

SERVICE PARTS LIST AND BRIEF INSTRUCTIONS

WICO SERIES XV MAGNETOS



WICO ELECTRIC COMPANY

WEST SPRINGFIELD, MASSACHUSETTS

BRIEF INSTRUCTIONS

INSTALLATION

The impulse spark should be used in timing the magneto to the engine in the absence of other information from the engine manufacturer. Turn the magneto shaft over in the proper direction of rotation until the impulse has just tripped and the monel metal segment of the distributor arm is near the tower marked No. 1 on the distributor cap. Then turn the engine over to top dead center on No. 1 cylinder on the compression stroke. Clamp the magneto to the engine.

Recheck the timing after the magneto is attached to the engine by turning the engine over until No. 1 piston of No. 1 cylinder is again at top dead center on the compression stroke. Magneto impulse should snap at this point.

Note: Do NOT loosen the magneto end plate lock to adjust engine timing as this will disturb the internal timing of the magneto.

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

The distributor cap may be removed by loosening the 3 screws, 5622, which hold it in place. The distributor arm X5531 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.

BREAKER CONTACTS-REPLACEMENT AND ADJUSTMENT

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.

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.

BRIEF INSTRUCTIONS

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.

MAJOR REPAIRS SHOULD BE DONE AT THE NEAREST WICO SERVICE STATION OR DISTRIBUTOR

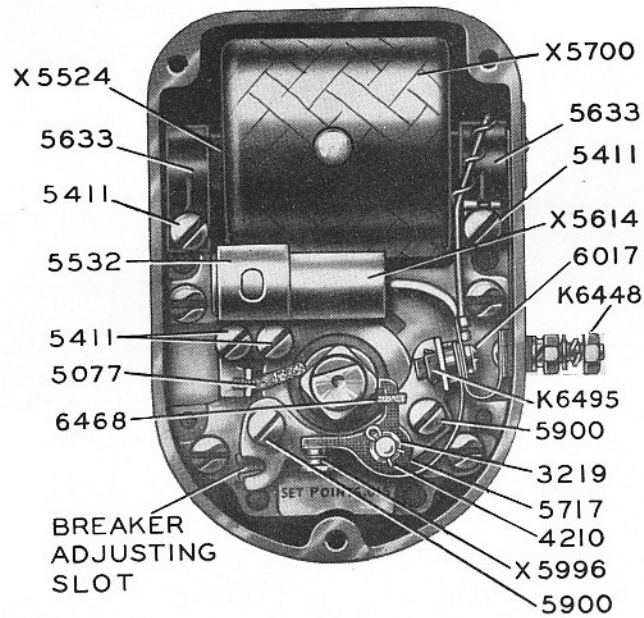
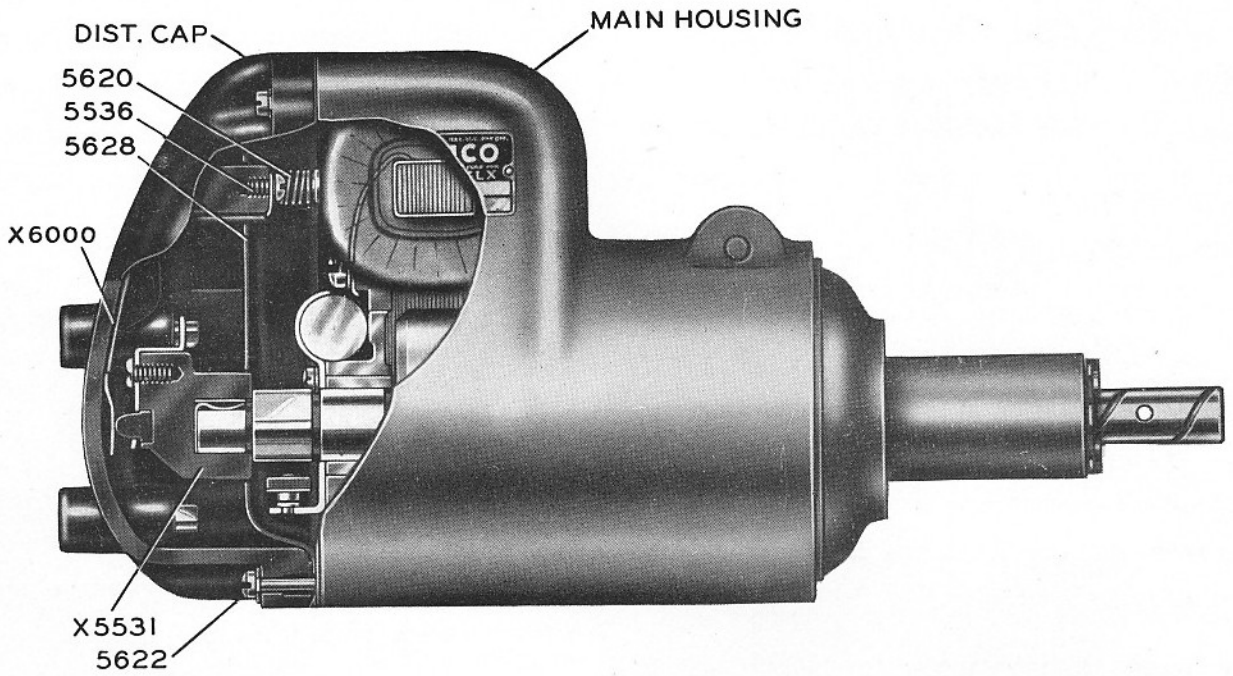
PRICE INFORMATION

MODEL XV WICO MAGNETOS

These prices include built-in impulse coupling, stop button, or connection for remote control — but do not include hold-down arms, gears, tongues or other drive members.	TYPE	NO CYLINDERS	FIRING ANGLE	LIST PRICES WITH IMPULSE	Cables will be furnished for an additional charge when lengths are specified on the order. Automatic Advance supplied when specified at \$5.00 additional.
	XV	2	180°	\$37.00	
XV	4	90°	37.00		
XV	6	60°	45.00		

BRIEF INSTRUCTIONS

CUTAWAY VIEW — DISTRIBUTOR END OF MAGNETO



BRIEF SERVICE PARTS LIST

Part No.	Name	List Price	Part No.	Name	List Price
16-X121C*	Lead wire grp. (12") .	\$.50	X5697	Distributor cap unit (XV-2) .	3.50
A-355*	Lead wire grp. (12") .	.40	X5700	Coil group	4.50
3219	Breaker arm pivot washer .	.05	5717	Breaker point aligning washer . . . . .	.05
4210	Breaker arm lock . . . . .	.05	5900	Fixed contact clamp screw .	.05
5077	Cam wiper felt . . . . .	.05	X5981	Distributor cap unit (XV-4) (#1 tower in upper right hand quadrent)	2.50
5411	Condenser clamp screw (SEMS) . . . . .	.05	X5994	Distributor cap unit (XV-6) .	4.00
5411	Coil core clamp screw (SEMS) . . . . .	.05	X5996	Breaker contact set (Incl. X5539 & X5547) .	1.30
X5524	Coil core grp. . . . .	.50	X6000	Secondary interlead grp. .	.25
X5531	Distributor arm grp. . . . .	.60	6017	Breaker spring clamp screw	.05
5532	Condenser clamp . . . . .	.10	X6336	Distributor Cap Unit (XV-2) (Special for XV-1922) .	5.00
5536	Coil contact screw . . . . .	.05	K-6448	Standard ground connection kit . . . . .	.55
X5614	Condenser assembly	1.25	6468	Breaker arm felt . . . . .	.05
5620	Coil contact spring . . . . .	.05	X6476	Distributor cap unit (XV-4) (#1 tower in upper left hand quadrent)	2.50
5622	Distributor cap screw . . . . .	.05	K-6495	Breaker spring insulator kit .	.10
5628	Distributor cap gasket . . . . .	.20			
5633	Coil core clamp . . . . .	.05			
X5672	Distributor cap unit (XV-4) (#1 tower in lower right-hand quadrent)	2.50			

*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.
	Tampa	Spencer Auto Electric Co., 607 Cass St.		Kilgore	Magneto Sales & Service Co.
Georgia	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., 1050 Carondelet St.	Alberta	Calgary	CANADA
	Shreveport	Magneto Ignition Service Co., 804 Louisiana Ave.		Edmonton	Hutton's, Ltd. 131 Eleventh Ave., West.
Maryland	Baltimore	Parks & Hull Automotive Corp., 1033 Cathedral St.	British Columbia	Vancouver	Smith Battery & Auto Elec.
Massachusetts	Boston	A. & J. Auto Ignition Company, 55 Brighton Ave.	Manitoba	Winnipeg	Jeffree & Jeffree, Ltd., 775 Homer St.
Michigan	Detroit	Auto Elec. & Service Corp., 90 Selden Ave.	Ontario	Toronto	Beattie Auto Electric Co., Ltd., 176 Port St.
Minnesota	Minneapolis	Reinhard Bros. Co., Inc., 11 S. 9th Street	Quebec	Montreal	A. Cross & Co., 45 Elm St.
Missouri	Kansas City	E. S. Cowie Electric Co., 1819 Wyandotte St.	Saskatchewan	Regina	International Electric Co., Ltd., 1037 Bleury St.
	St. Louis	Medart Auto Elec. Co., Inc., 3134 Washington Blvd.		Channel Islands	Elec. Motor Service.
Montana	Billings	Lee Pasley, 20 N. 33rd St.		Guernsey	CHANNEL ISLANDS
Nebraska	Omaha	Carl A. Anderson, Inc., 16th and Jones St.		Habana	Auto and Electric Supply Co., Ltd.
	Newark	Henry's Company, 376 High St.	Cuba		CUBA
New Jersey	Albuquerque	Spitzer Electrical Co.			Electrical Equipment Co. of Cuba, Avenida de Italia 29.
New Mexico	Buffalo	Peter Hettrich, 1032 Ellicott St.	Hawaii	Honolulu, T. H.	HAWAIIAN ISLANDS
New York	Long Island City	Steiner Bros., Inc., North Blvd. at 34th St.			Automotive Service Co., So. and Kawaiahoa Streets.
	Troy	Ehrlich Electric Service, 200 Fourth St.	Mexico	Mexico City	MEXICO
North Carolina	Charlotte	Carolina Rim & Wheel Co., 306 No. Graham St.			Annahuac Machinery Co., SH. Bucareli No. 12.
North Dakota	Fargo	Reinhard Bros.	NEW ZEALAND	Wellington	NEW ZEALAND
Ohio	Cleveland	Electric Power Maintenance, E. 30th & Prospect			H. E. W. Silver Magneto & Ignition Co., 45/7 Lower Cuba St.
	Toledo	Electric Power Maintenance Co., 26-30 17th St.	Philippine Is.	Manila	PHILIPPINE ISLANDS
Oklahoma	Oklahoma City	American Electric Ignition Co., 725 N. Broadway			Ramcar, Inc., 110 Padre Faura
	Tulsa	Magneto Ignition, 701 W. Fifth Ave.	Porto Rico	San Juan	PORTO RICO
Oregon	Portland	Magneto Equipment Co., 1111 So. E. Grand Ave.			Ricardo Davila, P. O. Box 475.
Pennsylvania	Philadelphia	Tri-State Electric Co., 3330 N. Broad Street	Roumania	Bucaresti	ROUMANIA
	Pittsburgh	Automotive Ignition Co., 4917 Baum Blvd.			Progresul Mecanic.
Rhode Island	Providence	A & J Auto Ignition, 43 Broadway.	South Africa	Durban	SOUTH AFRICA
South Dakota	Aberdeen	Reinhard Bros.		Bloemfontein	Messrs. J. M. Moir
			Orange	Cape Town	Electric Service Station Corp., Ltd., 34 Henry St.
			Free State	Johannesburg	Motor Units Pty., Ltd., Cor. Bree and Rieckeek Streets.
					Thos. Barlow & Sons, Ltd., (S.A.)
			Argentina	Buenos Aires	SOUTH AMERICA
					Armido Bonelli, Rauch 1849, Entre Calleo y Corrientes.