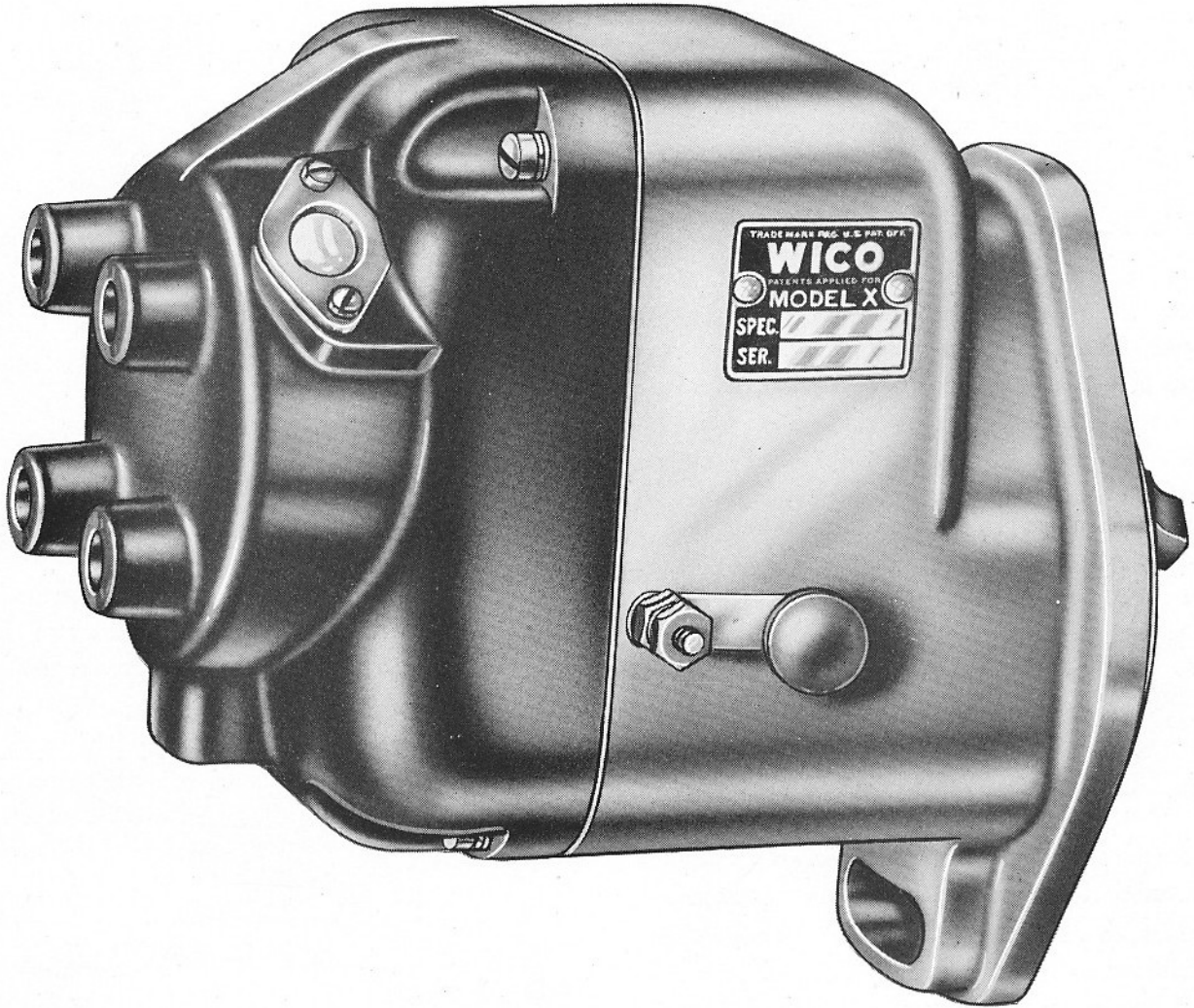


SERVICE PARTS LIST AND BRIEF INSTRUCTIONS

WICO SERIES XH MAGNETOS



WICO ELECTRIC COMPANY

WEST SPRINGFIELD, MASSACHUSETTS

BRIEF INSTRUCTIONS

INSTALLATION

When installing the model XH or XHG WICO Magneto on a base mounted application, care should be taken to see that there is proper alignment between the drive members and lugs of the magneto drive cup. Before tightening the screws firmly, this alignment should be checked by turning over the motor, at the same time ascertaining that the float member has sufficient play endwise during each turn of the cycle. Care should also be taken to be sure that the screws are short enough so that they are clamping the magneto down and not just bottoming in the tapped holes of the magneto.

TIMING TO IMPULSE SPARK

When the impulse coupling is to be used in timing the magneto to the engine, and in the absence of other information from the engine manufacturer, first turn the magneto shaft in the direction opposite to the rotation of the magneto until the white timing mark on the distributor rotor is in view through the distributor cap window. Continue to turn slowly until the impulse can be engaged. Then turn the magneto shaft in the direction of rotation until the impulse has just tripped. Turn the engine over to top dead center on No. 1 cylinder on the compression stroke and couple the magneto to the engine. Connect the number 1 distributor cap tower to the spark plug on the number 1 cylinder and connect the other leads in the order of engine firing.

TIMING TO ADVANCE SPARK

Where the engine flywheel is marked with the position of advance or running spark, usually designated by IGN, a different procedure is followed: Turn the engine over until the advance spark mark on the flywheel is correctly located on the compression stroke of No. 1 cylinder. Turn the magneto shaft in the direction opposite to its rotation until the white timing mark on the distributor arm is visible in the timing window on the distributor cap. Turn the magneto drive lugs slightly until they line up with the corresponding drive slots on the engine and couple the magneto to the engine. Connect the distributor cap tower marked No. 1 to the spark plug on No. 1 engine cylinder and connect the other leads in order of engine firing.

LUBRICATION

The only lubricating point in the magneto is the cam wiper felt, 5077. This felt, which lubricates the breaker arm at point of contact with the cam, should be replaced whenever it is necessary to replace the breaker contacts.

IMPORTANT

Incorrectly adjusted spark plug gaps cause magneto failure more frequently than any other condition.

Spark plugs should be inspected at frequent intervals, the size of the gap should be carefully checked and adjusted and the plugs thoroughly cleaned.

All oil, grease, and dirt should frequently be wiped off the magneto, lead wires, and spark plug insulators. Keeping these parts clean and the spark plugs properly adjusted will improve the engine performance and at the same time will prolong the life of the magneto.

DISTRIBUTOR CAP AND ARM

On XH magnetos the distributor cap may be removed by loosening the screws, 5622, which hold it in place. The distributor arm can then be removed from the shaft. When replacing the distributor arm be sure that the flat inside of the arm is lined up with the flat on the shaft.

On XHG magnetos the distributor cap is removed in the same manner as described above. After the cap has been removed the distributor arm may be pulled off the bridge. When replacing the arm make sure the timing marks on the distributor arm and the pinion gear are in line.

BREAKER CONTACTS-REPLACEMENT AND ADJUSTMENT (ON MODEL XH MAGNETOS)

The breaker compartment is separated from the distributor compartment by a composition breaker cover, 5628. Removing this cover exposes the breaker contacts.

The breaker contacts should be adjusted to .015" when fully opened. To adjust the contacts, loosen the two clamp screws, 5900, enough so that the contact plate can be moved.

BRIEF INSTRUCTIONS

Insert the end of a small screw driver in the adjusting slot and open or close the contacts by moving the plate until the opening is .015", measuring with a feeler gauge of that thickness, tighten the two clamp screws.

To replace the contacts remove the breaker spring clamp screw, 6017, the breaker arm lock and washer, 3219, and 4210, then lift the breaker arm from its pivot. Remove the spacing washer, 5717, and the two breaker plate clamp screws, 5900. The breaker plate can then be removed.

If the contacts need replacing it is recommended that both the fixed contact and the breaker arm be replaced at the same time, using replacement breaker set X5996.

After assembly the contacts should be adjusted as described above. The contacts should be kept clean at all times. Lacquer thinner is an ideal cleaner for this purpose. Use WICO tool S-5449, to adjust the alignment of the contacts so that both surfaces meet squarely.

CONDENSER

To remove the condenser, X5614, first disconnect the condenser lead by removing the breaker arm spring screw, 6017, then remove the two condenser clamp screws, 5411, and the condenser clamp 5532. When replacing the condenser make sure it is properly placed

between the two locating bosses and that the clamp screws are securely tightened.

COIL AND COIL CORE

The coil and coil core must be removed from the magneto housing as a unit. After the distributor cap, distributor arm, and breaker shield have been removed and the primary wire disconnected from the breaker arm spring terminal by removing screw 6017, take out the two coil core clamp screws, 5411, and remove the clamps, 5633. The coil and core can then be pulled from the housing. When replacing this group make sure that the bare primary wire is connected under the core clamp screw and that the insulated wire is connected to the breaker arm spring terminal.

REMOVAL OF COIL FROM CORE

The coil X5700, is held tight on the core, X5524, by two wedges, 10383. It will be necessary to press against the coil core with considerable force to remove it from the coil. The coil should be supported in such a way that there is no danger of the primary of the coil being pushed out of the secondary.

When replacing the coil on the coil core, slide it on then press in the two coil wedges, one on each end, until they are flush with the primary of the coil.

PRICE INFORMATION

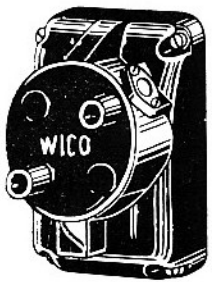
MODEL XH WICO MAGNETOS

These prices include built-in impulse coupling, stop button, or connection for remote control. Cables will be furnished where lengths are on factory specifications or when lengths are specified on the order.	TYPE	NO CYLINDERS	FIRING ANGLE	LIST PRICES WITH STANDARD IMPULSE	Units furnished with adjustable impulse coupling similar to that on Spec. XH-19, XH-20, XH-22, add \$1.60 to the list price.
	XH	1	360°	\$28.00	
XH	2	180°	30.00		
XH	4	90°	32.50		
XHG	2	360°	33.50		
XHG	4	180°	33.50		
XHG	6	180°	41.50		

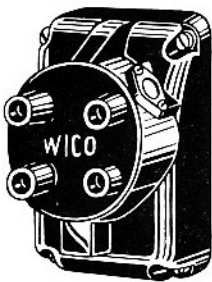
Prices apply to Base or Flange mounted magnetos with or without Dust Cover, but without Drive Gears, Float members or Engine members.

BRIEF INSTRUCTIONS

DISTRIBUTOR CAP AND COVER UNITS



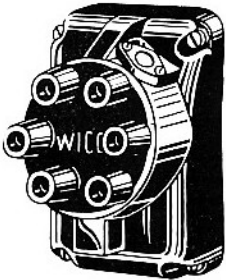
X5776



X5777



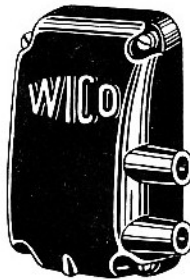
X5653



X5897



X5770



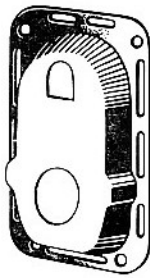
X5651



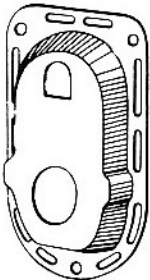
X5652



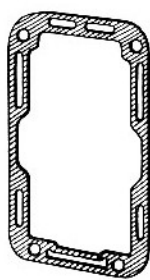
X5704



X5644



X5628



X5618

DISTRIBUTOR ARM GROUPS



X5531



X5617

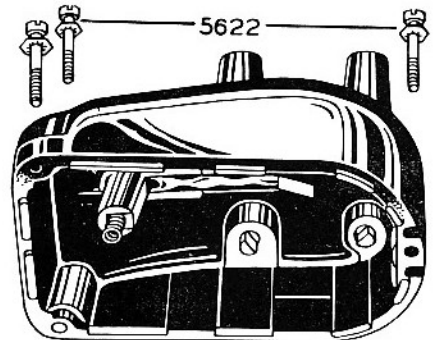


X5740

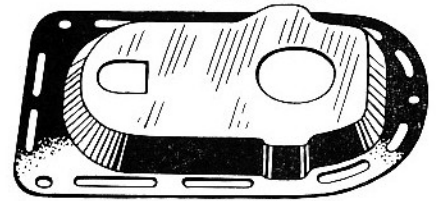


X5787

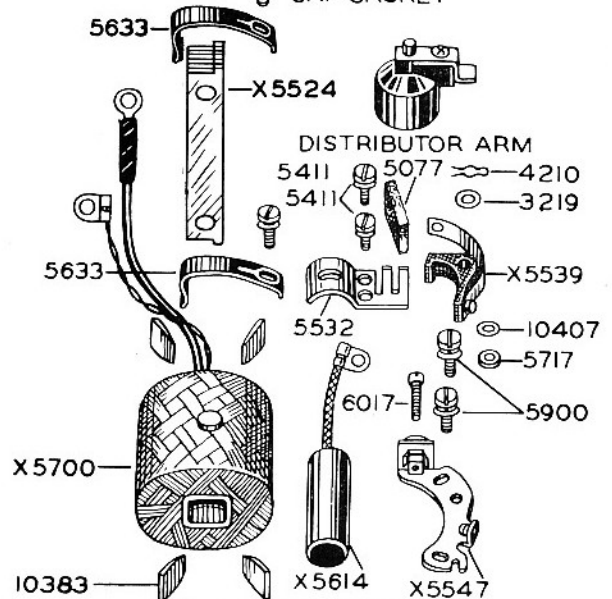
EXPLODED VIEW — DISTRIBUTOR END OF MAGNETO



DISTRIBUTOR CAP



5411 — DISTRIBUTOR CAP GASKET



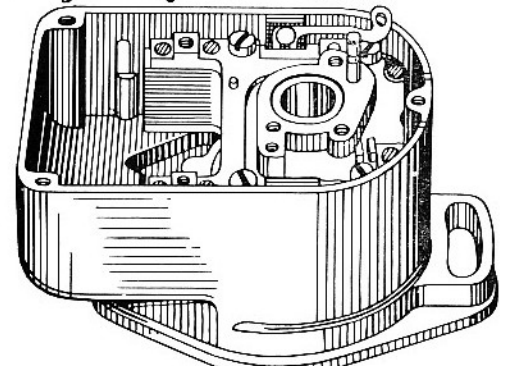
DISTRIBUTOR ARM

5411 — 5077 — 4210
5411 — 3219

5532 — 10407 — 5717

6017 — 5900

X5614 — X5547



SIDE VIEW
MAIN HOUSING—SEE TABLE

BRIEF SERVICE PARTS LIST

COMPLETE MAGNETO PRICES ON NEXT PAGE

Part No.	Name	List Price	Part No.	Name	List Price
16-X121C*	Lead wire grp. (12") . . .	\$.50	X5651	Distributor cap unit . . .	2.50
A-355*	Lead wire grp. (12") . . .	.40	X5652	Cover unit	1.85
3219	Breaker arm pivct washer . . .	.05	X5653	Distributor cap unit . . .	2.50
4210	Breaker arm lock . . . . .	.05	X5700	Coil grp.	4.50
5077	Cam wiper felt . . . . .	.05	X5704	Cover unit	1.85
5411	Condenser clamp screw (SEMS) . . . . .	.05	5717	Brk. point aligning washer . . .	.05
5411	Coil core clamp screw (SEMS) . . . . .	.05	X5734*	Dust cover unit . . . . .	.30
X5524	Coil core grp. . . . .	.50	X5740	Distributor arm grp.	1.75
X5531	Distributor arm grp. . . . .	.60	X5770	Distributor cap unit	3.00
5532	Condenser clamp . . . . .	.10	X5773*	Coil contact spring . . . . .	.10
5536*	Distributor cap window clamp plate screw . . . . .	.05	X5776	Distributor cap unit	2.50
X5539	Breaker arm grp. (USE X5996 contact Set)	1.30	X5777	Distributor cap unit	2.50
X5547	Fixed contact grp. (USE X5996 Contact Set)	1.30	X5787	Distributor arm grp.	1.75
5552*	Coil contact screw . . . . .	.05	5895*	Distributor cap window clamp plate . . . . .	.05
X5614	Condenser assembly	1.25	X5897	Distributor cap unit	3.50
X5617	Distributor arm grp. (XH477 & 1042) . . . . .	.75	5900	Fixed contact clamp screw . . .	.05
5618	Dist. cap and cover gasket (XH1 and XHG) . . . . .	.10	X5996*	Breaker contact set (Incl. X5539 & X5547)	1.30
5622	Distributor cap screw . . . . .	.05	X6000*	Secondary interlead grp. (XH) . . . . .	.25
5628	Dist. cap gasket (XH-4) . . . . .	.20	X6001*	Secondary interlead grp. (XHG) . . . . .	.25
5632*	Stop button grp. . . . .	.15	6017	Breaker spring clamp screw . . .	.05
5633	Coil core clamp . . . . .	.05	K6448*	Standard ground connection Kit . . . . .	.55
5644	Dist. cap gasket (XH) . . . . .	.15	K6449*	Wisconsin ground connection Kit . . . . .	.85

*Not illustrated

Prices effective July 1, 1947, subject to change without notice

BRIEF INSTRUCTIONS

WARRANTY

We warrant each piece of apparatus manufactured by us to be free from defects in material and workmanship under normal use and service. Our obligation under this warranty is limited to the furnishing of any part of said apparatus which shall within a period of ninety (90) days after delivery to the original purchaser, be returned either to one of our authorized service stations, or to the factory, transportation charges prepaid, and which, upon examination by one of our authorized representatives, shall disclose to our satisfaction to have been thus defective.

Any magneto or other piece of apparatus shall not be considered to have been under normal use and service if it appears to have been subjected to misuse, abuse, neglect or accident,

or if it has been repaired or altered outside of our factory so as, in our judgment, to affect its stability or reliability, or if any part not of Wico manufacture has been substituted for a part of Wico manufacture.

This warranty is in lieu of all other warranties, either expressed or implied; and we do not authorize any person or persons to assume for us any other liability in connection with the sale of our equipment; nor are we responsible for any liability for any damage or injury to any person or part resulting directly or indirectly from design, material, workmanship or installation of any of our apparatus.

WARRANTY ADJUSTMENT PROCEDURE

Apparatus assumed to come within the terms of the warranty should be submitted to the nearest authorized Wico Service Station with a formal request for adjustment.

If, upon examination by such authorized representation, the apparatus is found to be actually defective and within the warranty period, it will be placed in proper operating condition and no charge made, either for labor or material.

The term labor does not refer to that involving the removing or installing the apparatus, nor for transportation, duty or tax thereon, but only refers to the actual bench labor on the apparatus itself. Any labor charge other than for such bench labor, is to be borne by the owner, who will be required to sign a warranty Service Report form at the time a warranty adjustment

is made. The service station will be reimbursed upon receipt of the warranty service report by the factory.

When the Service Station is in doubt as to the cause of the apparatus being inoperative, the owner should pay the service station for the material and labor charges, who will forward the units or parts claimed defective to the factory, together with a signed warranty Service Report form. Upon receipt and examination by the factory of the units or parts and the warranty service report form, the claim will be carefully considered and if in the opinion of the factory the units or parts are found to have been defective, credit will be issued to the Service Station for both labor and material and the Service Station will reimburse the owner the amount paid for material and labor.

WICO ELECTRIC COMPANY, WEST SPRINGFIELD, MASSACHUSETTS, U. S. A.

BRIEF INSTRUCTIONS

FACTORY WICO ELECTRIC COMPANY West Springfield, Mass.

D. FORBES — O. H. TIFT

The Bankers Bldg,
208 E. Wisconsin Ave.
Suite #710
Milwaukee, Wisc.

LOS ANGELES, CALIFORNIA

V. T. Chevallier
1116 S. Hope St.
Los Angeles, California

TULSA, OKLAHOMA

Harry Lolley
310 Thompson Bldg.

NEW YORK

Wico Electric Company
38 Pearl St.
New York, N. Y.

DISTRIBUTORS SALES AND SERVICE

NOTE: This list includes only central stations. A complete directory of all authorized Wico Service Stations will be supplied on request.

Alabama	Birmingham	Birmingham Electric Battery Co., 23rd St. & Ave. B.	Tennessee	Knoxville	R. T. Clapp Co., 401 No. Broadway
Arizona	Phoenix	Charlie C. Jones Electric Company, 300 W. Jefferson St.		Memphis	Automotive Electric Service Company, 982 Linden St.
California	Los Angeles	Electric Equipment Company, 1611 So. Hope St.	Texas	Amarillo	E. S. Cowie Electric, 700 Van Buren St.
	San Francisco	Auto Electric & Supply Co., 543 Van Ness Ave.		Dallas	Beard & Stone Electric Co., 2101 Bryan at Olive.
Colorado	Denver	Spitzer Electric Company, 43 W. 9th Ave.		El Paso	Oakes Battery & Elec. Co., 423 Texas Street
Florida	Jacksonville	Spencer Elec., Inc., 40 W. Beaver St.		Forth Worth	Generator Service Company, 1115 Commerce St.
	Miami	Electrical Equipment Co., 42 N. W. 4th St.		Houston	Beard & Stone Electric Co., Inc., Milam at Polk St.
Georgia	Tampa	Spencer Auto Electric Co., 607 Cass St.		Kilgore	Magneto Sales & Service Co.
	Atlanta	Auto Electric & Magneto Co., 477 Spring St., N. W.	Utah	San Antonio	S. X. Callahan, 419-425 N. Flores St.
Idaho	Boise	Oakley Automotive, 1105 Idaho St.		Salt Lake City	Frank Edward's Company Motor Equip. Div., 601 S. State St.
Illinois	Chicago	Illinois Auto Electric Co., 2101 Indiana Ave.	Virginia	Richmond	Richmond Battery & Ignition Co., 1319 West Broad St.
Indiana	Indianapolis	Gulling Auto Electric Co., 450 N. Capitol Ave.	Washington	Seattle	Pacific Magneto Service, Inc., 2719 First Ave. So.
Kansas	Wichita	E. S. Cowie Electric Co., 230 S. Topeka Ave.	West Virginia	Spokane	Sunset Electric Co., First & Adams
Kentucky	Lexington	Kentucky Ignition Co., Rose St. at Vine	Wisconsin	Charleston	MacFadden Ignition, 108 Broad St.
	Louisville	Kentucky Ignition, 737-739 S. 3rd St.		Milwaukee	Wisconsin Magneto Co., 918 Broadway.
Louisiana	New Orleans	John M. Walton, Inc., 1009 St. Charles St.	Alberta	Calgary	CANADA R. Hutton, 131 Eleventh Ave., West.
	Shreveport	Magneto Ignition Service Co., 804 Louisiana Ave.	British Columbia	Edmonton	Smith Battery & Auto Elec.
Maryland	Baltimore	Parks & Hull Automotive Corp., 1033 Cathedral St.	Manitoba	Vancouver	Jeffree & Jeffree, Ltd., 775 Homer St.
Massachusetts	Boston	A. & J. Auto Ignition Company, 55 Brighton Ave.	Ontario	Winnipeg	Beattie Auto Electric Co., Ltd., 176 Fort St.
Michigan	Detroit	Auto Elec. & Service Corp., 90 Selden Ave.	Quebec	Toronto	A. Cross & Co., 45 Elm St.
Minnesota	Minneapolis	Reinhard Bros. Co., Inc., 11 S. 9th Street		Montreal	International Electric Co., Ltd., 1037 Bleury St.
Missouri	Kansas City	E. S. Cowie Electric Co., 1819 Wyandotte St.	Saskatchewan	Regina	Elec. Motor Service.
	St. Louis	Medart Auto Elec. Co., Inc., 3134 Washington Blvd.	Channel Islands	Guernsey	CHANNEL ISLANDS Auto and Electric Supply Co., Ltd.
Montana	Billings	Lee Pasley, 20 N. 33rd St.	Cuba	Habana	CUBA Electrical Equipment Co. of Cuba, Avenida de Italia 29.
Nebraska	Omaha	Carl A. Anderson, Inc., 16th and Jones St.	Hawaii	Honolulu, T. H.	HAWAIIAN ISLANDS Automotive Service Co., So. and Kawaiahoa Streets.
New Jersey	Newark	Henry's Company, 376 High St.	Mexico	Mexico City	MEXICO Annahuac Machinery Co., SH. Bucarelli No. 12.
New Mexico	Albuquerque	Spitzer Electrical Co.			NEW ZEALAND
New York	Buffalo	Peter Hettrich, 1032 Ellicott St.	New Zealand	Wellington	H. E. W. Silver Magneto & Ignition Co., 45/7 Lower Cuba St.
	Long Island City	Steiner Bros., Inc., North Blvd. at 34th St.			PHILIPPINE ISLANDS
North Carolina	Troy	Ehrlich Electric Service, 200 Fourth St.	Philippine Is.	Manila	Ramcar, Inc., 110 Padre Faura
	Charlotte	Carolina Rim & Wheel Co., 306 No. Graham St.	Porto Rico	San Juan	Ricardo Davila, P. O. Box 475.
North Dakota	Fargo	Reinhard Bros.	Roumania	Bucaresti	Progresul Mecanic.
Ohio	Cleveland	Electric Power Maintenance, E. 30th & Prospect	South Africa	Durban	SOUTH AFRICA Messrs. J. M. Moir
	Toledo	Electric Power Maintenance Co., 26-30 17th St.		Bloemfontein	Electric Service Station Corp., Ltd., 34 Henry St.
Oklahoma	Oklahoma City	American Electric Ignition Co., 725 N. Broadway	Orange Free State	Cape Town	Motor Units Pty., Ltd., Cor. Bree and Riekeek Streets.
	Tulsa	Magneto Ignition, 701 W. Fifth Ave.		Johannesburg	Thos. Barlow & Sons, Ltd., (S.A.)
Oregon	Portland	Magneto Equipment Co., 1111 So. E. Grand Ave.	Argentina	Buenos Aires	SOUTH AMERICA Arnido Bonelli, Rauch 1849, Entre Calco y Corrientes.
Pennsylvania	Philadelphia	Tri-State Electric Co., 3330 N. Broad Street			
	Pittsburgh	Automotive Ignition Co., 4917 Baum Blvd.			
Rhode Island	Providence	A & J Auto Ignition, 43 Broadway.			
South Dakota	Aberdeen	Reinhard Bros.			