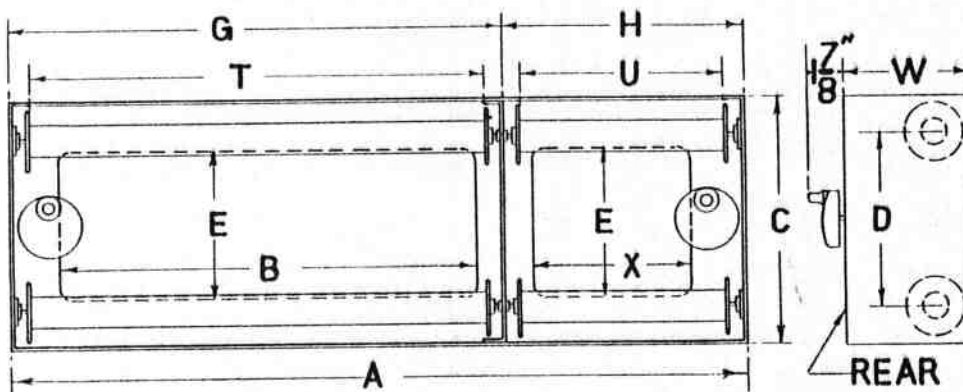
Rear View Box Type Sign No. S-615 RLR

The standard No. S-615 is a double curtain Utility unglazed box type sign. This sign consists of two curtains, two pair of spring differential rollers, two operating mechanisms, and a double tail (or support) plate all enclosed in a well constructed pressed steel sign box compartment. Utility steel cut gears are used in making up the two operating mechanisms, which are rigidly mounted within the box.

The use of sign curtains made of a high grade of either Holland cloth or washable cloth, printed by the wood block engraving process; the ability to install and change the curtains and rollers and the illuminating lamps without disturbing the operating mechanism or the use of tools; and the provision of a positive, noiseless and frictionless locking device are all important features of the No. S-615 sign.

The illuminating lamp sockets that are supplied with the sign can be either high or low voltage as specified. Signs having an "A" dimension of 36 inches or less will be supplied with two sockets; signs longer than 36 inches will be provided with three sockets.

DIMENSION DIAGRAM—BOX TYPE SIGN No. S-615 RLR



- A—Length overall (to be specified).
- B—Width of left front opening (to be specified).
- X—Width of right front opening (to be specified).
- C—Height overall.
- D—Distance between centers of rollers.
- E—Height of front opening.
- W—Shows the depth of the sign box compartment.

- G—Distance between left side roller plates (equals "B" plus $3\frac{1}{2}$ ").
- H—Distance between right side roller plates (equals "X" plus $3\frac{1}{2}$ ").
- T—Distance between left roller flanges (equals "G" less $2\frac{1}{16}$ ").
- U—Distance between right roller flanges (equals "H" less $2\frac{1}{16}$ ").

BOX TYPE SIGN

No. S-615

The location of the bell-cranks can be indicated clearly by using the following type designation:—For example, take the sign shown on the preceding page which is of the type No. S-615 RLR. The first letter may be "R" or "L" and indicates whether the bell-crank is on the right or left side of the right hand unit; the second letter ("R" or "L") shows the position of the bell-crank on the left hand unit; the third letter "R" designates that the bell-crank extends horizontally from the rear of the box.

If the bell-crank extended vertically down from the bottom of the box, the marking would be No. S-615 RLB.

When the operating handles are to be located inside of the box, which necessitates the raising of the rear door in order to operate the sign, the marking would be No. S-615 RLI.

The Utility sign No. S-615 being unglazed makes it necessary to install the sign box compartment immediately behind a sash that the body builder has provided for the sign in the regular body construction. As the sign is delivered completely assembled, the sign box compartment can be installed in the space provided by the body builder in one operation.

The back of the box is provided with a large door attached by a continuous hinge for accessibility in changing the curtains, rollers and illuminating lamps. The door is also provided with two peek holes for seeing the curtain when operating the signs. The illustration on catalog sheet No. 34 pictures the door in the raised position showing the accessibility of the curtains and rollers, and the location of the light sockets and peek holes.

WHEN ORDERING the Utility standard type No. S-615 double curtain signs, it is necessary to give complete information on the following items:—Full type designation, which includes the position of the bell cranks; the size of type desired on each curtain; the background wanted, which can be white, red or black; the number of exposures to be printed on the sign curtain; whether or not the edges of the sign curtains are to be metal reinforced; the dimensions on the preceding page marked "to be specified"; and whether the lighting sockets are to be single or double contact, high or low voltage, and whether series or parallel wiring is required.

The dimensions "C" and "W" given in the table below are such that it will be necessary to increase them slightly if more than 25 exposures are to be printed on the sign curtain.

Curtain Printing	D	C	E	Dimension "W" varies as follows:		
	Inches	Inches	Inches	Type Sign	Size Printing Inches	Dimension "W" Inches
2 Inch Type	3½	5⅞	3½	S-615 RRR or RLR	2—3	3½
2½ Inch Type	3⅞	6¼	3¾			
3 Inch Type	4½	7	4¼			
4 Inch Type	5½	8	5¼			
4½ Inch Type	6	8½	5¾			
5 Inch Type	6½	9¼	6½			
6 Inch Type	7½	10½	7½	S-615 RRR or RLR	4—6	4½

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently it will not be necessary to carry duplicates in stock.

SIDE SIGN No. S-565



Front View Side Sign No. S-565 LR



Rear View Side Sign No. S-565 LR

No. S-565 is a standard Utility single curtain side sign. The sign consists of a two section box glazed front and rear, a sign curtain, a pair of steel rollers, a Utility steel cut gear mechanism, and a tail (or support) plate. The front of the box is fastened permanently, between the posts of the window nearest the entrance door of the car or bus. The rear section is hooked to the top of the front section and fastened at the bottom by screws.

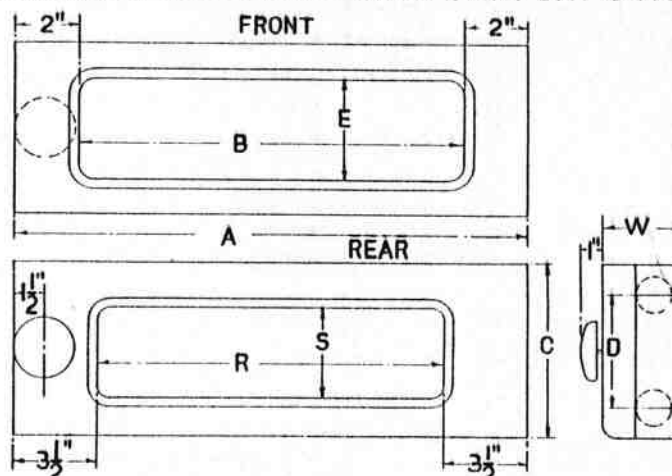
When the rear section is swung clear, it carries with it the curtain, rollers, operating mechanism, and tail plate. This arrangement makes it easy to get in and clean the rear of the sash and for changing the curtain and rollers.

The glazing in the sign is installed by a special weatherproof rubber moulding of an attractive design. The front of the sign being glazed with the weatherproof moulding allows the sign to be exposed to the weather taking the place of the regular sash.

Other important features of the sign are that the sign curtain is made of a high grade of either Holland cloth or washable cloth and printed by the wood block engraving process; that the sign is equipped with an attractive and easily operated bell-crank; that the curtain and rollers may be removed without disturbing the operating mechanism; and that the locking device is noiseless, frictionless, and positive.

The illumination of the sign is taken care of at night by the general light from the interior of the vehicle.

DIMENSION DIAGRAM—SIDE SIGN No. S-565 LR



- A—Length overall (to be specified).
- B—Width of front opening (equals "A" less 4 inches).
- C—Height overall.
- D—Distance between centers of rollers.
- E—Height of front opening.

- R—Width of rear opening (equals "A" less 7 inches).
- S—Height of rear opening.
- T—Distance between roller flanges (equals "A" less $2 \frac{1}{16}$ inches).
- W—Depth of box.

SIDE SIGN

No. S-565

The side sign is very effective in showing the riding public the route or destination of the car or bus. This is especially true on congested streets and crowded loading zones, for the prospective passenger who has not been able to read the front sign can read the side sign and then board the correct car or bus. Time is saved in the loading because the passenger does not have to inquire of the operator the route or destination of the car or bus and then on finding that he has boarded the wrong one waste time in trying to reach the street again against other people boarding the vehicle.

The location of the bell-crank can be stated simply by using the following type designation: — For example, the sign pictured on the preceding page is type No. S-565 LR. The first letter will either be "R" or "L" depending on whether the bell-crank is to be placed on the right or left side of the sign rollers. The last letter "R" designates that the bell-crank is extending horizontally from the rear of the sign.

For glazing, the $\frac{1}{8}$ inch thick glass should be $\frac{5}{8}$ inch larger than the dimension of "B" and "E" or "R" and "S" of the glazed signs. It is also necessary to cut the corners to a $\frac{7}{8}$ inch radius, or to a 45 degree cutoff of $\frac{7}{16}$ inch on each edge.

WHEN ORDERING the Utility standard type No. S-565 single curtain signs, it is necessary to give complete information on the following items:—Full type designation, which indicates the position of the bell-crank; the size of type desired; the background wanted, which can be either white, red, or black; the number of exposures to be printed on the curtain; whether or not the edges of the sign curtain are to be metal reinforced; the dimensions on the preceding page marked "to be specified"; and the depth of the window posts.

The dimensions given in the table below are based on the use of a curtain containing 25 exposures or less. If more readings are needed, "W" and "D" will have to be increased slightly.

Curtain Reading	D Inches	C Inches	E Inches	S Inches	W Inches
2½ Inch Type	3¾	6½	3½	2½	3¼
3 Inch Type	4½	7¼	4¼	3	3-9/16
4 Inch Type	5½	8¼	5¼	4	3-9/16
4½ Inch Type	6	8¾	5¾	4½	3-9/16
5 Inch Type	6½	9¼	6¼	5	3-9/16

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently their use would not in any way disturb your present standards, and it would not be necessary to carry duplicates in stock, insofar as these members are concerned.

SIDE SIGN No. S-620



Front View Side Sign No. S-620 RLR



Rear View Side Sign No. S-620 RLR

Utility side sign No. S-620 is a standard double curtain sign. The box is made in two parts, both sections being glazed. The front section is installed permanently between the posts of a side window sash, usually the one nearest the entrance door of the car or bus. The rear section is hooked at the top to the front section and fastened at the bottom by screws. The two curtains and the two pair of spring differential rollers are held by the two Utility steel cut gear operating mechanisms, and a double tail (or support) plate, which are rigidly mounted in the rear section.

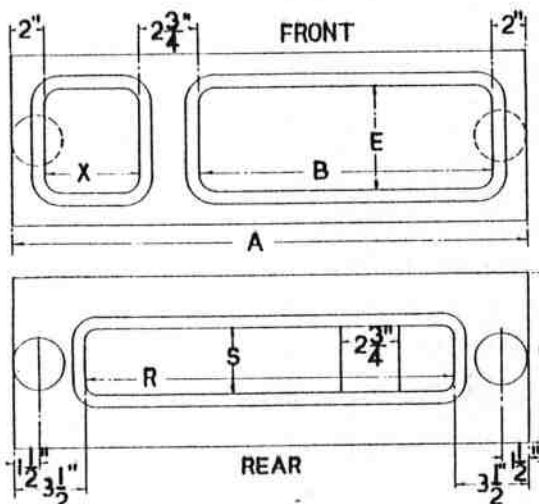
The design of having the sign box in two sections makes it very convenient to get inside for washing the rear of the glass and for changing the curtains and rollers.

The sign is not provided with light sockets for illumination at night because the general light from the interior of the vehicle affords ample illumination for the sign to be read distinctly.

The sign glazing being of weatherproof construction can be exposed to the weather taking the place of the regular sash if desired. The glass for the glazing is held in place by a special rubber moulding that is easily installed or removed without the use of tools of any sort.

Important features are: that the printing is done by the wood block engraving process on a high grade of either Holland sign cloth or washable sign cloth; that the curtains and rollers can be removed without disturbing the operating mechanism or the use of tools; and that the locking device is noiseless, frictionless, and positive.

DIMENSION DIAGRAM—SIDE SIGN No. S-620 LR



- A—Length overall (to be specified).
- B—Width of left front opening (to be specified).
- X—Width of right front opening (to be specified).
- C—Height overall.
- D—Distance between centers of rollers.
- E—Height of front openings.
- R—Width of rear opening (equals "A" less 7 inches).
- S—Height of rear opening.
- T—Distance between left roller flanges (equals "B" plus 1 1/4 inches).
- U—Distance between right roller flanges (equals "X" plus 1 1/4 inches).
- W—Width of box.

SIDE SIGN

No. S-620

The side sign plays a large and important factor in the building up of the passenger loads, for they make it convenient for the prospective passenger, who by reading the route and destination of the car or bus on the side sign, to be sure he is boarding the correct vehicle. This is especially true on congested streets and on crowded loading zones where the passenger was unable to see the front sign. The schedule run time of the car or bus is more apt to be kept with the use of a side sign, because the boarding passenger does not have to inquire of the operator the route or destination of the vehicle and then on finding he has boarded the wrong one waste schedule time on returning to the street again against other boarding passengers.

On all double curtain side signs the operating bell-cranks are located one on each end of the sign box and protruding from the rear. Therefore the letters RLR will follow the type number.

For glazing, the $\frac{1}{8}$ inch glass should be $\frac{5}{8}$ inch larger than the dimension of "B" and "E"; "X" and "E"; or "R" and "S" of the glazed signs. It is also necessary to cut the corners to a $\frac{7}{8}$ inch radius or to a 45 degree cutoff of $\frac{7}{16}$ inch on each edge.

WHEN ORDERING the Utility standard type No. S-620 double curtain signs, it is necessary to give complete information on the following items:—Full type designation which indicates the position of the bell-cranks; the size of type desired; the background wanted, which can be white, red, or black; the number of exposures to be printed on the curtain; whether or not the edges of the sign curtains are to be metal reinforced; the dimensions on the preceding page marked "to be specified"; and the depth of the window posts.

The dimensions given in the table below are based on the use of a curtain containing 25 exposures or less; if more readings are needed, "W" and "D" will have to be slightly increased.

Curtain Reading	D Inches	C Inches	E Inches	S Inches	W Inches
2½ Inch Type	3¾	6½	3½	2½	3¼
3 Inch Type	4½	7¼	4¼	3	3-9/16
4 Inch Type	5½	8¼	5¼	4	3-9/16
4½ Inch Type	6	8¾	5¾	4½	3-9/16
5 Inch Type	6½	9¼	6¼	5	3-9/16

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently their use would not in any way disturb your present standards, and it would not be necessary to carry duplicates in stock, insofar as these members are concerned.

SIDE SIGN No. S-597



Front View Side No. S-597 LR



Rear View Side Sign No. S-597 LR

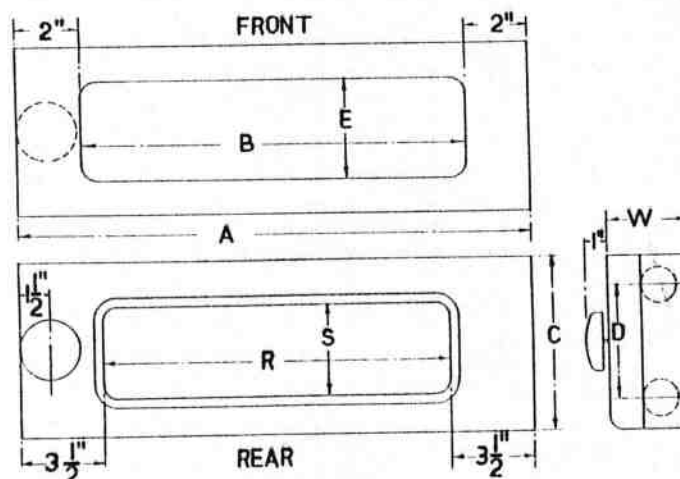
The standard single curtain Utility side sign No. S-597 is glazed only in the rear section. The front section of the sign box being unglazed makes it necessary to mount the sign immediately behind a weatherproof sash provided by the body builder. This is usually done by mounting the front section of the sign box permanently between the posts, and behind the stationary portion of the side window sash nearest the entrance of the car or bus. The rear section is hooked at the top, and fastened at the bottom by screws to the front section. When the rear section is unhooked from the front section, it carries with it a sign curtain, a pair of spring differential rollers, a Utility steel cut gear operating mechanism, and a tail (or support) plate.

Important features of the sign are that the glazing is held in place by an easily installed and removed special rubber moulding; the curtain and rollers can be removed without disturbing

the operating mechanism or the use of tools; the sign curtain is of a high grade of either Holland cloth or washable cloth and printed by the wood block engraving process; and the locking device is positive, noiseless, and frictionless.

The illumination of the side sign at night is taken care of by the general light from the interior of the car or bus, which affords ample illumination for the sign to be read distinctly.

DIMENSION DIAGRAM—SIDE SIGN No. S-597 LR



- A—Length overall (to be specified).
- B—Width of front opening (equals "A" less 4 inches).
- C—Height overall.
- D—Distance between centers of rollers.
- E—Height of front opening.

- R—Width of rear opening (equals "A" less 7 inches).
- S—Height of rear opening.
- T—Distance between roller flanges (equals "A" less $2 \frac{1}{16}$ inches).
- W—Width of the sign box.

SIDE SIGN

No. S-597

It should be realized that by installing a side sign on a car or bus it tends to build up passenger loads and saves schedule run time in loading. The side sign is of great convenience to the prospective passenger, for he may not have been able to see the front sign due to congested streets or crowded loading zones. Thus, by reading the side sign, the passenger can see the route or destination of the vehicle and be sure to board the correct one. By the passenger being able to determine the route or destination of the car or bus before boarding the vehicle, he does not have to ask the operator this question and then on finding that he has gotten on the wrong car or bus, waste schedule time in trying to reach the street again against other boarding passengers.

The location of the bell-crank can be stated simply by using the following type designation: — For example the sign pictured on the preceding page is type No. S-597 LR. The first letter will either be "R" or "L," depending on whether the bell-crank is to be placed on the right or left side of the sign rollers. The last letter "R" designates that the bell-crank is extending horizontally from the rear of the sign.

For glazing, the $\frac{1}{8}$ inch thick glass should be $\frac{5}{8}$ inch larger than the dimension of "R" or "S." It is also necessary to cut the corners to a $\frac{7}{8}$ inch radius, or to a 45 degree cutoff of $\frac{7}{16}$ inch on each edge.

WHEN ORDERING the Utility standard type No. S-597 single curtain sign, it is necessary to give complete information on the following items:—Full type designation, which indicates the position of the bell-crank; the size of type desired; the background wanted, which can be either white, red, or black; the number of exposures to be printed on the curtain; whether or not the edges of the sign curtain are to be metal reinforced; the dimensions on the preceding page marked "to be specified"; and the depth of the window posts.

The dimensions given in the table below are based on the use of a curtain containing 25 exposures or less; if more readings are needed, "W" and "D" will have to be slightly increased.

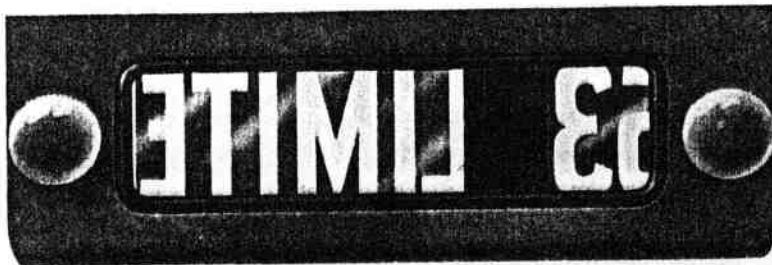
Curtain Reading	D Inches	C Inches	E Inches	S Inches	W Inches
2½ Inch Type	3¾	6½	3½	2½	3¼
3 Inch Type	4½	7¼	4¼	3	3-9/16
4 Inch Type	5½	8¼	5¼	4	3-9/16
4½ Inch Type	6	8¾	5¾	4½	3-9/16
5 Inch Type	6½	9¼	6¼	5	3-9/16

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently it will not be necessary to carry duplicates in stock.

SIDE SIGN No. S-625



Front View Side Sign No. S-625 RLR



Rear View Side Sign No. S-625 RLR

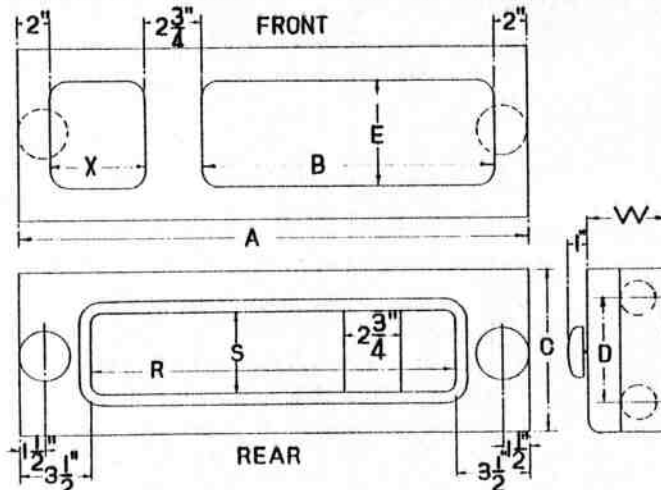
The double curtain sign No. S-625 is a Utility standard side sign. The sign box is made in two sections with only the rear section being glazed. Therefore it is necessary for the body builder to provide a weatherproof sash directly behind which the unglazed front section of the sign box is installed. This is usually done by mounting the front section permanently between the posts, and behind the stationary portion of the side window sash nearest the entrance of the car or bus. The rear section of the sign box is hooked at the top and fastened at the bottom with screws to the front section. The sign consists of two sign curtains, two pair of steel rollers, two Utility steel cut gear mechanisms, and a double tail (or support) plate, all of which are mounted to the rear section of the sign box.

Important features of the sign are that: the glazing is held in place by an easily installed and removed special rubber moulding; the curtains and

rollers can be removed without disturbing the operating mechanism or the use of tools; the sign curtain is of a high grade of either Holland cloth or washable cloth and is printed by the wood block engraving process; and the locking device is positive, noiseless, and frictionless.

The illumination of the side sign at night is taken care of by the general light from the interior of the car or bus, which affords ample illumination for the sign to read distinctly.

DIMENSION DIAGRAM—SIDE SIGN No. S-625 RLR



- A—Length overall (to be specified).
- B—Width of left front opening (to be specified).
- X—Width of right front opening (to be specified).
- C—Height overall.
- D—Distance between centers of rollers.
- E—Height of front openings.
- W—Width of sign box.

- R—Width of rear opening (equals "A" less 7 inches).
- S—Height of rear opening.
- T—Distance between left roller flanges (equals "B" plus 1 1/4 inches).
- U—Distance between right roller flanges (equals "X" plus 1 1/4 inches).

SIDE SIGN

No. S-625

The side sign is installed upon the cars and buses primarily for the convenience of the prospective passengers that may not have seen the front sign due to congested streets and crowded loading zones. Then by reading the route and destination of the car or bus on the side sign, the boarding passenger can be sure that he is getting on the right one. The side sign is also an aid to the operator in keeping up to schedule run time, because the boarding passenger does not have to ask the route or destination of the car or bus, and then on finding that he has boarded the wrong one wastes schedule time, in returning to the street again against other boarding passengers.

On all double curtain side signs the operating bell-cranks are located one on each end of the sign box and protruding from the rear. Therefore the letters RLR will follow the type number.

For glazing, the $\frac{1}{8}$ inch thick glass should be $\frac{5}{8}$ inch larger than the dimension "R" or "S." It is also necessary to cut the corners to a $\frac{7}{8}$ inch radius, or to a 45 degree cutoff of $\frac{7}{16}$ inch on each edge.

WHEN ORDERING the Utility standard type No. S-625 double curtain side sign, it is necessary to give complete information on the following items:—Full type designation, which indicates the position of the bell-cranks; the size of type desired; the background wanted, which can be either white, red, or black; the number of exposures to be printed on the sign curtain; whether or not the edges of the curtains are to be metal reinforced; the dimensions on the preceding page marked "to be specified"; and the depth of the window posts.

The dimensions given in the table below are based on the use of a curtain containing 25 exposures or less; if more readings are needed, "W" and "D" will have to be slightly increased.

Curtain Reading	D Inches	C Inches	E Inches	S Inches	W Inches
2½ Inch Type	3⅞	6½	3½	2½	3¼
3 Inch Type	4½	7¼	4¼	3	3-9/16
4 Inch Type	5½	8¼	5¼	4	3-9/16
4½ Inch Type	6	8¾	5¾	4½	3-9/16
5 Inch Type	6½	9¼	6¼	5	3-9/16

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently it will not be necessary to carry duplicates in stock.

FRAME TYPE SIGN No. S-600



Front View Frame Type Sign No. S-600 RR

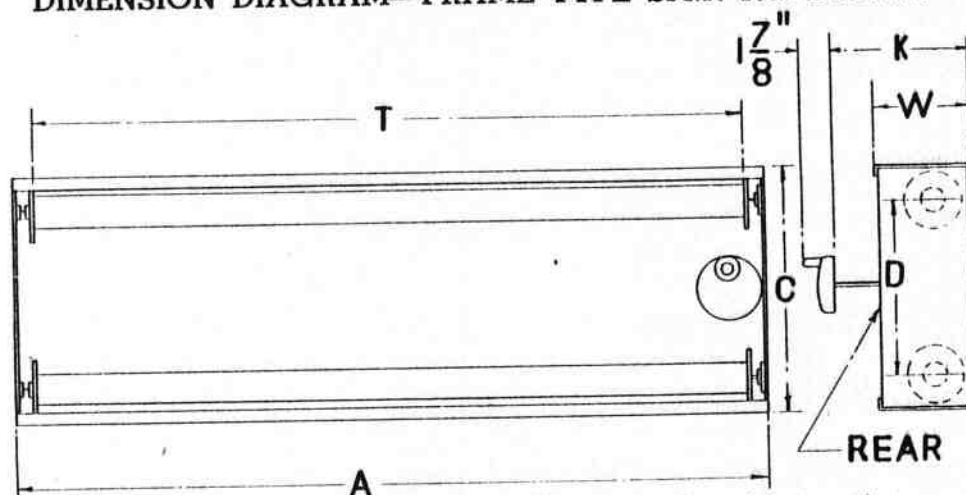


Rear View Frame Type Sign No. S-600 RR

No. S-600 is a Utility standard single curtain frame type sign. The sign consists of a sign curtain attached to a pair of spring differential rollers operated and supported by a mechanism and tail plate, which are rigidly mounted in a pressed steel frame. The sign when delivered is completely assembled and is ready to be installed in the space provided for the sign by the body builder.

Important features of the sign are that: the gears used in the Utility operating mechanism are of cut steel and are heavily cadmium plated; the curtain and rollers can be removed without disturbing the operating mechanism or the use of tools; the sign exposures are printed by the wood block engraving process on a high grade of either Holland sign cloth or washable sign cloth; and the mechanism is provided with a locking device that is positive, frictionless and noiseless.

DIMENSION DIAGRAM—FRAME TYPE SIGN No. S-600 RR



A—Length overall (to be specified).

C—Height overall.

D—Distance between centers of rollers.

T—Distance between roller flanges (equals "A" less 2 inches).

W—Width of mechanism plate.

K—Shows the depth the body builder is making the sign box and should be specified.

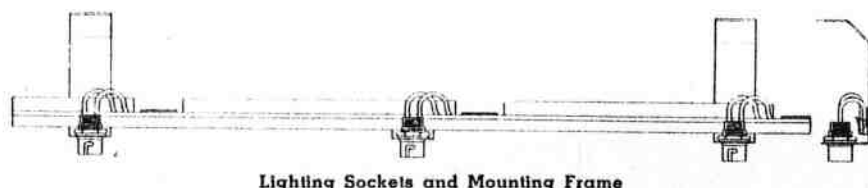
The location of the bell-crank can be stated simply by using the following type designation: — For example, the sign pictured above is type No. S-600 RR. The first letter will either be "R" or "L," depending on whether the bell-crank is to be placed on the right or left side of the sign rollers. The last letter "R" designates that the bell-crank is extending horizontally from the rear of the sign.

If the bell-crank extended vertically down from the bottom of the box, the marking would be No. S-600 RB.

When the operating handle is to be located inside of the box made by the body builder, which necessitates the raising of the rear door to operate the sign, the marking would be No. S-600 RI.

FRAME TYPE SIGN No. S-600

The frame constructed sign is provided for the car and bus builder that wishes to include the construction of the sign box compartment and the furnishing of a sash front for the sign as a part of the regular body construction, but at the same time do away with the trouble and extra labor of installing and aligning the mechanism plate and the tail plate bearings so that the curtain rollers will run true. The frame type sign is held in alignment by the pressed steel frame and enables the complete sign to be installed as a complete unit.



Lighting Sockets and Mounting Frame

The light sockets and mounting frame, as shown, are furnished with the signs as standard equipment. The sockets can be either high or low voltage. Signs having an "A" dimension of 36 inches or less will be supplied with two sockets

and signs longer than 36 inches will be provided with three sockets.

WHEN ORDERING the Utility standard type No. S-600 single curtain sign, it is necessary to give complete information on the following items:—Full type designation, which includes the position of the operating bell-crank; the size of type desired and whether it is to be printed with route and destination as illustrated on catalog sheet Nos. 21 and 35, or with just destination; the curtain background desired, which can be white, red, or black; the number of exposures to be printed on the curtain; whether or not the edges of the curtain are to be metal reinforced; all the dimensions on the preceding page marked "to be specified"; and whether the lighting sockets are to be single or double contact, high or low voltage, and whether series or parallel wiring is required.

The dimensions "C" and "W" given in the table below are such that it will be necessary to increase them slightly if more than 25 exposures are to be printed on the sign curtain.

Curtain Printing	D Inches	C Inches
2 Inch Type	3½	5⅞
2½ Inch Type	3⅞	6¼
3 Inch Type	4½	7
4 Inch Type	5½	8
4½ Inch Type	6	8½
5 Inch Type	6½	9¼
6 Inch Type	7½	10½

Dimension "W" varies as follows:

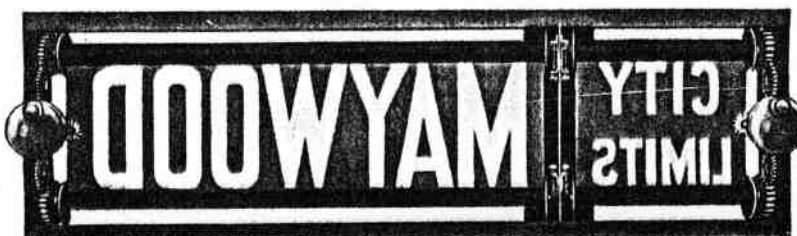
Type Sign	Size Printing Inches	Dimension "W" Inches
S-600 RR or LR	2—3	3½
S-600 RR or LR	4—6	4½

The Utility sign curtains, metal rollers, and roller end gears are interchangeable with the corresponding members of your present sign equipment; consequently it will not be necessary to carry duplicates in stock.

FRAME TYPE SIGN No. S-585



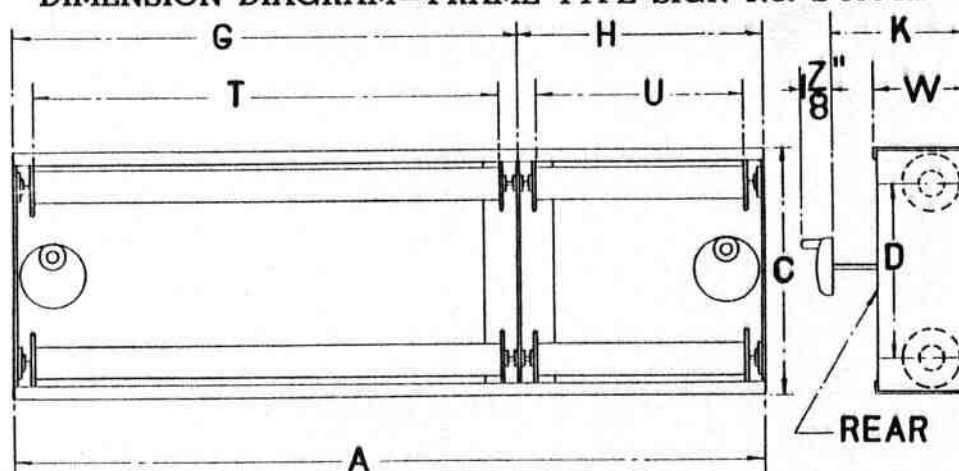
Front View Frame Type Sign No. S-585 RLR



Rear View Frame Type Sign No. S-585 RLR

Holland sign cloth or washable sign cloth by the wood block engraving process; and the mechanism is provided with a noiseless, frictionless, and positive locking device.

DIMENSION DIAGRAM—FRAME TYPE SIGN No. S-585 RLR



- A—Length overall (to be specified).
- C—Height overall.
- D—Distance between centers of rollers.
- G—Distance between left side roller plates (to be specified).
- H—Distance between right side roller plates (to be specified).

- T—Distance between left roller flanges (equals "G" less 2 inches).
- U—Distance between right roller flanges (equals "H" less 2 inches).
- W—Width of mechanism plate.
- K—Show the depth the body builder is making the sign box and should be specified.

The location of the bell-cranks can be stated simply by using the following type designation:—For example, the sign pictured above is type No. S-585 RLR. The first letter may be "R" or "L" and indicates whether the bell-crank is on the right or left side of the right hand unit; the second letter "R" or "L" shows the position of the bell-crank on the left hand unit; the third letter "R" designates that the bell-crank extends horizontally from the rear of the box.

If the bell-cranks extended vertically down from the bottom of the box the marking would be No. S-585 RLB.

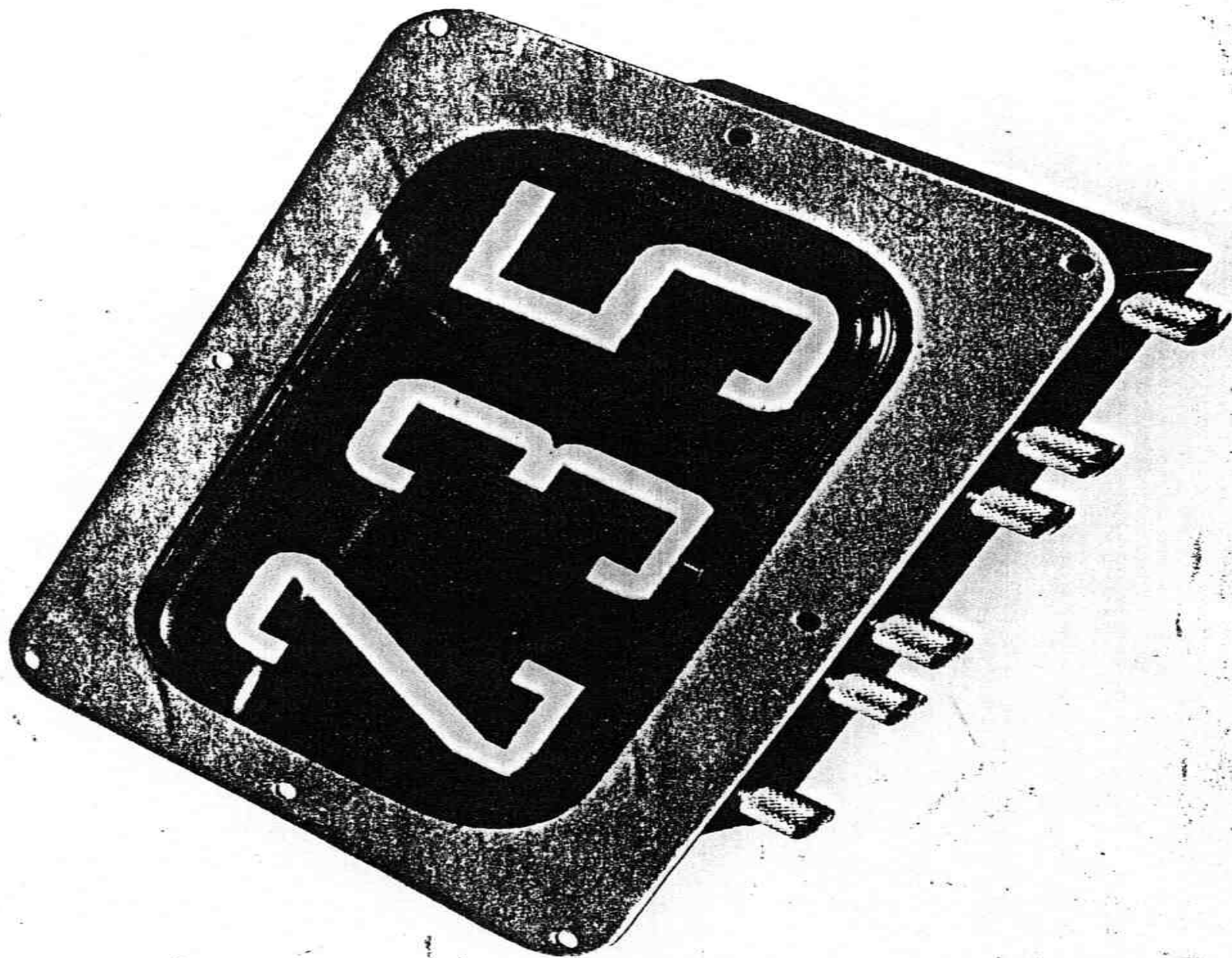
When the operating handles are to be located inside of the box made by the body builder, which necessitates the raising of the rear door to operate the sign, the marking would be No. S-585 RLI.

The double curtain frame type sign No. S-585 is a Utility standard. The frame is constructed of pressed steel and has two mechanisms and a double tail (or support) plate mounted rigidly to it. The two sign curtains and the two pair of spring differential rollers are also part of the standard equipment. The sign when delivered is completely assembled and is ready to be installed in the place provided for the sign by the body builder.

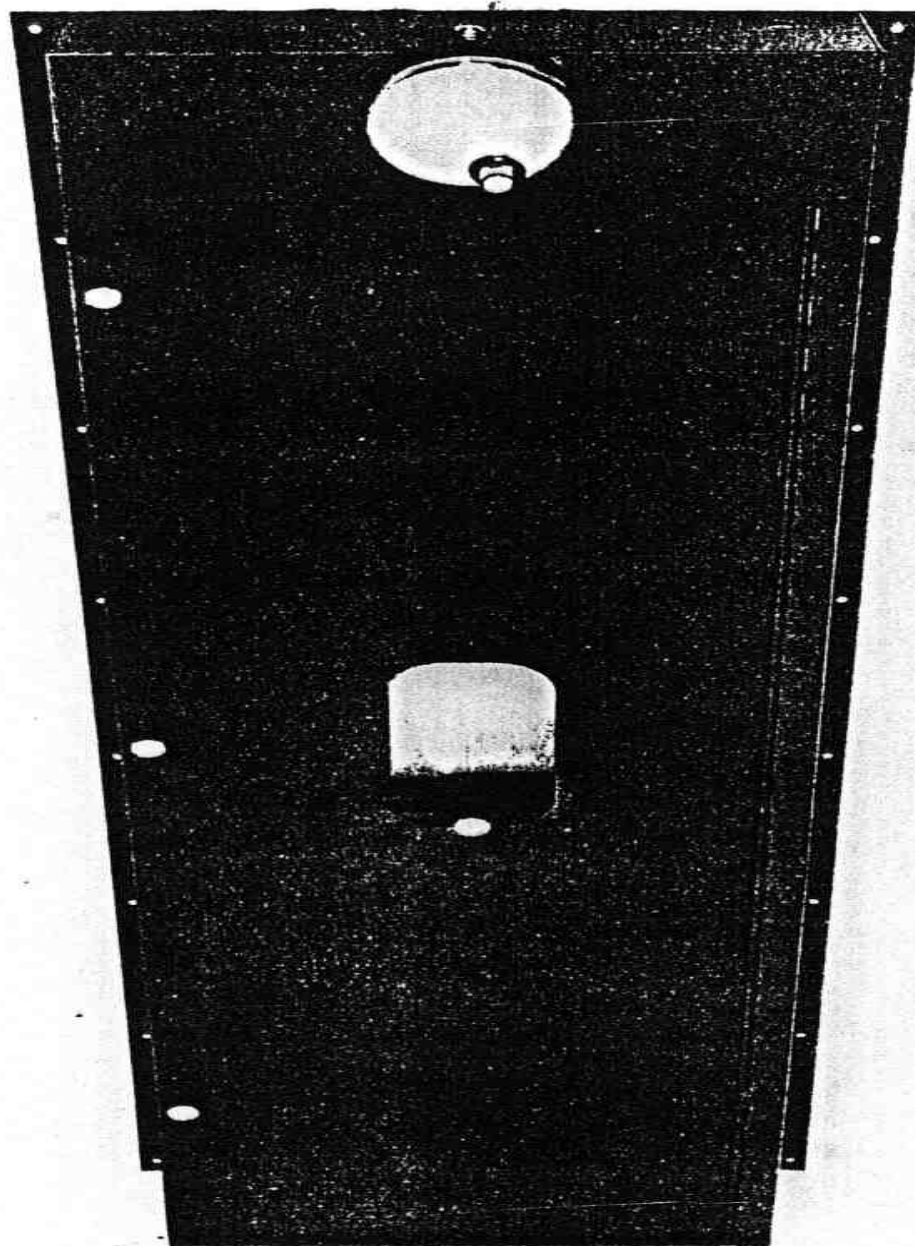
The operating of the signs is done by two standard Utility gear driven mechanisms. The gears used in making up mechanisms are steel cut and heavily cadmium plated, and all the bearings are bronze bushed.

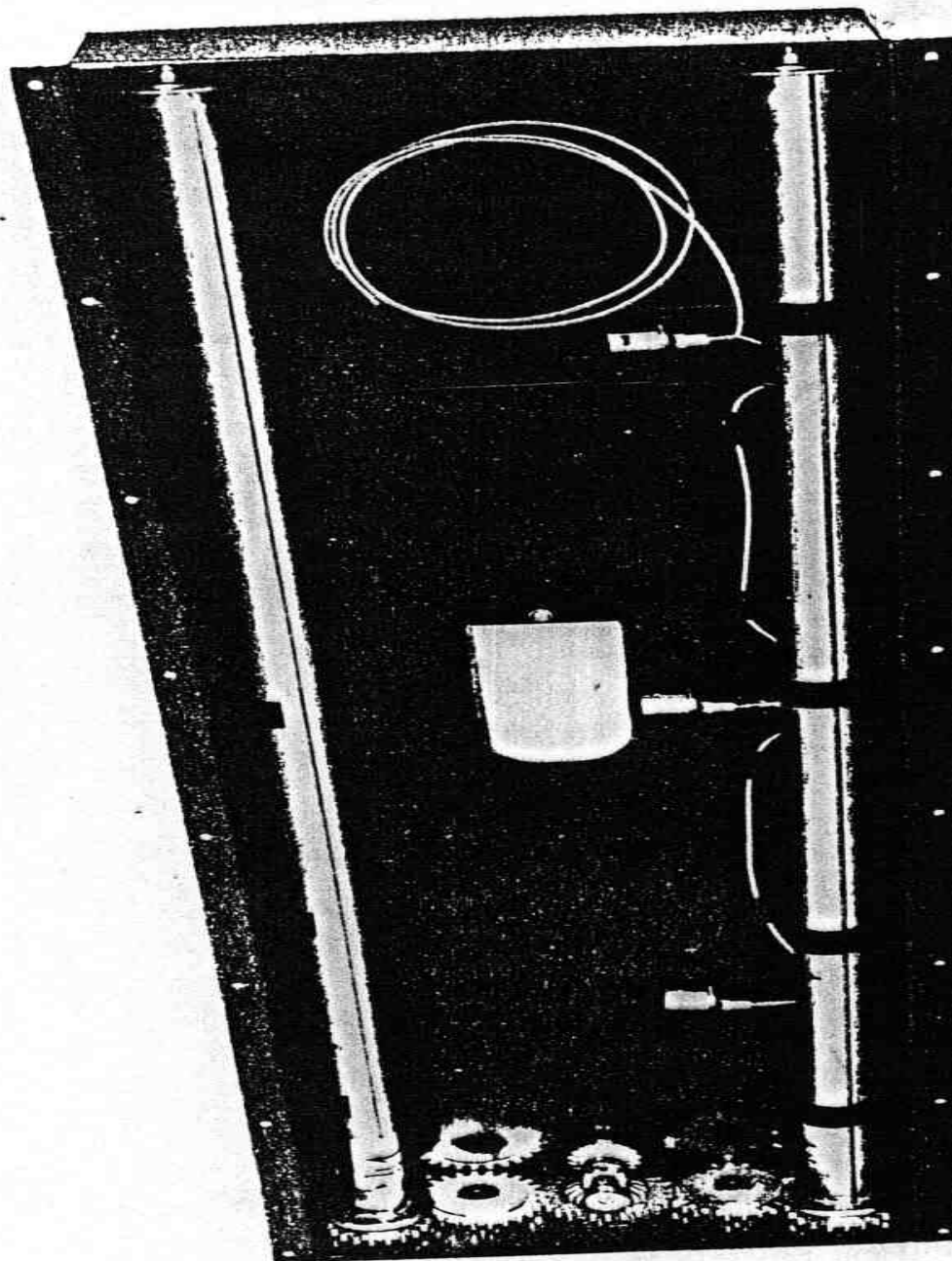
Other features are that the curtains and steel rollers can be removed without disturbing the operating mechanism or the use of tools; the exposures are printed on a high grade of either

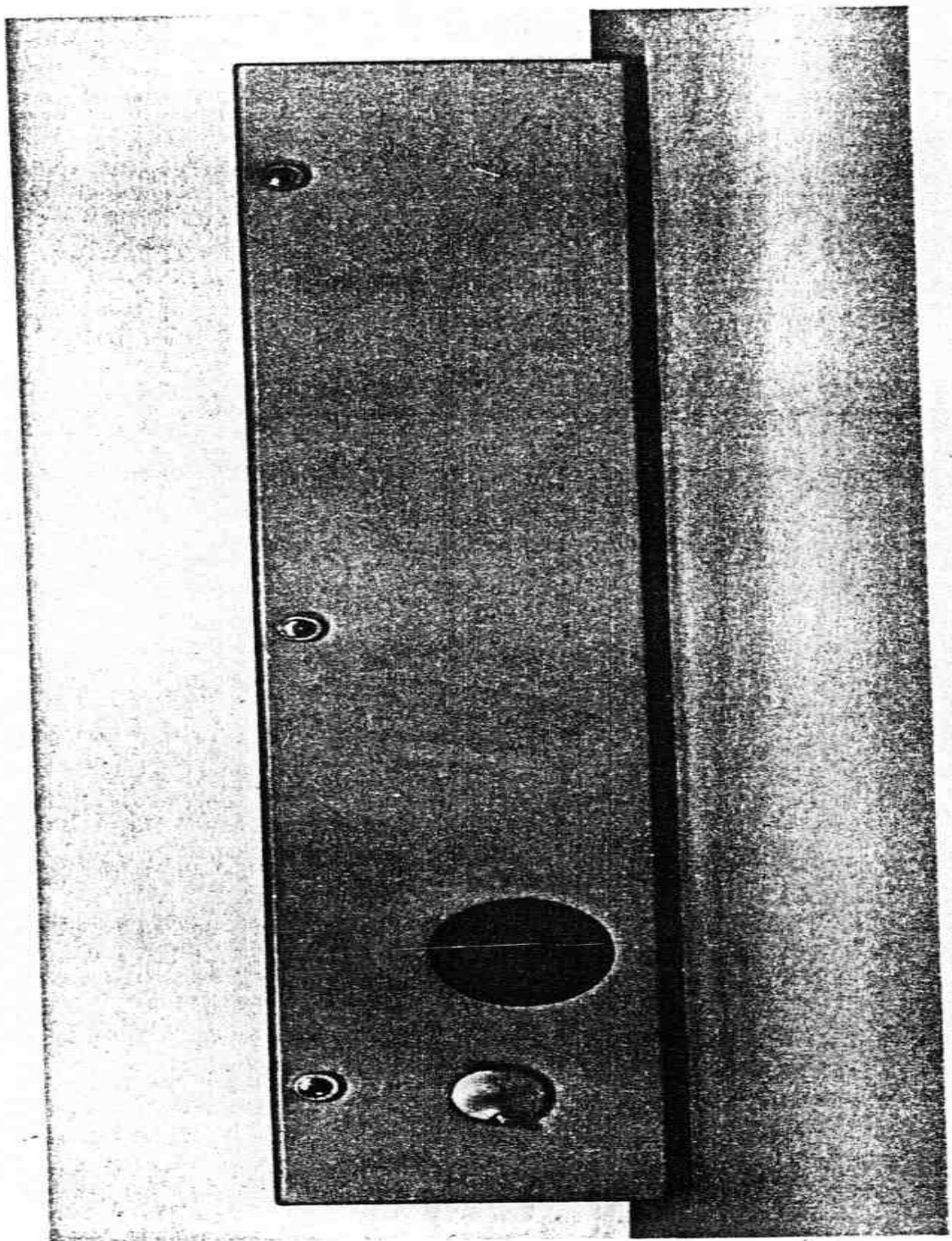
A JACKSON PK.

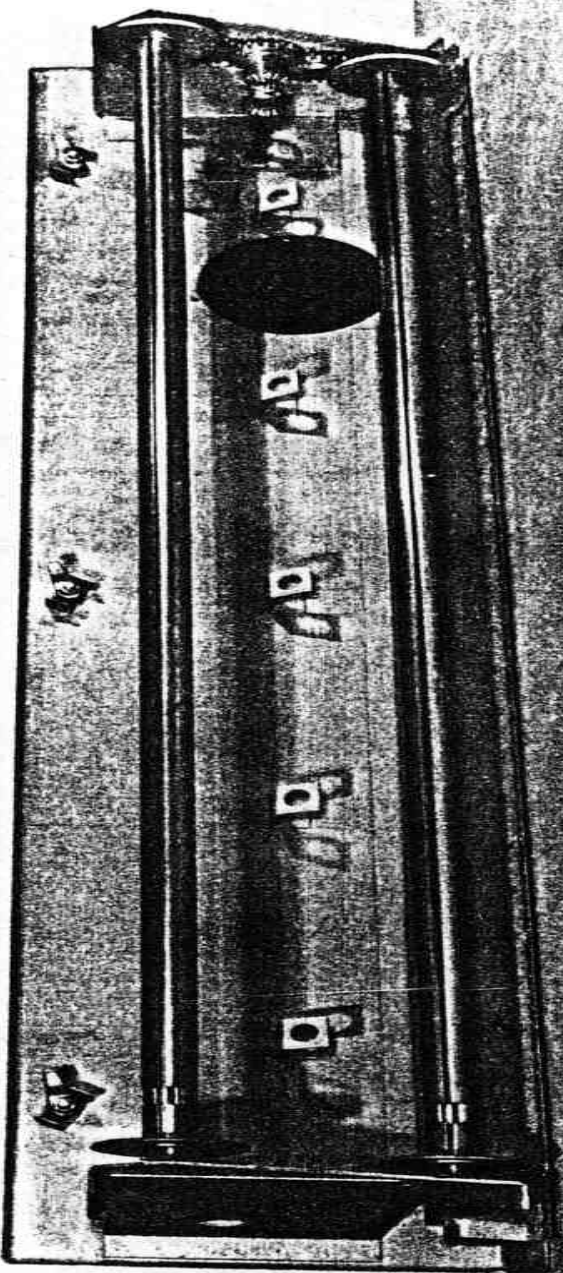












RUCO GATE SIGN-ILLUMINATED

Model GR 1

Volts 120 AC
Watts 20 2 Lamp
Lamp Size 14"

Size:

High 27½"
Wide 18 "
Deep 5 "

Finish:

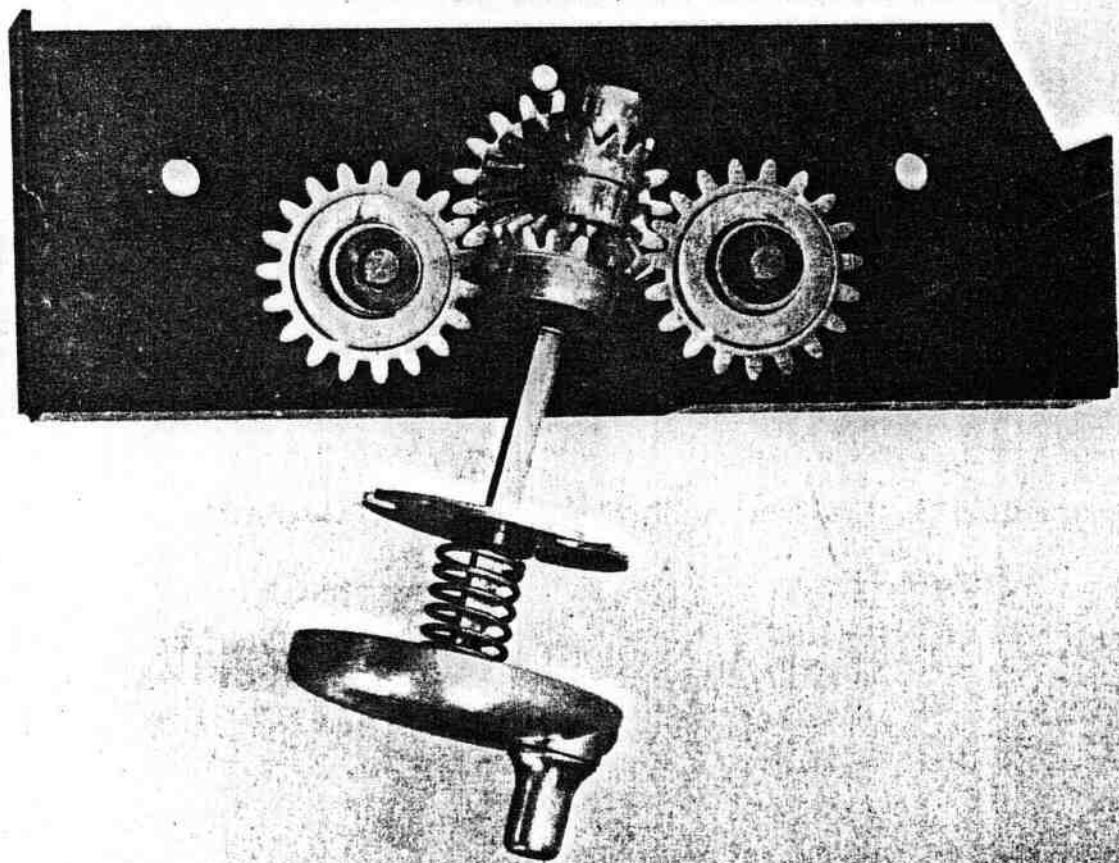
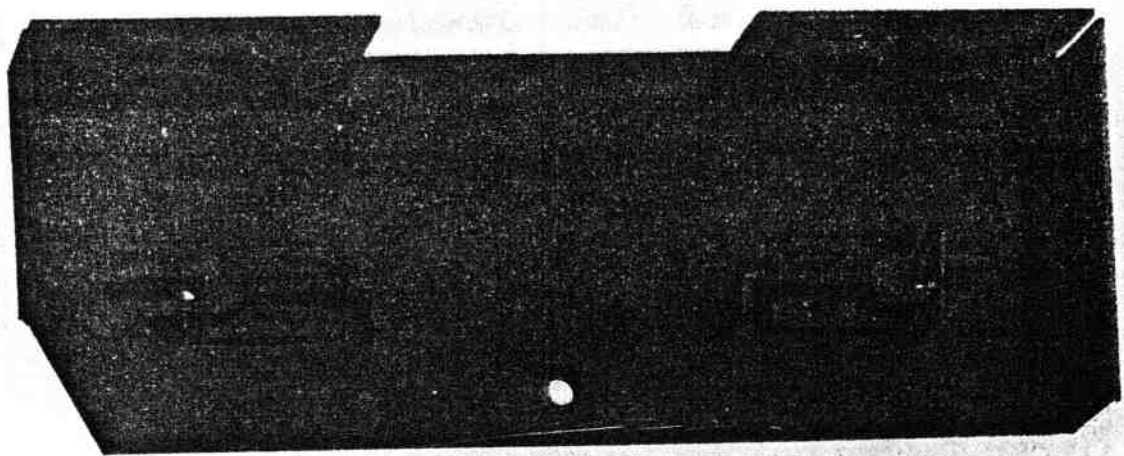
Stainless Steel #4



RUCO DESTINATION SIGN

Model GR-2	(Curtain Insert)
Material	Standard Shade Fabric Or As Specified
Letters	Silk Screened
Ink	As Specified
Cabinet	See Reverse Side
Size	As Required
Illuminator	Optional
Volts	120 AC
Watts	20 - 40

STREET
95TH



JAMESTOWN - BUFFALO

BUTLER

OIL CITY

STONE HOUSE

WARREN

FRANKLIN

FREDONIA

RUCO TWO WAY DESTINATION SIGN

ELECTRICALLY OPERATED LOCATION SELECTOR

6 Sided (Curtain Showing):

3 Stop Re: A-B- Local

3 Destination Re:

Jackson Pk
Garfield Pk
Downtown

Voltage:

32 AC DC

Size:

High 10"

Long 24"

Deep 6½"

Finish:

Grey or as required

(Special)

NO PASSENGERS

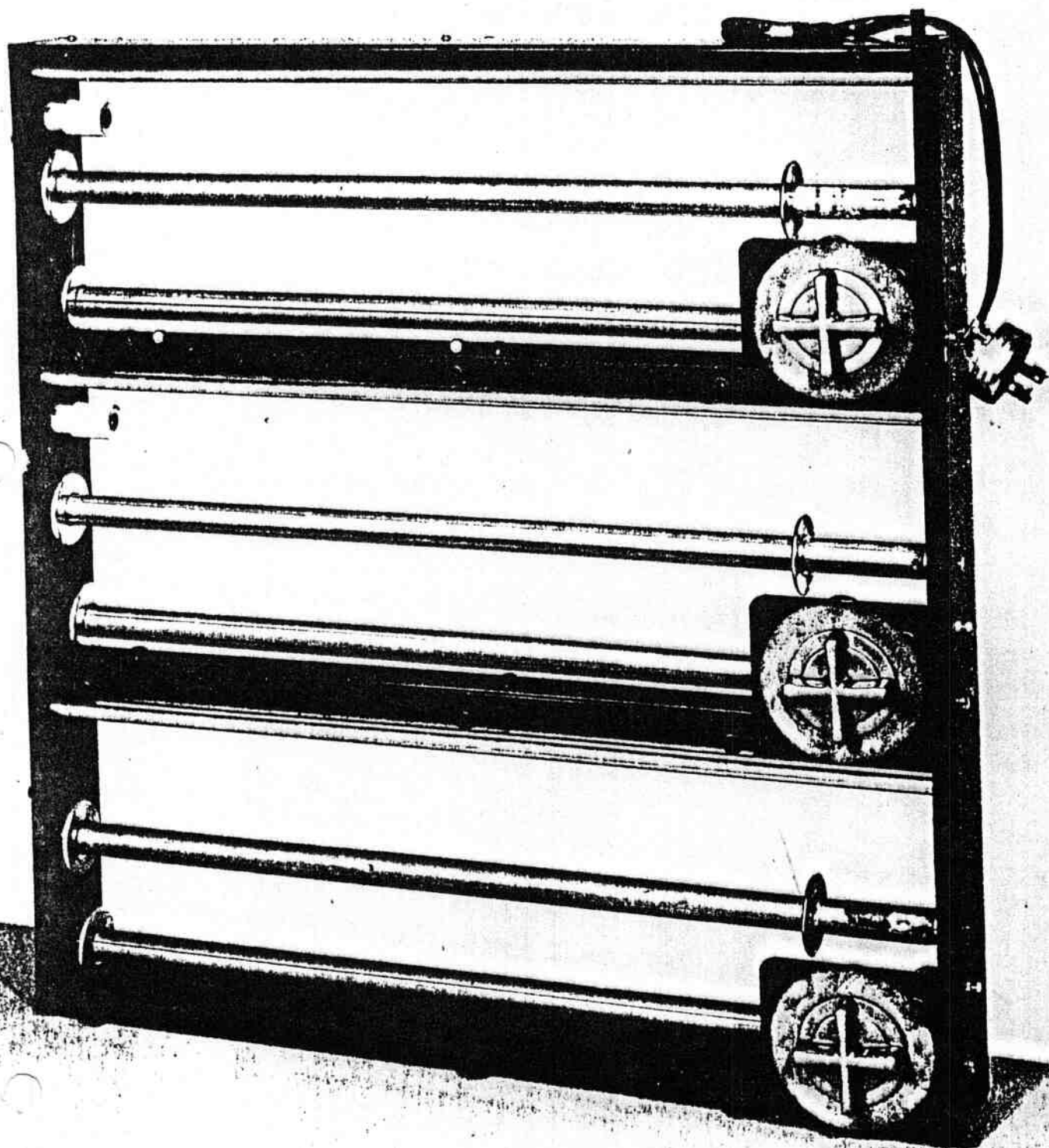


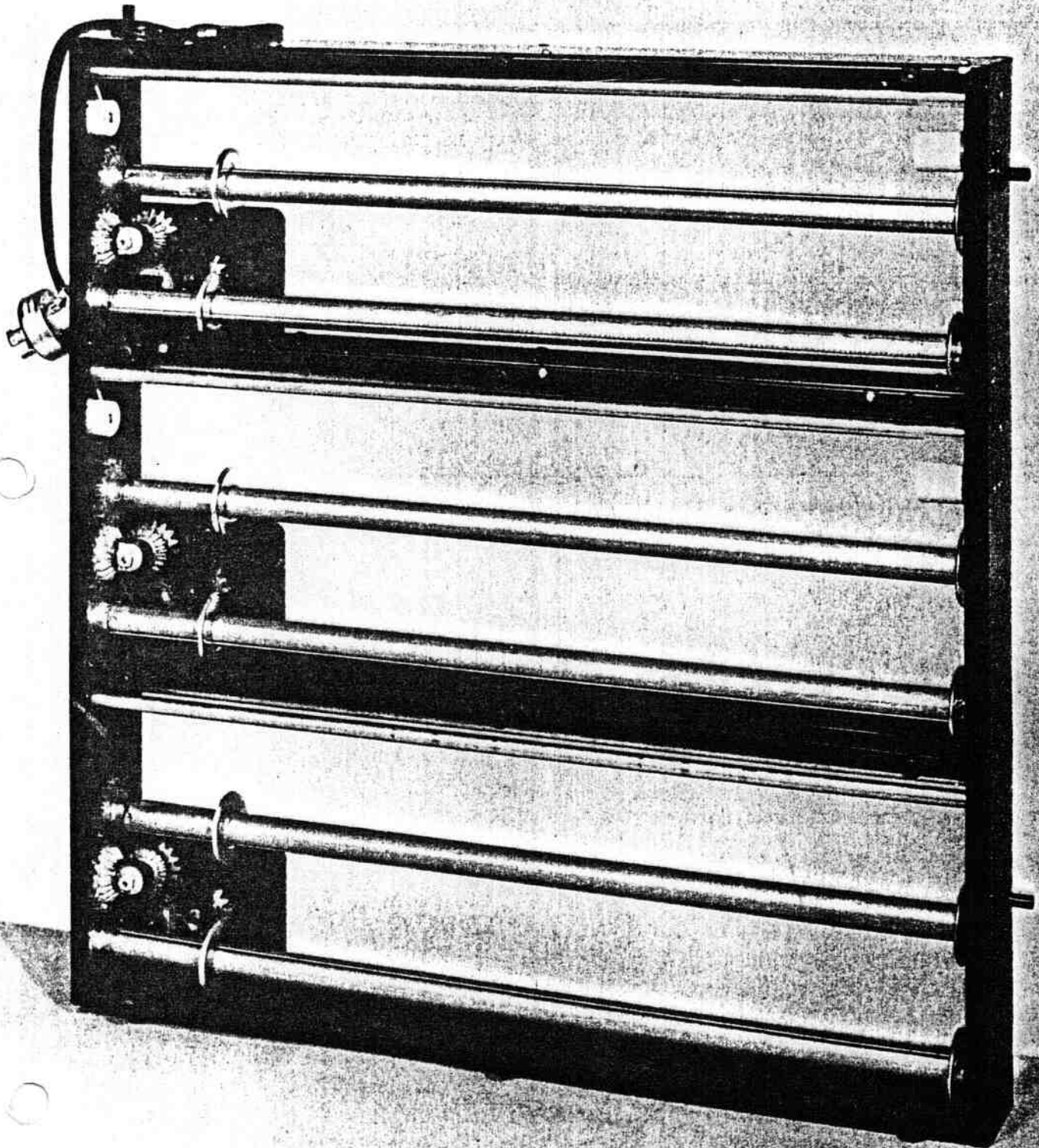
145 ST-LENOX AV

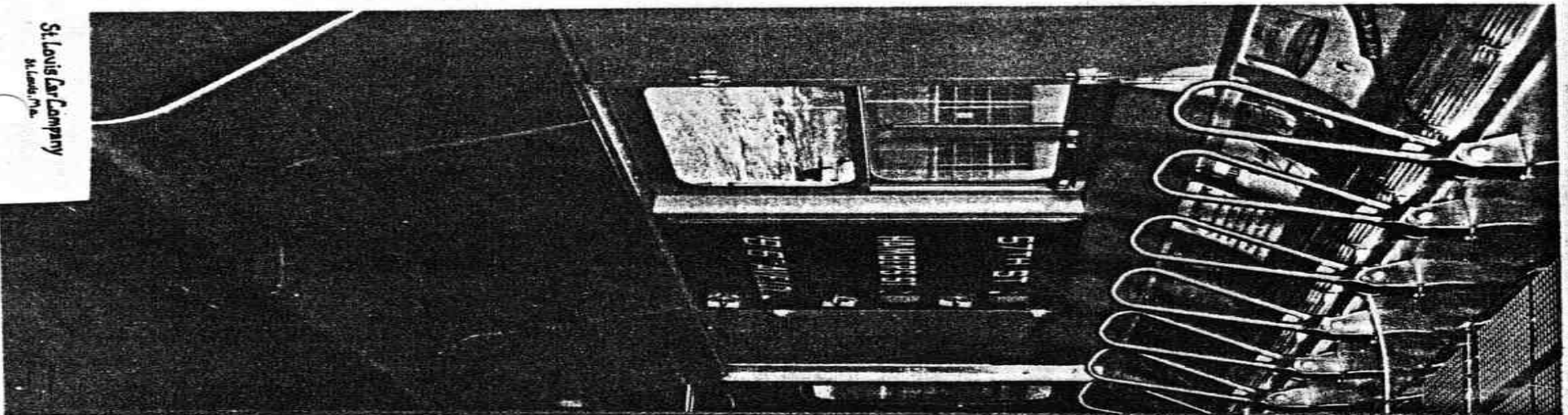


SUPER EXPRESS

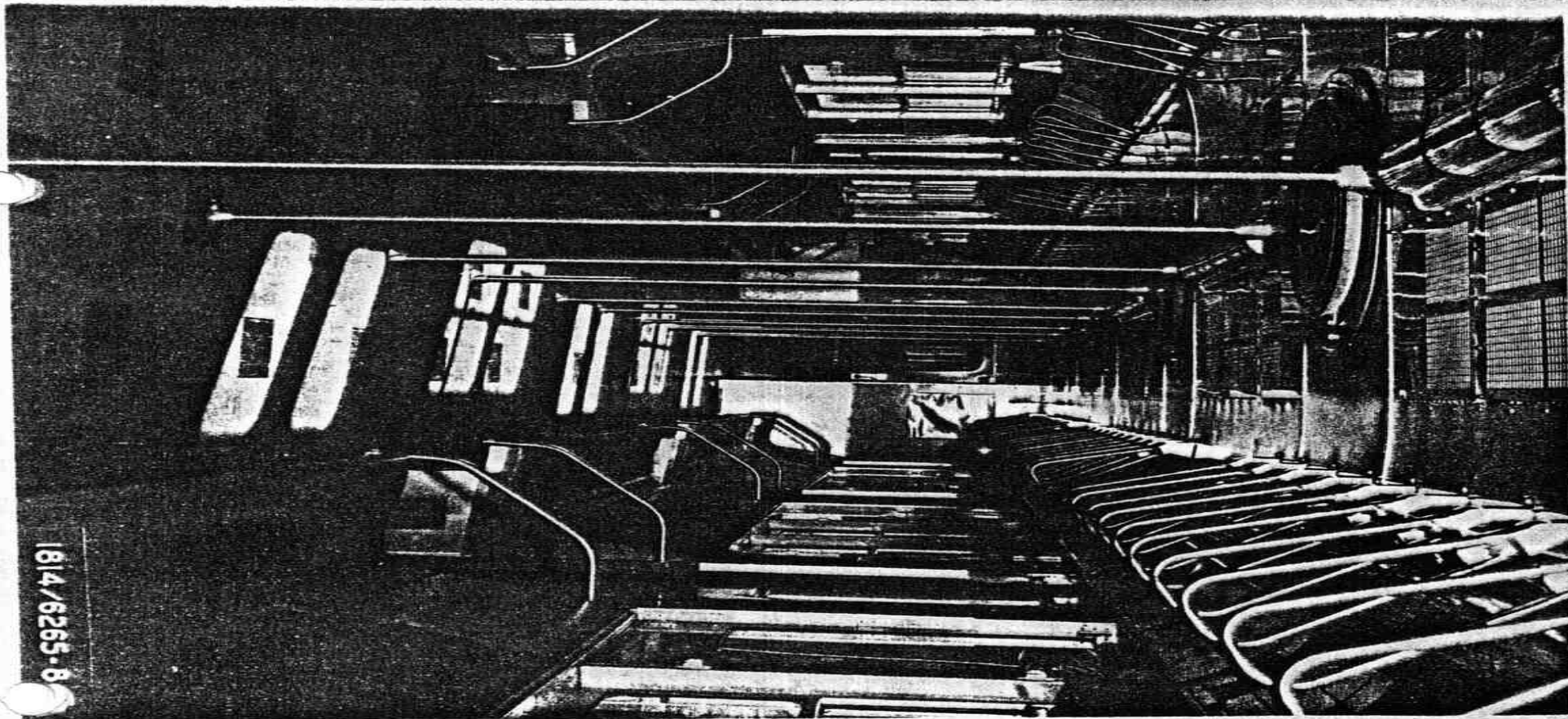




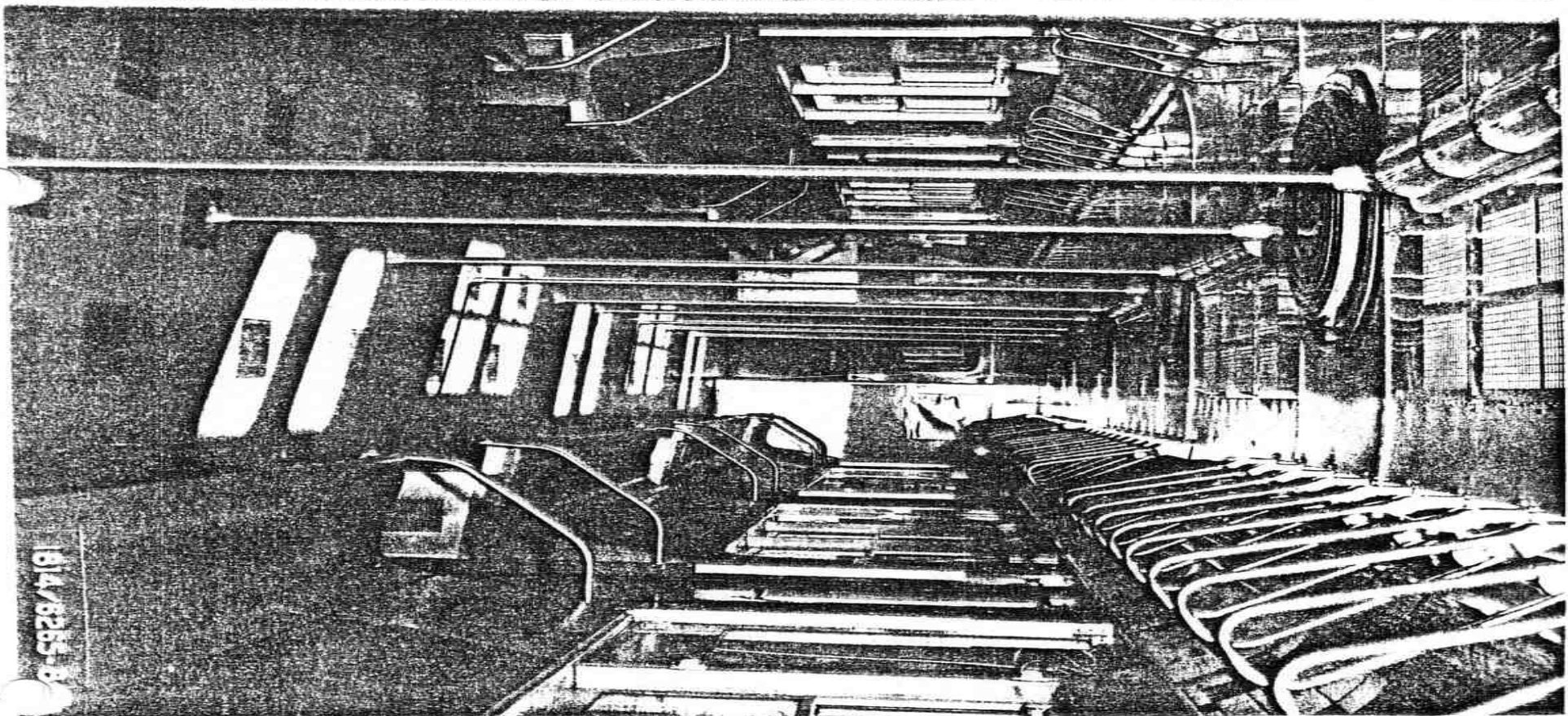
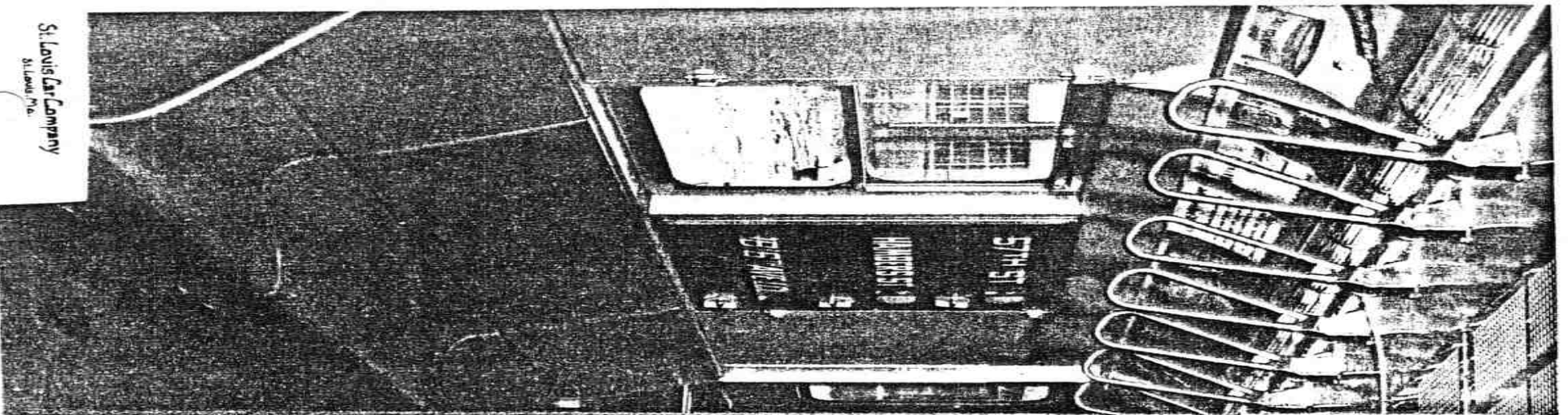




St. Louis Car Company
St. Louis, Mo.



1814/6265-8



St. Louis Car Company
St. Louis, Mo.

104/6255-8

S
SPECIAL

**ROCKAWAY
PARKWAY**

PASSENGERS ARE FORBIDDEN TO WIDE BETWEEN CARS

EASTERN PARKWAY CHAMBERS ST
CHAMBERS ST EASTERN PARKWAY
CRESCENT ST CANAL STREET
CANAL STREET CRESCENT ST
EIGHTH AVE JAMAICA 168 ST
JAMAICA 168 ST EIGHTH AVE

WINDHILL 50 INCH 15-58 INCH
STREET LIGHTWAY CHAMBERS ST
CHAMBERS ST 168 ST
CHAMBERS ST 168 ST
CHAMBERS ST 168 ST
CHAMBERS ST 168 ST

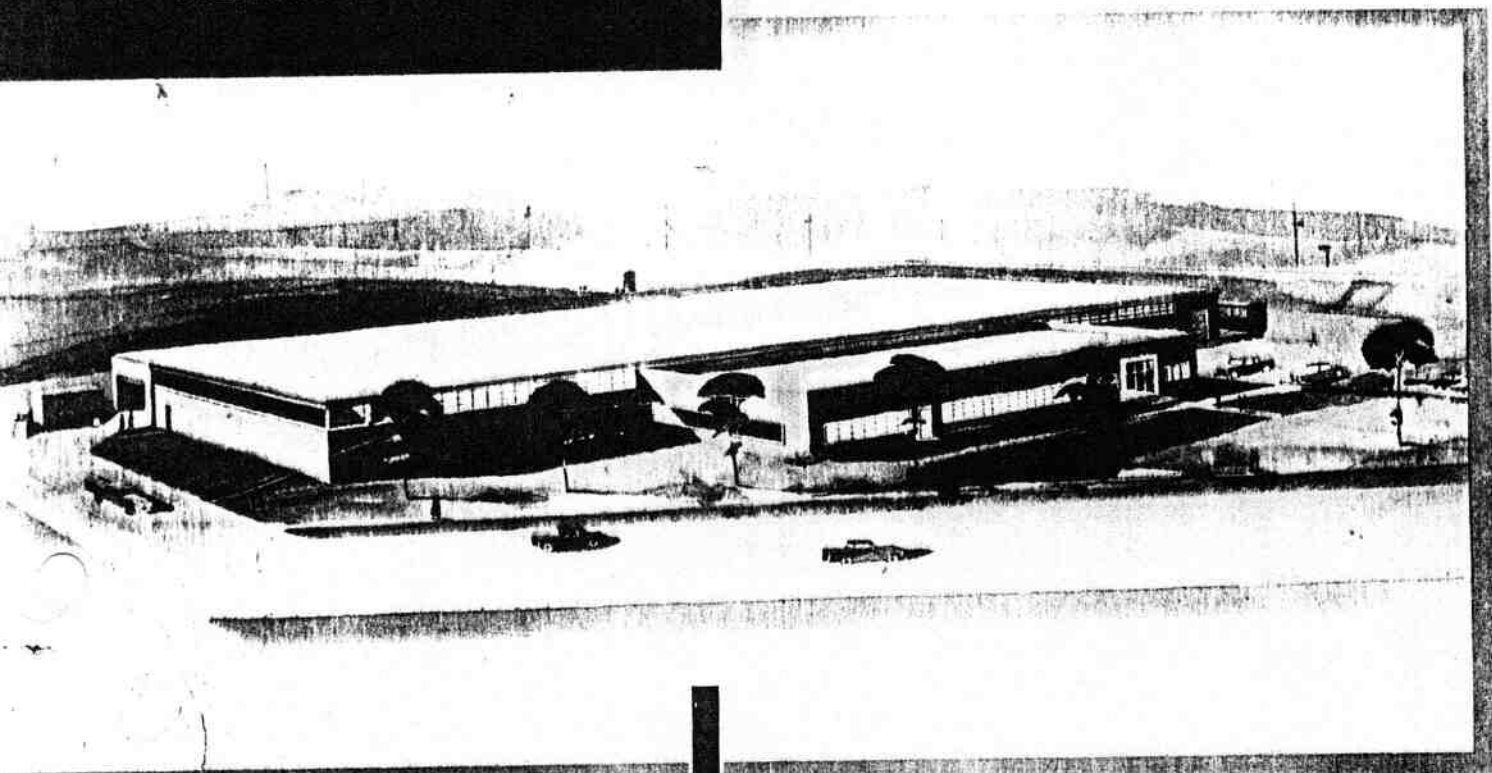
CHAMBERS ST
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CHAMBERS ST
CHAMBERS ST
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Serving the Railroad Industry Over 50 Years!

TELEWELD, INC.

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FRANKLIN PARK, ILLINOIS

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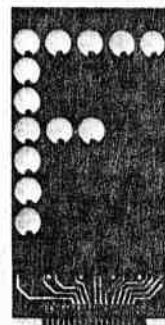
Salt Lake City

and principle cities in Canada and foreign countries.

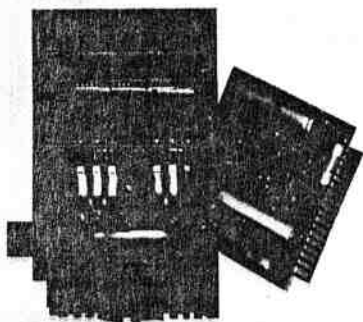
TELEWELD TECHNOLOGY



This fully automated destination sign incorporates the latest in solid state optoelectronics and integrated circuit logic to display one of its fifty possible readings. The curtain is 85 ft. long and printed in seven colors.



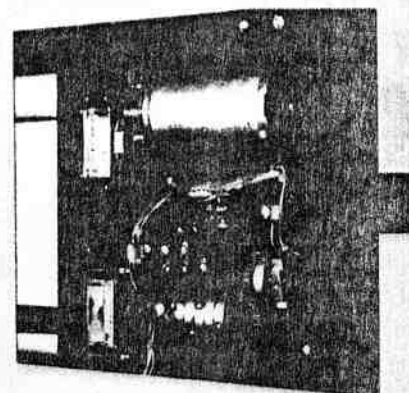
TELEWELD's technology is constantly being upgraded to keep pace with the latest in destination sign developments such as the flip-dot display shown left.



LEFT is a typical control package from an electronically controlled sign. The modular circuitry is completely designed and built by TELEWELD.



The above sign is an electromechanically controlled, automated system incorporating an associated relay logic panel to display one of 15 possible destinations.

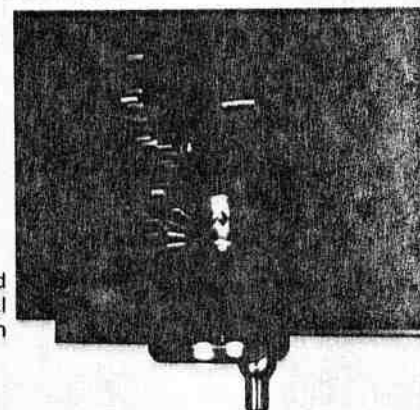


The drive motor and cam switch details of an automated electro-mechanical control are shown above.



Even basic hand crank signs require TELEWELD's innovative design and fabrication as shown by this forty reading end destination sign which incorporates the car marker lights.

Details of the crank and gear mechanism of a typical hand crank sign are shown to the right.



INNOVATORS OF MASS TRANSIT SIGNS SINCE THE TROLLEY

TELEWELD, INC. through its Railway Utility Company Division has been a leading manufacturer of destination signs for the mass transit industry for over 50 years. From the most basic open frame, hand crank signs, to the latest in fully automated systems, TELEWELD has the ability to design and fabricate whatever is required.

Years of experience in working with transit authorities and vehicle builders to satisfy hardware, display, control and interface requirements joined with complete facilities for machining, metal fabrication, silk screening, and printed circuit board assembly qualify TELEWELD as your best source for transit signs.

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