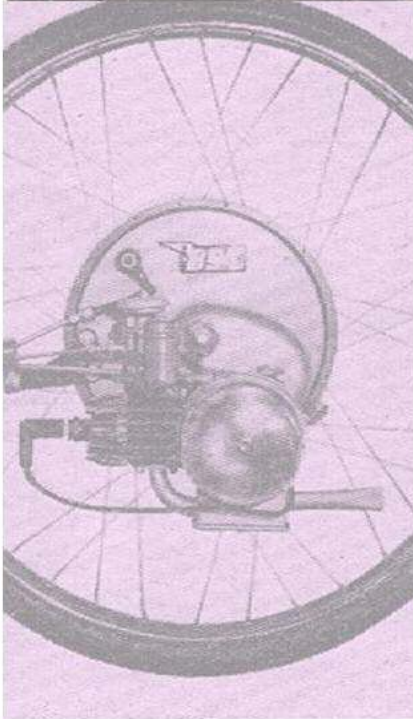


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# THE WIPAC GROUP—BLETCHLEY ENGLAND

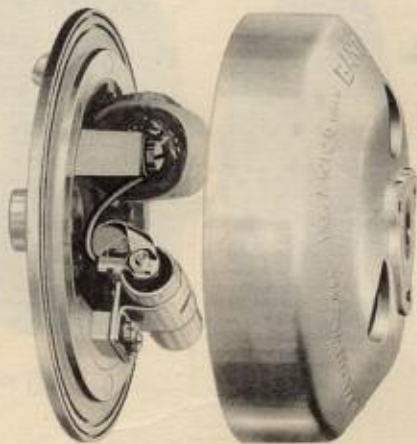
## BRIEF DESCRIPTION AND SPARE PARTS LIST FOR

### WICO

## "BANTAMAG" MAGNETO SPECIFICATIONS FW-1086Z and FW-1109Z

### STANDARD EQUIPMENT ON

### POWER PAK



#### Details :

CYLINDER :	Single
ROTATION :	Clockwise
FLYWHEEL :	Without cooling fins
DIAMETER OF FLYWHEEL :	$4\frac{1}{8}$ " dia.
WEIGHT OF FLYWHEEL :	32 ozs.
BREAKER POINT SETTING :	.018"
H.T. LEAD :	20"

#### DESCRIPTION

The "Bantamag" Specifications FW-1086Z and FW-1109Z, designed for engines up to 100 c.c. is a  $4\frac{1}{8}$ " dia. flywheel magneto featuring high spark output for easy starting, permanent retention of magnetism and the elimination of the necessity of frequent adjustment. It is the ultimate in simplicity, consisting of a rotor and a stator plate assembly.

The flywheel is a magnetic unit which concentrates a powerful magnetic charge within a small space and volume. By virtue

of its ability to retain indefinitely this high magnetic concentration, this unit is able to provide the magneto with its extraordinary high spark output throughout its entire life.

The stator plate assembly contains the coil and core, condenser, and breaker mechanism, all easily accessible for servicing.

This magneto fulfils the needs of the small engine, providing unprecedented slow or high speed performance and requiring little or no attention over long periods of service.

#### SERVICE INSTRUCTIONS

##### Checking Magneto for Spark

It is recommended that if there is an indication of the magneto causing trouble, a test be made before attempting to repair.

If the engine refuses to start, the magneto can be checked by holding the H.T. lead  $\frac{1}{4}$ " away from a point on the frame of the engine. When the engine is cranked over in its usual way, a properly performing magneto should jump this gap.

If the engine misses at high speed, first check the spark plug. With the plug in good condition and properly adjusted the magneto should fire a spark without missing while the H.T. lead is held  $\frac{1}{8}$ " away from the spark plug terminal.

The only adjustable part on the "Bantamag" is the breaker plate which provides adjustment for the breaker points.

##### Removal of Flywheel from Engine

Remove the hexagon nut which holds the flywheel in position. If there is no flywheel puller available the flywheel can be withdrawn by grasping the flywheel firmly and while attempting to pull it off, tap the end of the crankshaft with a mallet. Be careful during this operation not to bend or damage the shaft.

##### Adjustment of Breaker Points

The only adjustable part on the magneto is the breaker plate which provides adjustment for the breaker points.

To adjust these points turn the engine over until the contacts are visible through the hole in the flywheel marked "set points .018" here."

If points need adjusting loosen the screw that locks the fixed contact breaker plate just sufficiently to allow the breaker plate to be raised or lowered by placing a screwdriver between the raised edge of the stator and breaker plate and slightly turning.

When the correct contact gap has been obtained lock the fixed contact plate securely.

The breaker point setting should only be adjusted in the manner described and **at no time should the breaker arm be filed to provide adjustment.**

The moving contact is integral with the breaker arm. If the contact points need replacement it is recommended that both the fixed and movable points be replaced at the same time.

The breaker arm bearing is packed with cam lubricant at the time of assembly and should not need any other lubrication. A small amount of this lubricant is also packed on the breaker arm shoe and wipes off on the cam surface, providing permanent lubrication between these rubbing surfaces.

##### Removal of Condenser

To remove the condenser, disconnect the breaker connection strip and the primary connection from the live end of the condenser and remove the two screws holding the condenser clamp.

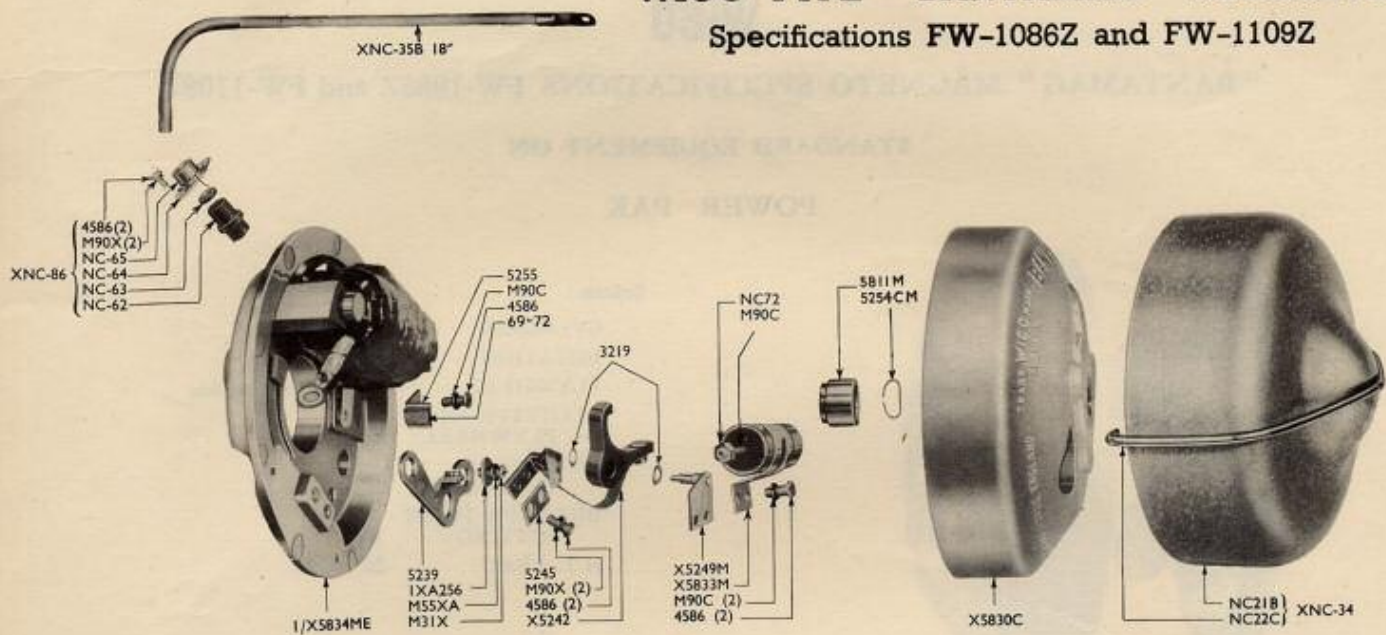
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# THE WIPAC GROUP—BLETCHLEY ENGLAND

## WICO TYPE "BANTAMAG" MAGNETO Specifications FW-1086Z and FW-1109Z



### SPARE PARTS LIST

Part No.	Quan.	Description	Part No.	Quan.	Description
**NC-21	1	Flywheel Cover	*4586	2	H.T. Terminal Plate Fixing Screw
*NC-21B	1	Flywheel Cover	4586	2	Condenser Fixing Screw
**NC-22B	1	Flywheel Cover Clip	4586	1	Cam Pad Bracket Fixing Screw
*NC-22C	1	Flywheel Cover Clip	5239	1	Fixed Contact
M-31X	1	Fixed Contact Screw	X5242	1	Breaker Arm
**XNC-34	1	Flywheel Cover and Clip	5245	1	Breaker Arm Spring Clamp Plate
*†XNC-34C	1	Flywheel Cover and Clip	5248	2	Coil Core Fixing Screw
*XNC-35B	1	H.T. Lead Wire Group 20"	X5249M	1	Breaker Arm Pivot and Fixing Plate Group
M55XA	1	Fixed Contact Screw Lock Washer	5253M	1	Breaker Cam
*PNC56	1	H.T. Lead Wire 20"	5254CM	1	Cam Retainer Clip
M58X	2	Coil Core Fixing Screws (Lock Washers)	5255	1	Cam Pad Bracket
*NC-62	1	H.T. Terminal Insulator	**5256	1	Cam Pad
*NC-63	1	H.T. Terminal Rubber Grommet	**5829MB	1	Stator Plate
*NC-64	1	H.T. Terminal Fixing Plate	*5829ME		
*NC-65	1	H.T. Terminal Cap	*X5830C	1	Flywheel
*69-72	1	Cam Pad	**X5830B	1	Flywheel
*NC-72	1	Condenser Nut	**X5831A	1	Coil and Core Group
*†XNC-86	1	H.T. Terminal Block Unit	*X5831B	1	Coil and Core Group
*M90X	2	H.T. Terminal Fixing Plate Screw Lock Washer	**X5833	1	Condenser Group
M90C	1	Cam Pad Bracket Fixing Screw Lock Washer	*X5833M	1	Condenser Group
M90C	2	Condenser Fixing Screw Lock Washer	**X5834MB	1	Stator Plate Unit
M90C	1	Condenser Screw Stud Lock Washer	*X5834ME		
M90X	2	Breaker Arm Spring Clamp Lock Washer	**1/55834MB	1	Coil, Core and Stator Plate Unit
*138-55	1	H.T. Lead Sleaving	*1/X5834ME	1	Coil, Core and Stator Plate Unit
IXA-256	1	Fixed Contact Screw Washer			*Used on Specification FW-1109Z only.
3219	1	Breaker Arm Spacing Washer			**Used on Specification FW-1086Z only.
**4586	1	Condenser Screw			†Includes all parts bracketed against this number on illustration above.

To ensure receiving the correct spares, please quote Magneto Specification Number, together with Part Number required.

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