Electric Automobile Charging Stations in New York City and Vicinity

[With Route Maps]

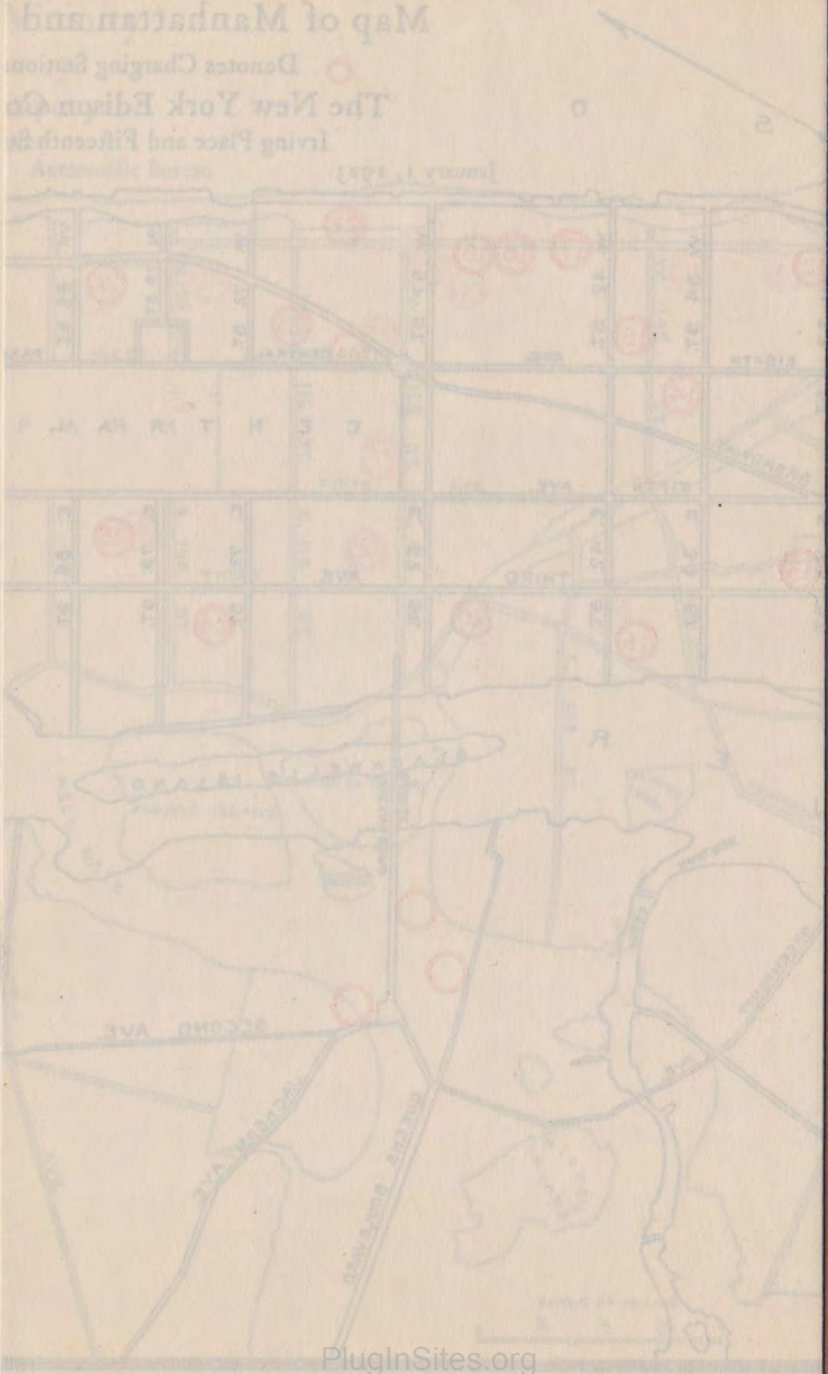
Copies of this book will be sent upon request

January, 1923

The New York Edison Company

Automobile Bureau

Irving Place and Fifteenth Street



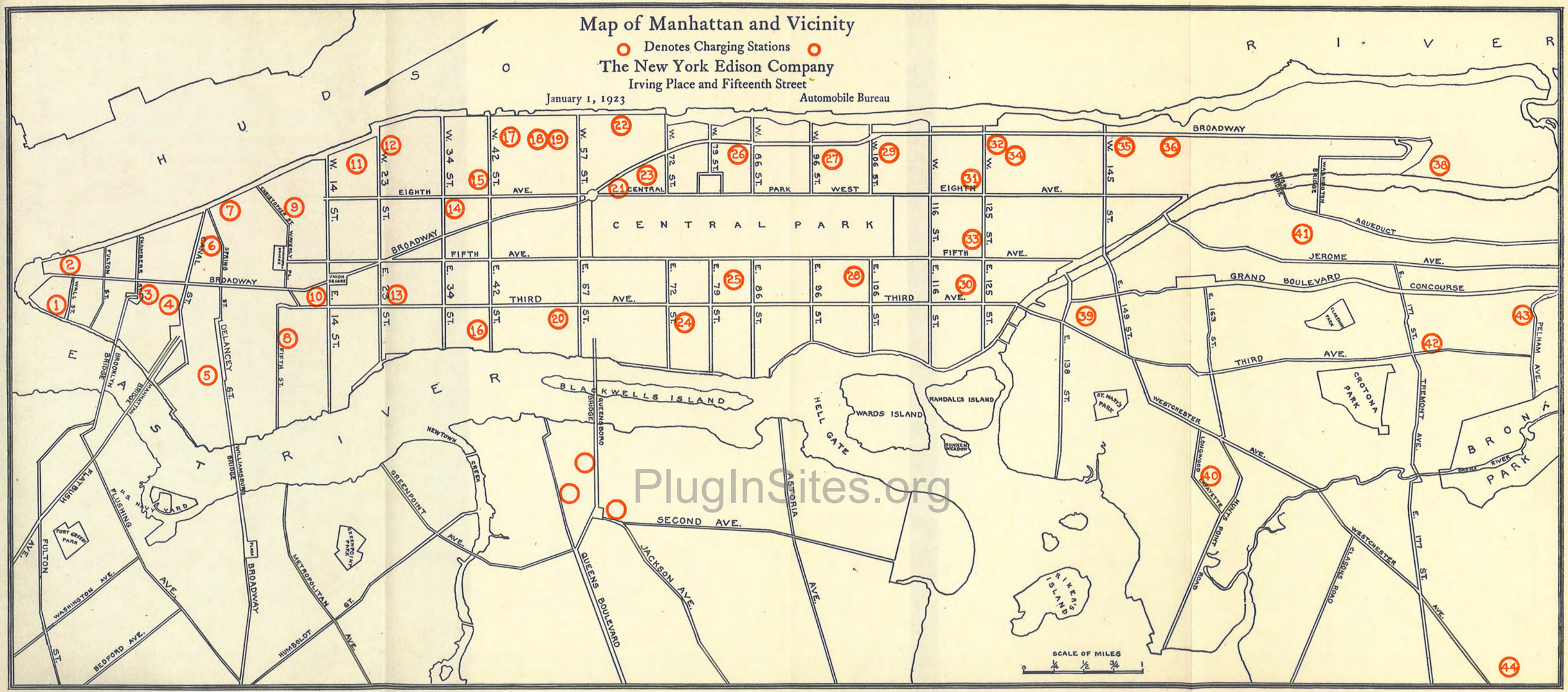
Map of Manhattan and Vicinity

Denotes Charging Stations

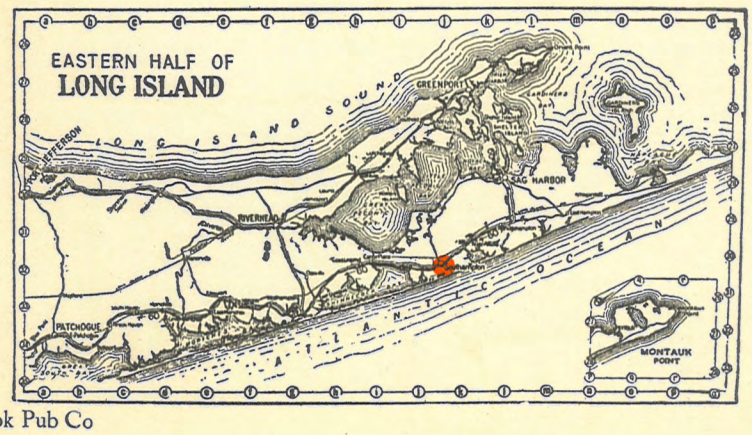
The New York Edison Company

Irving Place and Fifteenth Street

January 1, 1923 — Automobile Bureau



● Denotes charging stations



Courtesy The Automobile Blue Book Pub Co

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January, 1923

The New York Edison Company

Automobile Bureau

Irving Place and Fifteenth Street

Telephone Stuyvesant 5600

THE charging stations listed in this book establish electric vehicle routes between our principal cities and by making use of the facilities these stations offer, the tourist should get the maximum service from his car. Trips between such distant points as Philadelphia, Atlantic City and Buffalo, thus come easily within the capacity of the electric.

It will be noticed that there are two classes of charging stations—public garages and the private garages of electric vehicle owners. While these owners are quite ready to help a fellow-owner in an emergency and will place their charging facilities at his disposal, they do not care to make a regular practice of this business. On the other hand the public garages maintain their electric vehicle equipment as a regular part of the service they offer.

It is suggested, therefore, that those making use of this booklet look to the public charging station before seeking accommodations at the private garage.

The following practice is recommended for alkaline (Edison) batteries:

The battery may be boosted at high rates during brief periods of idleness, thereby materially adding to the charge, provided the temperature of the solution in the cells near the center, or warmest part, of the battery does not rise above 115° Fahrenheit. The following table gives figures which may be used under average conditions, but values that will not cause excessive heating must be determined in each case by experience:

5 minutes at 5 times normal rate
15 minutes at 4 times normal rate
30 minutes at 3 times normal rate
60 minutes at 2 times normal rate

Frothing at the filler opening is an indication that the boosting has been carried too far (if the solution is at the proper height) and the high rate should be discontinued at once.

Boosting

Direct current must be used to charge a storage battery. If alternating current only is available, it must be converted into direct current by a motor-generator set, mercury arc rectifier, or other form of current rectifier.

The charging source should have a voltage equal to 1.85 times the number of cells in series.

Before starting to charge, open the covers of the compartment, if the battery is in one. Temperatures greater than 115° Fahrenheit will shorten the life of a battery. If the temperature of the solution exceeds 115° Fahrenheit, allow the cells to cool.

Specific gravity readings are of no value in determining the state of charge or discharge of an Edison battery, because the specific gravity of the solution does not change during the charge or discharge to any appreciable extent. Such small changes, as may be noted, are entirely due to extreme low or high temperatures, or to the loss of water from the electrolyte caused by either evaporation or electrolysis in operating the cell.

If the extent of the previous discharge is unknown, charge at

the normal rate until the voltmeter reading has remained constant for thirty minutes at a point between 1.80 and 1.90 volts for each cell, according to temperature and electrolyte conditions.

If the battery is totally discharged, recharge at the normal rate for the proper number of hours. If the battery is one-half discharged, recharge at the normal rate for one-half the time, etc.

When an ampere-hour meter is used it should be set to indicate 20% slow while charging. The Meter will then show the correct amount of charge to put in the battery.

With the constant current method of charging, the rheostat should be adjusted, as often as necessary, to keep the current at the normal rate. At each adjustment, set the current a few amperes high, so that it will not drop much below normal.

If necessary, and if the full capacity is not required, a battery may be taken off charge at any time and used.

In an emergency, when time for a normal charge is not available, charging may be done at higher rates than normal, provided there is no frothing and the temperature does not rise above 115° Fahrenheit.

Overcharging

It is a well-known fact that the capacity of Edison batteries increases with use. Best results are obtained from a new battery by overcharging it every two weeks for the first two months and every two months thereafter for six months. Whenever the solution is renewed, the battery should be given an overcharge. If the battery is seldom totally discharged in regular service, it is advisable, at times, to give it an overcharge.

Batteries, which have become sluggish through lack of work, may be restored to normal by overcharging.

Water, or Flushing

Do not allow the level of the solution to drop below the tops of the plates. Never fill higher than the proper level. If filled too high, the solution will be forced out during the charge.

During the charge, some of the water in an Edison battery is driven off as a gas and must be replaced with pure distilled water.

Never use anything but pure distilled water for replenishing,

except only when the solution has been spilled, in which case use Edison Electrolyte.

Distilled water should be kept in a closed container to exclude impurities.

Battery compartments and trays must be kept clean and dry at all times.

To prevent slopping water over and around the cells and to assure filling to the correct height, we recommend the semi-automatic filling apparatus.

Laying Up Battery

If a battery is to be laid up for any length of time be sure the plates are covered by the solution or electrolyte to the proper height.

The battery should not be left in a damp place.

Never empty out the solution and let the battery stand unfilled.

It does not matter what state of charge or discharge the battery is in when laying it up.

When putting a battery in commission go over each cell. See that the plates are properly covered with electrolyte and then overcharge.

Caution

1 Never put lead battery acid into an Edison Battery or use utensils that have been used with acid; you may ruin the battery.

2 Never bring a lighted match or other open flame near a battery.

3 Never lay a tool or any piece of metal on a battery.

4 Always keep the filler caps closed except when necessary to have them open for filling as provided in these instructions.

5 Keep batteries clean and dry externally.

Lead batteries can be boosted in the following manner

The temperature during the boost must never exceed 110 degrees Fahrenheit and should preferably be kept a few degrees below this figure. Gassing should be avoided during the boost.

When the vehicle is equipped with an ampere-hour meter, the boosting rate can be conveniently determined from the following table:

Constant Current Boosting Rates

Ampere Hours Discharged	Time Available for Boosting							
	¼ hour	½ hour	¾ hour	1 hour	1¼ hrs	1½ hrs	1¾ hrs	2 hours
	Amperes	Amperes	Amperes	Amperes	Amperes	Amperes	Amperes	Amperes
10	8	6	5	5	4	4	3	3
20	16	13	11	10	9	8	7	6
30	24	20	17	15	13	12	11	10
40	32	26	23	20	18	16	14	13
50	40	33	28	25	22	20	18	16
60	48	40	34	30	26	24	22	20
70	56	46	40	35	31	28	25	23
80	64	53	45	40	35	32	29	27
90	72	60	51	45	40	36	33	30
100	80	66	57	50	44	40	36	33
110	88	73	63	55	49	44	40	37
120	96	80	68	60	53	48	43	40
130	104	87	74	65	58	52	47	43
140	112	93	80	70	62	56	51	47
150	120	100	86	75	67	60	54	50
160	128	106	91	80	71	64	58	53
170	136	113	97	85	75	68	62	57
180	144	120	103	90	80	72	65	60
190	152	127	108	95	84	76	69	63
200	160	133	114	100	89	80	73	67
210	168	140	120	105	93	84	76	70
220	176	147	126	110	98	88	80	73
230	184	153	131	115	102	92	84	77
240	192	160	137	120	106	96	87	80
250	200	167	143	125	111	100	91	83

Explanation—In the left-hand column, find the figure nearest to the ampere hours discharged from the battery; follow across to the column headed by the available time. The figure at this intersection is the current to be used continuously throughout the charge.

Example—Ampere-hour meter reading, 103 ampere hours discharged; time available for boosting, one hour. Start at 100 in

the left-hand column; follow across to the column headed 1 hour, and find 50, which is the current to be used continuously.

The current must not be continued beyond the time for which the rate is figured, as injurious gassing and heating will result.

When any considerable time is available, and it is convenient to regulate the current at intervals, a greater amount of charge can be put in by dividing the time into several periods and by using the current value for each period successively. If one hour is available for boosting, a greater number of ampere-hours can be put into the battery if quarter-hour rates are used over 15 minute periods, rather than the one-hour rate over the entire period.

The values of current, in the table shown on the preceding page, are determined by using the following formula:

$$\text{Charging current (amperes)} = \frac{\text{ampere hours already discharged}}{1 + \text{hours available for boost}}$$

A method which may be used when the vehicle is not equipped with an ampere-hour meter, but when the vehicle wiring and charging circuit have a capacity sufficient to safely carry current four or five times the normal starting rate of the battery to be boosted, is to place the battery on charge with the rheostat at the "all resistance in" position. When the circuit has been closed, the voltage at the battery terminals is read. The resistance is then cut out until the battery terminal voltage reaches the value given in the table for the appropriate number of cells. The circuit may then be left without further adjustment for an hour or less, and the current will taper off as the voltage of the battery rises.

Number of cells	Voltage at battery terminals
48	110
46	104
44	98
42	92
40	86
38	80

This table is based upon a line voltage of 110-120, and the voltages given are too high for a boost of more than one hour's duration.

The following are a few condensed rules regarding the lead type of battery:

Discharging

While driving on level roads, stop discharge upon reaching the gravity limit or when the voltage drops to 1.70 volts for each cell.

Charging

Charge often enough to keep the battery from reaching the discharge limit. Always charge at rates low enough to keep the cell temperature below 110° Fahrenheit and to avoid gassing until the finishing rate is reached.

Equalizing Charge

Give an equalizing charge every week. This means continuing an ordinary charge, at one-half the finishing rate, until all the cells gas freely and until the specific gravity has not risen during three consecutive half-hour readings.

Replacing Evaporation

The electrolyte must always cover the top of the plates. Once every week inspect, and, if necessary, add pure water to bring the level one quarter inch below the bottom of the filling tube. Never add acid electrolyte, or anything but pure water to the cells to replace evaporation.

Inspection

Near the end of the equalizing charge, inspect all the cells to see that they are gassing evenly.

Caution

Always lift the cover of the battery compartment when charging, as ventilation is necessary.

Do not bring an exposed flame, match, candle, cigar, etc, near the battery when charging or for a short time after.

Never allow metals or impurities of any kind to get into the cells.

An owner should write to the Local Office of the Battery Company for complete instructions covering the battery in each electric truck in his service.

Suggestions to Owners

Battery and truck manufacturers are anxious that the equipment be brought to their service stations for inspection. Wherever this is inconvenient, upon request, an inspection will be made on the premises, without charge.

Don't fail to have your vehicle re-varnished annually, as you will thus avoid the expense of a complete repainting.

Don't permit your truck battery to run out of current for the want of a boost. The New York Edison Company has some thirty (30) emergency charging stations in New York City, where your credit is good.

When traveling through heavy snow, it is advisable to give your battery a boosting charge at noon, to insure a full day's work. Don't forget a full set of anti-skid chains.

To secure the best service from a truck, both chassis and battery should be inspected occasionally. The truck and battery manufacturers will make such inspections free of charge at their respective service stations.

Please notify the Automobile Bureau if at any of these stations you are unable for any reason to secure service. We should also appreciate it if you will inform us of any charging stations not listed in this book

The following is a list of the battery service stations:

The Edison Storage Battery Garage, Inc, 247 West 35th Street
The Exide Battery Depots Inc, 101 West End Avenue
General Lead Batteries Company, 123 West 56th Street
Gould Battery Service Station, 505 West 55th Street
KW Battery Co, Inc, 514 West 53d Street
Philadelphia Storage Battery Company, 645-655 West 43d Street

The following is a list of the various vehicle service stations:

The Commercial Truck Co, 553 West 51st Street
The Lansden Co, 468 Clermont Avenue, Brooklyn
Walker Vehicle Company, Ely Ave & 13th St, Long Island City
Ward Motor Vehicle Co, 141 East 25th Street

Electric vehicles are cheaper to operate in their radius than any other type of vehicle. Keep a careful record of your costs. You can obtain cost system sheets from the following:

The Commercial Vehicle, 239 West 39th Street, New York City
Truck Owners Conference, Mollers Bldg, Chicago, Ill

Ampere Hour Meters

The use of ampere hour meters for charging purposes is advised, both because it avoids overcharging of the battery and consequent gassing, and because it is a great convenience to the driver and owner of the vehicle. Most of the electric truck manufacturers are now equipping their trucks with these meters as a standard part of their equipment because they have found that the "Automatic, Modified, Constant, Potential" system of charging possesses advantages not met with elsewhere.

A circuit breaker automatically controlled by the meter, is installed at the same time as the meter itself, which permits of the charge being automatically stopped when the battery is fully charged and makes it unnecessary to have someone continually watch the battery during the charging process. The function of the meter which is of peculiar assistance to the driver is that it tells him the amount of electricity still left in the battery at any time and thus warns him when it is necessary to boost the battery in order to avoid running out of power, or indicates when a complete charge is needful.

A regular meter inspection service is now maintained in the Metropolitan District by the manufacturers of these meters where entire responsibility for the proper operation of the meters themselves is assumed, in consideration of a moderate yearly payment.

Charging Plugs

In regard to charging plugs, it is suggested that the Anderson Charging Receptacle, Type N, 150 amperes capacity, be adopted as this is of a uniform size and can be universally recommended. Standardization of the charging plugs on all electric trucks will add greatly to the ease of providing adequate charging facilities and will help to simplify this problem for both the garage man and the truck owner.

Suggestions for increasing the usefulness of this booklet are invited. It is particularly requested that the Automobile Bureau of The New York Edison Company be notified of the opening of charging stations where electric vehicles can receive emergency boosting charges.

Typical Garage Rates in New York City

Passenger Cars

Rates for Storing, Washing, Charging, etc.....$60.00 a month

Electric Passenger Car Garages

Electric Garage.....62nd Street & Central Park West
Brunswick Garage.....453-475 West 129th Street

Commercial Cars

The Rates for Storing, Washing, Charging, etc, vary from $50.00 to $100.00 a month, depending upon the size of the truck and the type of battery.

Commercial Car Garages

Exide Garage.....218-226 Spring Street
Wendell Evans Company.....160 West 10th Street
Commercial Truck Service Corp.....524 West 19th Street
Exide Garage.....529-41 West 23rd Street
Exide Garage.....141 East 25th Street
Edison Storage Garage, Inc.....247-51 West 35th Street
Acker, Merrall & Condit Garage.....532 West 46th Street
Commercial Truck Service Corp.....551 West 51st Street
Exide Garage.....220-232 East 55th Street
Electric Garage, The.....Central Park West and 62nd Street
H C F Koch & Co, Inc.....134 West 124th Street
Brunswick Garage, Inc.....453-475 West 129th Street

Electric Vehicle Charging Stations

*Denotes emergency charging station only. Regular charging or garaging is not undertaken at these stations. Other stations are prepared to do both charging and garaging.

New York City

Manhattan

1 *The New York Edison Company.....100 Water Street
50 amperes—120 volts—all hours

2 *The New York Edison Company.....124 Cedar Street
200 amperes—120 volts—all hours

3 *The New York Edison Company.....55 Duane Street
200 amperes—120 volts—all hours

4 *The New York Edison Company.....8 Elizabeth Street
200 amperes—120 volts—all hours

5 *The New York Edison Company.....152 Clinton Street
200 amperes—120 volts—all hours

6 Exide Garage, Downtown Garage.....226 Spring Street
150 amperes—120 volts—all hours—minimum charge 50c

8 *The New York Edison Company....421 East Sixth Street
200 amperes—120 volts—all hours

9 Wendell Evans Company.....160 West 10th Street
100 amperes—220 volts—all hours—full garage service

10 *The New York Edison Company.....115 East 12th Street
200 amperes—120 volts—all hours

11 Commercial Truck Service Corp.....524 West 19th Street
100 amperes—120 volts—all hours—7c a kilowatt hour—minimum charge 50c

12 Exide Garage, West Side Garage...529-41 West 23rd Street
100 amperes—120 volts—all hours—minimum charge 50c

13 Exide Garage, East Side Garage.....141 East 25th Street
100 amperes—125 volts—all hours—minimum charge 50c—full garage service

14 Edison Storage Battery Garage, Inc 247-51 West 35th Street
200 amperes—120 volts—all hours—6c a kilowatt hour—full garage service

15 *The New York Edison Company.....314 West 41st Street
200 amperes—120 volts—all hours

16 *The New York Edison Company 41st Street & First Avenue
200 amperes—120 volts—all hours

17 Acker, Merrall & Condit Company....532 West 46th Street
100 amperes—120 volts—all hours—10c a kilowatt—full garage service

18 Commercial Truck Service Corp.....553 West 51st Street
80 amperes—120 volts—all hours, except Sunday—7c a kilowatt hour—minimum charge 50c

19 *K W Storage Battery Company, Inc 514 West 53rd Street
100 amperes—120 volts—8 a m to 5 p m—7c a kilowatt hour—$1.00 a boost

20 Exide Garage, Uptown Garage....220-232 East 55th Street
100 amperes—120 volts—all hours—minimum charge 50c—full garage service

21 The Electric Garage.....Central Park West & 62nd Street
100 amperes—120 volts—all hours—full garage service—passenger cars and small trucks only

22 *The Electric Storage Battery Company
West End Avenue & 64th Street
100 amperes—120 volts—8 a m to 5 p m—minimum charge 50c

23 *Columbia Storage Warehouse.....149 Columbus Avenue
80 amperes—120 volts—7:30 a m to 5:30 p m
(except Sundays and holidays) 10c a kilowatt hour

24 *The New York Edison Company.....207 East 73rd Street
200 amperes—120 volts—all hours

25 *The New York Edison Company.....123 East 83rd Street
200 amperes—120 volts—all hours

26 *The New York Edison Company....211 West 84th Street
200 amperes—120 volts—all hours

27 *The United Electric Light & Power Company
115-117 West 97th Street
100 amperes—all hours

28 *The New York Edison Company...115 East 103rd Street
200 amperes—120 volts—all hours

29 *The New York Edison Company...158 West 108th Street
60 amperes—120 volts—all hours

30 *The New York Edison Company....128 East 121st Street
200 amperes—120 volts—all hours

31 *The New York Edison Company...259 West 123rd Street
200 amperes—120 volts—all hours

32 *The Thomas J Stewart Company.....14 Moylon Place
80 amperes—120 volts—8 a m to 5 p m—minimum charge $1.00

33 H C F Koch & Co, Inc.....134 West 124th Street
100 amperes—120 volts—all hours—full service

34 Brunswick Garage, Inc.....453-475 West 129th Street
100 amperes—220 volts—all hours—minimum charge $1.50—
7c a kilowatt hour

35 *The United Electric Light & Power Company
514 West 147th Street
50 amperes—120 volts—8:30 a m to 5 p m

36 *Audubon Storage Warehouse....1926 Amsterdam Avenue
(near 155th Street)
50 amperes—220 volts—8 a m to 4 p m—10c a kilowatt hour

38 *The United Electric Light & Power Co...201st Street and
Harlem River
100 amperes—120 volts—all hours

Bronx

39 *The New York Edison Company..Rider Ave & 140th Street
100 amperes—120 volts—all hours

40 *The New York Edison Company....Lafayette Avenue bet
Garrison & Whitlock Avenues
200 amperes—120 volts—all hours

41 *The New York Edison Company.....1349 Inwood Avenue
(170th Street)
4–200 amperes—120 volts—all hours

42 *The New York Edison Company... 177th Street, Tremont
and Monterey Avenues
200 amperes—120 volts—9 a m–5 p m (except Sunday)

43 *The New York Edison Company..Park Ave & 189th Street
200 amperes—120 volts—all hours

44 *Bronx Gas & Electric Company....43 Westchester Square
80 amperes—125 volts—8 a m to 6 p m (daily)

Brooklyn

Wright Electric Garage.....80 Clymer Street
200 amperes—120 volts—all hours—10c a kilowatt hour

*Brooklyn Edison Co Inc..... Rodney & Ainslie Streets
180 amperes—125 volts—all hours

*Brooklyn Edison Co Inc.....1171 Myrtle Avenue
180 amperes—125 volts—all hours

Clinton Garage.....8-14 Clinton Street
60 amperes—115 volts—all hours—minimum charge $1.00—7c a kilowatt hour—pleasure cars and small commercials only

*Brooklyn Edison Co Inc..... 360 Pearl Street
60 amperes—125 volts—9 a m to 5:30 p m (except Sunday)

Meyer's Garage.....Wyckoff Avenue & Cooper Street
100 amperes—120 volts—all hours—minimum charge $1.00
Note: Will open about May 1, 1923

*Meyer's Garage.....389-391 Flushing Avenue
90 amperes—120 volts—all hours—minimum charge $1.00

*Paul Cutler..... 180-2 Classon Avenue
300 amperes—110 volts—all hours—$1.50 a boost

*Brooklyn Edison Co Inc.....5-13 Quincy Street
100 amperes—125 volts—all hours

*Brooklyn Edison Co Inc.....1265 Atlantic Avenue
180 amperes—125 volts—all hours

*Cushman's Sons Inc.....1692 Atlantic Avenue
200 amperes—125 volts—all hours

Brooklyn Electric Garage.....342 Flatbush Avenue
100 amperes—120 volts—all hours—10c a kilowatt hour—minimum charge 75c

*Brooklyn Edison Co Inc.....580 Carroll Street
180 amperes—125 volts—all hours

St Edwards Commercial Garage.....50 St Edwards Street
60 amperes—125 volts—all hours—$1.50 a boost

*The Flatbush Gas Company.....321-369 Clarkson Street
45 amperes—120 volts—10 a m to 4 p m—minimum charge $1.50 (emergency only)

*Brooklyn Fire Brick Works.....87 Van Dyke Street
200 amperes—115 volts—5 p m to 7 a m—minimum charge $1.50

*Sachter's Ice Cream Co.....777 Kent Avenue
70 amperes—110 volts—all hours—minimum charge $1.00—
10c a kilowatt hour

*Bush Terminal Company.....41st Street & First Avenue
150 amperes—125 volts—all hours (except Sunday and holidays)—
10c a kilowatt hour

Midway Garage.....2202 Albermarle Road
50 amperes—rates $60.00 monthly

*A Enteman Inc.....654 to 670—72nd Street
100 amperes—120 volts—$1.00 a boost—hours 8 a m to 5 p m

*Consumer's Pie Baking Co .....518 Atlantic Avenue
90 amperes—120 volts—$1.00 a boost—hours 8 a m to 12 noon during week days

Coney Island New York 16 Miles

*Brooklyn Edison Co Inc West 12th Street & Railroad Avenue
180 amperes—125 volts—all hours

*Brooklyn Edison Co Inc.....Surf Ave near West 14th Street
60 amperes—125 volts—9 a m to 5:30 p m (except Sunday)

Charging Stations Outside of New York City

Distance Reckoned from Columbus Circle

Albany **New York** **148 Miles**

Alfred Preston, 418 Hamilton Street
40 amperes—7 a m to 6 p m (except Sundays and holidays)—
minimum charge $1.00—10c a kilowatt hour

Amsterdam **New York** **178 Miles**

J & M Electric Company, 25 Main Street
30 amperes—200 volts—all hours

Asbury Park **New Jersey** **58 Miles**

Proctor-Jones Electric Co, 219 Cookman Avenue
20 amperes—all hours—$2.00 a boost

Atlantic City **New Jersey** **134 Miles**

Traymore Garage
60 amperes—120 volts—all hours

The Breakers Garage
160 amperes—125 volts—all hours—$3.50 a boost

Commercial Truck Service Corp
117 North Presbyterian Avenue
160 amperes—125 volts—all hours—$3.50 a boost

Auburn **New York** **343 Miles**

Leonard's Garage, 54 Water Street
Full charging facilities—Milburn Detroit Agency

Baltimore **Maryland** **198 Miles**

Commercial Truck Service Company, 7 North Paca Street
Full garage service—all hours

*Consolidated Gas & Electric Light & Power Company,
30 South Eutaw Street
Full garage service—all hours

Binghampton New York 188 Miles

The Binghamton Marko Battery Co, 172 State Street
50 amperes—120 volts—rectifier, full garage service

Boston Massachusetts 245 Miles

City Electric Garage, 880 Commercial Street
800 amperes—120 volts—all hours—75c a boost

Commercial Truck Co, 179 West First Street
Full Service

The Edison Storage Battery Supply Company
100 amperes—110 volts—8:30 a m to 5 p m—6c a kilowatt hour

The Electric Truck Service Inc, 75 West Dedham Street
160 amperes—all hours

N Rommelfanger, 398-410 Newbury Street
90 amperes—110-220 volts—all hours (except Sunday)—50c a charge—
7c a kilowatt hour

Walker Vehicle Co, 592 Commonwealth Avenue
100 amperes—120 volts—8:00 a m to 5 p m

Bridgeport Connecticut 57 Miles

General Motors Service & Truck Co, Inc,
125 Holland Avenue
200 amperes—120 volts—all hours—10c a kilowatt hour—minimum charge $1.00

Bronxville New York 16 Miles

The Bronxville Garage Company
40 amperes—110 volts—all hours—10c a kilowatt hour, $1.00 a boost—
minimum charge 50c

Buffalo New York 460 Miles

*Wm M Coon, 1140 Main Street
75 amperes—120 volts—all hours

C-T Electric Service, 42 Goodrich Street
Full service

Concord Massachusetts 238 Miles

*Municipal Electric Light Plant
50 amperes—110 volts—8 a m to 5 p m—8c a kilowatt hour—$2.00 a boost

Cohasset Massachusetts 271 Miles

*The Electric Light & Power Company of Abington & Rockland

90 amperes—110 volts—8c a kilowatt hour—7:30 a m to 5:00 p m

Danbury Connecticut 62 Miles

*The Lansden Company

75 amperes—120 volts—5c a kilowatt hour—7:30 a m to 5 p m—other hours by making arrangements in advance

Edgewater New Jersey 5 Miles

*Warner Sugar Refining Company

100 amperes—125 volts—7 a m to 6 p m (except Sunday)

Elizabeth New Jersey 10 Miles (via Staten Island) 17 Miles (via Newark)

*Exide Service, No 12 Westfield Avenue

35 ampere rect—220 volts—24 hour service if left between 8 a m and 6 p m

Flushing Long Island 8 Miles

*New York & Queens Electric Light & Power Co, Collins Place

300 amperes—125 volts—all hours—50c plus 6c a kilowatt hour

Freeport Long Island 24 Miles

L Streck & Son, 52 Merrick Road

30 amperes—110 volts—12c a kilowatt hour

Glen Cove Long Island 28 Miles

*Edward R Ladew Company, Inc

30 amperes—7:00 a m to 9:00 p m—minimum charge $1.50

Gloversville New York 193 Miles

J & M Electric Company, 12 Church Street

30 amperes—220 volts—all hours

Haddonfield New Jersey 98 Miles

*Haddon Ice & Coal Company, Redman Avenue & Pennsylvania R R

30 amperes—110 volts—all hours (emergency) $1.00 a boost

Hartford Connecticut 113 Miles

Hartford Electric Light Company, 380 Sheldon Street
300 amperes—250 volts—all hours

Hempstead Long Island 17 Miles

*J H Weimer Battery & Engineering Co, 25 Greenwich Street
75 amperes—120 volts—8:30 a m to 6 p m—10c a kilowatt hour—daily service (except Sunday)—$1.50 a boost

Hoboken New Jersey

Ferguson Brothers, Eight & Jackson Streets
100 amperes—120 volts—7 a m to 5 p m (except Sundays)
minimum charge $1.00

Holyoke Massachusetts 150 Miles

Peltier's Garage, 111 Front Street
45 amperes—115 volts—all hours

Irvington New Jersey 16 Miles

*The J T Castle's Ice Cream Company, 19-49 Loretta Avenue
Unlimited—115 volts—all hours—$1.00 a boost

Jamaica Long Island 11 Miles

*New York & Queens Light & Power Company,
Van Wyck Avenue & Carll Street
280 amperes—125 volts—all hours—50c plus 6c a kilowatt hour

Jersey City New Jersey 7 Miles

*The Thomas J Stewart Co, Erie & 5th Streets
120 amperes—115 volts—all hours—10c a kilowatt hour—
minimum charge $1.00

Lakewood New Jersey 66 Miles

*Lakewood & Coast Electric Company
125 amperes—150 volts—all hours—$2.00 a boost

Langhorne Pennsylvania 72 Miles

*Langhorne Electric & Power Company
60 amperes—110 volts—all hours—6c a kilowatt hour

Livingston Staten Island 6 Miles

*Richmond Light & Railroad Company,
Richmond Terrace & Bard Avenue
100 amperes—175 volts—7 a m to 6 p m—7½c a kilowatt hour—minimum charge $1.50

Long Island City New York 2 Miles

O B Electric Vehicles, Inc, Harris Avenue & Sherman Street
60 amperes—120 volts—all hours—6c a kilowatt hour

Walker Vehicle Company, Ely Avenue & 13th Street,
150 amperes—120 volts—all hours—7c a kilowatt hour—minimum charge $1.00
hours 8:30 a m to 6 p m (except Sunday)

*New York & Queens Electric Light & Power Company,
72 Radde Street
200 amperes—125 volts—5 p m to 7 a m—50c plus 6c a kilowatt hour

Lowell Massachusetts 272 Miles

*Lowell Electric Light Corporation, 103-107 Perry Street
100 amperes—8 a m to 1 p m (excepting Sundays and holidays)

Lynn Massachusetts 260 Miles

*Lynn Gas & Electric Company,
Broad opposite Shepard Street
100 amperes—125 volts—5c a kilowatt hour—all hours—50c a boost

Maspeth Long Island 5 Miles

*New York & Queens Electric Light & Power Company,
2227 Flushing Avenue
160 amperes—125 volts—5 p m to 7 a m—50c plus 6c a kilowatt hour

Mt. Vernon New York 14 Miles

Mt Vernon Charging Station, 43-5 North Third Avenue
50 amperes—220 volts—8 a m to 6 p m (except Sunday) minimum charge $1.00—10c a killowatt hour

*The Ward Motor Vehicle Company,
South Fulton Avenue, near East 6th Street
100 amperes—125 volts—8 a m to 5 p m (except Sundays and holidays)—10c a kilowatt hour—minimum charge $1.00

Newark New Jersey 14 Miles

*The Central Stamping Company, 591 Ferry Street
75 amperes—110 volts—8 a m to 4:30 p m—10c a kilowatt hour—minimum charge $2.00

*L Bamberger & Company,
Market, Halsey and Washington Streets
65 amperes—120 volts—9 a m to 11:30 a m and from 2 p m to 5 p m

*Columbian Laundry, 278-88 South 12th Street
35 amperes—120 volts—8:30 a m to 4:30 p m (emergency)

Passaic Transportation Company, 57 Freeman Street
100 amperes—all hours—$1.50 a boost

Newburgh New York 63 Miles

J G Metzer Inc, 99 Broadway Inc
30 amperes—125 volts—hours 7:30 a m to 6 p m—15c a kilowatt hour—minimum charge $1.25

New Bedford Massachusetts 215 Miles

New Bedford Gas & Edison Light Company
60 amperes—115 volts—all hours—7c a kilowatt hour

New Brighton New York 8 Miles

*Richmond Light and Railroad Company, Terminal Building
100 amperes—125 volts 7 a m to 6 p m—7½c a kilowatt hour—minimum charge $1.50

New Brunswick New Jersey 37 Miles

*Middlesex Transportation Co (Johnson & Johnson)
200 amperes—125 volts—10c a kilowatt hour—minimum charge $2.00 (emergency)—all hours except Saturday 12 noon to Monday 7 a m

New Haven Connecticut 75 Miles

The Holcomb Company, 105 Goffe Street
550 amperes—115 volts—all hours—8c a kilowatt hour—minimum charge $1.25

Kirk's Garage, 213-19 Crown Street
100 amperes—115 volts—all hours—10c a kilowatt hour—minimum charge $1.50

New London Connecticut 129 Miles

*The A C Swan Company, 126 Main Street
Full charging facilities—daytime only (except Sunday)

*The Autoletric Company, Shaw Street
25 amperes—110 volts—8:00 a m to 6:00 p m daily (except Sunday)

New Rochelle New York 18 Miles

P W Irvine, 73 Centre Street
35 amperes—120 volts—8 a m to 6 p m—minimum charge $1.00 (Willard Battery Service)

Newport Rhode Island 186 Miles

Bostel's Garage (Raulang Agency),
54-56 East Bowery Street
50 amperes—240 volts—all hours—minimum charge $1.00—15c a kilowatt hour

Norristown Pennsylvania 101 Miles

*Stritzinger's Bakery, Main & Markley Streets
60 amperes—130 volts (emergency)—all hours—10c a kilowatt hour—$1.50 a boost

North Abington Massachusetts 255 Miles

*The Electric Light & Power Company of Abington & Rockland
100 amperes—125 volts—minimum charge $1.00—7:30 a m to 5:00 p m—week days only—10½c a kilowatt hour

Orange New Jersey 13 Miles

*Edison Storage Battery Company,
Valley Road & Lakeside Avenue
100 amperes—120 volts—5c a kilowatt hour—all hours

Ossining New York 29 Miles

Ossining Garage, 21 Croton Avenue
35 amperes—110 volts—all hours—15c a kilowatt hour—minimum charge $1.50

Perth Amboy New Jersey 21 Miles

*Castle's Ice Cream Company,
Smith, Gifford & Stockton Streets
100 amperes—115 volts—$1.00 a boost—Summer, day and night—Winter, days only

Philadelphia, Pennsylvania and Vicinity 98 Miles

Philadelphia Pennsylvania 98 miles

Commercial Truck Service Corp, Franklin and Vine Streets
150 amperes—120 volts—all hours—by the kilowatt hour—minimum charge 50c

*Commercial Truck Company, Rising Sun and Hunting Park Avenues
150 amperes—120 volts—7 a m to 5 p m—minimum charge 50c

*Commercial Truck Service Corporation, 2001 Hunting Park Avenue
60 amperes—120 volts—7 a m to 5 p m—minimum charge 50c

Commercial Truck Company, Tasker, below Water Street
60 amperes—125 volts—7 a m to 5 p m—minimum charge 50c

*Chestnut Hill Motor Company, Chestnut Avenue and Bethlehem Pike
30 amperes—110 volts—all hours—12c a kilowatt hour—minimum charge $1.50

Overbrook Garage, 2099 North 63rd Street
30 amperes—90 volts—all hours—minimum charge 75c—7c a kilowatt hour

Wanamaker Garage, 23rd and Walnut Streets
150 amperes—all hours—6c a kilowatt hour

Commercial Truck Company, Girard Avenue, east of 27th Street
150 amperes—120 volts—all hours—by the kilowatt hour—minimum charge 50c

*The Electric Storage Battery Company, 671-73 N Broad St
100 amperes—110 volts—8 a m to 5:30 p m—$1.00 a boost—6c a kilowatt hour

*Carlisle & Doughty, Inc, 2530 North Broad Street
200 amperes—150 volts—7 a m to 6 p m—minimum charge 50c—6c a kilowatt hour

Germantown Pennsylvania

*The Philadelphia Electric Company, Armat and Lena Streets
160 amperes—125 volts—6c a kilowatt hour—minimum charge 50c—all hours

Tocony Pennsylvania

*The Philadelphia Electric Company, Delaware Ave and Robbins Street
250 amperes—120 volts—6c a kilowatt hour—minimum charge 50c—all hours

B & M Pennsylvania

*The Philadelphia Electric Company, 115 Bala Avenue
Bala, Pa
30 amperes—115 volts—6c a kilowatt hour—minimum charge 50c—daytime only

Folsom Pennsylvania

*The Philadelphia Electric Company, 2nd and Tasker Streets
40 amperes—115 volts—6c a kilowatt hour—minimum charge 50c—all hours

Chestnut Hill Pennsylvania

*The Philadelphia Electric Company, Germantown and
Moreland Avenues
40 amperes—115 volts—6c a kilowatt hour—minimum charge 50c—
night time only

Paschall Pennsylvania

*The Philadelphia Electric Company, 65th Street and
Pachall Avenue
250 amperes—125 volts—6c a kilowatt hour—minimum charge 50c—all hours

Filbert Pennsylvania

*The Philadelphia Electric Company, 3946 Filbert Street
40 amperes—115 volts—6c a kilowatt hour—minimum charge 50c—all hours

*The Philadelphia Electric Company, Grays Ferry Road
and Carpenter Street
40 amperes—115 volts—6c a kilowatt hour—minimum charge 50c—all hours

*The Philadelphia Electric Company, N W cor 23rd and
Market Streets
100 amperes—120 volts—6c a kilowatt hour—minimum charge 50c—daytime only

*The Philadelphia Electric Company, 17th and Clearfield Sts
100 amperes—120 volts—6c a kilowatt hour—minimum charge 50c—night
time only

Chester Pennsylvania

*Delaware County Electric Company, 515 Market Street
100 amperes—120 volts—6c a kilowatt hour—minimum charge 50c—all hours

Lansdowne Pennsylvania

*Delaware County Electric Company, Bartram Avenue,
West of Union Avenue
40 amperes—175 volts—6c a kilowatt hour—minimum charge 50c—daytime only

Marcus Hook **Pennsylvania**

*Delaware County Electric Company, Post Rd and Railroad
40 amperes—120 volts—6c a kilowatt hour—minimum charge 50c—all hours

Media **Pennsylvania**

*Delaware County Electric Company, Park Avenue and P B & W RR
40 amperes—175 volts—6c a kilowatt hour—minimum charge 50c—all hours

Pittsfield **Massachusetts** **160 Miles**

*The Pittsfield Electric Company, Eagle Square
60 amperes—125 volts—all hours—50c plus 4c a kilowatt hour

Plainfield **New Jersey** **27 Miles**

Laing Machine Auto Repair Company, 410 Sycamore St
30 amperes—220 volts—17c a kilowatt hour—8 a m to 6 p m

*Spicer Manufacturing Company, South Plainfield
100 amperes—110 volts 7 a m to 5 p m (except Saturday and Sunday)

Point Pleasant **New Jersey** **77 Miles**

*Lakewood and Coast Electric Company
40 amperes—150 volts—$2.00 a boost—8 a m to 4:30 p m

Port Jefferson **Long Island** **58 Miles**

Roscoe R Loper
30 amperes—110 volts—13c a kilowatt hour—8 a m to 8 p m—by the kilowatt hour

Poughkeepsie **New York** **73 Miles**

Pease Electric Service, New Market Street
40 amperes—120 volts—15c a kilowatt hour—minimum charge $1.25—7:30 a m to 5:30 p m

Revere **Massachusetts** **250 Miles**

*Suburban Gas & Electric Company, 150 Beach Street
100 amperes—110 volts—all hours—minimum charge $1.00—11c a kilowatt hour

Richmond Hill **New York** **10 Miles**

Columbia Garage, 121st Street & Jamaica Avenue
80 amperes—120 volts—50c plus 7c a kilowatt hour—all hours

Rochester **New York** **380 Miles**

J Lawrence Hill Garage, Plymouth Avenue
75 amperes—220 volts—all hours—6c a kilowatt hour—minimum charge 35c

Sager's Electric Station, 340-360 Culver Road
100 amperes—120 volts—all hours—minimum charge $1.50

Henry J Schneider Co, 30 Carlton Street
50 amperes—130 volts—all hours (except Sunday)—full garage service

Rome **New York** **257 Miles**

*J & M Electric Company, 127 North Washington Street
30 amperes—8 a m to 6 p m—Saturdays 8 a m to 9 p m—minimum charge $1.25 (emergency only)

Roslyn **Long Island** **22 Miles**

*Nassau Light & Power Company,
Pryor's Road, between Roslyn & Willis Avenues
60 amperes—80 volts—12c a kilowatt hour

Schenectady **New York** **163 Miles**

*Adirondack Power & Light Corporation, 325 Broadway
50 amperes—110 volts—7 a m to 2 a m—minimum charge $1.50—5c a kilowatt hour

Southampton **Long Island** **96 Miles**

Adolph Guldi, Main Street
60 amperes—110 volts—8 a m to 5 p m—also over-night charges—8c a kilowatt hour

South Norwalk **Connecticut** **42 Miles**

*The South Norwalk Electric Works, State Street
50 amperes—220 volts—all hours—5c a kilowatt hour—minimum charge $1.35

Springfield **Massachusetts** **140 Miles**

Electric Vehicle Company, 753 Main Street
100 amperes—130 volts—all hours—boosts 75c plus 8c a kilowatt hour

Stamford **Connecticut** **35 Miles**

Stamford Gas & Electric Co, Atlantic & South Streets
150 amperes—175 volts—1c an ampere hour—minimum charge $1.00 all hours—full garage service only for commercial cars

Summit **New Jersey** **23 Miles**

Nahr & Thomason, Inc, 172 Park Avenue
40 amperes—220 volts—all hours—$1.50 a boost—8 a m to 6 p m

Syracuse **New York** **293 Miles**

Flagg Storage Warehouse Company, Corner Canal and Townsend Streets
100 amperes—120 volts—hours 7 a m to 6 p m

Tompkinsville **Staten Island** **8 Miles**

*Richmond Light & Railroad Co, Brook & Jersey Streets
75 amperes—125 volts—all hours—7½c a kilowatt hour—minimum charge $1.50

Torrington **Connecticut** **102 Miles**

*Torrington Electric Light Company, Franklin Street
30 amperes—120 volts—all hours

Trenton **New Jersey** **62 Miles**

Brock's Garage, Inc, Canal Street at State Street
100 amperes—220 volts—all hours—6c a kilowatt hour

Tuxedo **New York** **38 Miles**

Garage Company of Tuxedo Park
30 amperes—120 volts—8 a m to 6 p m—minimum charge $1.00—15c a kilowatt hour

Utica **New York** **244 Miles**

J & M Electric Company, 26-30 Bank Place
30 amperes—220 volts—all hours

Schiller Electric Garage, Noyes and Francis Streets
150 amperes—all hours—minimum charge 75c

Washington **D C** **238 Miles**

Sterrett & Fleming, 2155 Champlain Street
Full garage service—all hours

C-T Service Corporation, 1358 D Street, N W
Truck car service only—all hours—115 volts—100 amperes—6c a kilowatt hour

Dupont Garage, 2020 M Street, N W
Passenger car service only—all hours

Kalorama Garage, 16th & Meridian Street
Passenger car service only—all hours

Emerson & Orme, 1620 M Street, N W
Passenger car service only—all hours

Washington New Jersey 70 Miles

*Eckel's Garage, 217-23 West Washington Avenue
25 amperes—120 volts—hours daytime only—12c a kilowatt hour

Westfield Massachusetts 150 Miles

Park Square Garage
50 amperes—125 volts—all hours

Westfield New Jersey (via Staten Island 17 Miles)
(via Newark 24 Miles)

*Peter J Windfeldt, 120 East Broad Street
Emergency only

DISTANCES IN NEW YORK CITY

Battery to Rector Street	¼ Mile
" " Fulton Street	½ "
" " City Hall	¾ "
" " Leonard Street	1 "
" " Canal Street	1¼ Miles
" " Spring Street	1½ "
" " East 4th Street	2 "
" " " 14th Street	2½ "
" " " 24th Street	3 "
" " " 34th Street	3½ "
" " " 44th Street	4 "
" " " 54th Street	4½ "
" " " 63d Street	5 "
" " " 73d Street	5½ "
" " " 83d Street	6 "
" " " 93d Street	6½ "
" " " 102d Street	7 "
" " " 112th Street	7½ "
" " " 121st Street	8 "
" " " 133d Street	8½ "
" " " 144th Street	9 "
" " " 154th Street	9½ "
" " " 164th Street	10 "
" " " 168th Street	10½ "
" " " 172d Street	11 "
" " " Tremont Avenue	11½ "
" " " 182d Street	12 "
" " " Fordham Road	12½ "
" " " 199th Street	13 "
" " " 205th Street	13½ "
" " Williamsbridge Station	14 "
" " Jerome and Mt Vernon Avenues	14½ "
" " Mt Vernon Avenue and 237th Street	15 "
" " City Line	15⅜ "

CROSSTOWN DISTANCES IN MANHATTAN

At Battery Place	½ Mile
At Fulton Street	¾ "
At Chambers Street	1¾ Miles
At Grand Street	2⅛ "
At Houston Street	2⅛ "
At 14th Street	2⅜ "
At 23d Street	2⅜ "
At Inwood	¾ Mile

From 23d Street northward to 125th Street, the width of the Island averages from 2 to 2¼ miles.