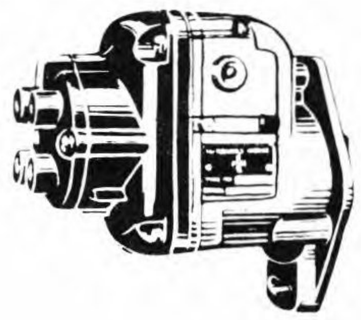
FAIRBANKS-MORSE

MAGNETO and ENGINE ACCESSORIES DIVISION
BELOIT, WISCONSIN



Instruction 2981A
Supersedes Instruction 2981
July, 1961

TYPE FM-W2A87C FLYWHEEL MAGNETOS FOR 16 H.P. WEST BEND OUTBOARD ENGINES

GENERAL DESCRIPTION

The Type FM-W2A87C flywheel magnetos are built for use on West Bend Aluminum Co., 16 H.P. Elgin engines. These magnetos are engineered to provide quick easy starting, economical operation and maximum dependability with minimum service. The magneto should be disassembled only after tests have proved that the malfunction of the engine is due to poor magneto performance.

TESTING THE IGNITION SPARK

With properly adjusted spark plugs in good condition, the ignition spark should be strong enough to bridge a short gap in addition to the actual spark plug discharge. This may be determined by holding the end of the ignition cable not more than 1/4" away from the spark plug terminal. The engine should not misfire when this is done. Ignition tests made while any part of the system is wet are useless.

SERVICE OF BREAKER POINTS

Before examining the breaker points, it is necessary to remove the flywheel. Loosen the flywheel nut until it is flush with the end of the crankshaft, then strike the nut sharply with a hammer which will jar the flywheel loose from the crankshaft taper. After removing the nut from the crankshaft, lift off the flywheel.

The breaker points should then be inspected for evidence of pitting or pyramiding. They should be clean and should meet squarely. A small tungsten file or fine stone may be used to resurface the points. Badly worn or pitted points should be replaced. If it is necessary to resurface or replace the breaker points, it will also be necessary to readjust them to their proper clearance, which is 0.020 in. at full separation. This adjustment is made in the following manner: With the points fully opened, loosen the contact support locking screws and move the contact support until the proper clearance is obtained. This is accomplished by inserting a screwdriver in the small triangular depression on the plate and turning it slightly to open the points the proper distance. Lock the assembly in place by tightening the locking screws, then take a final measurement of the breaker point gap after the locking screws are tightened. Repeat the procedure with the other set of points.

FURTHER FIELD SERVICE NOT RECOMMENDED

The cam felt wicks, if dry or hard, should be replaced by new factory-impregnated wicks. Other than this, Fairbanks-Morse magnetos do not require field lubrication. Coil and condenser replacements, while simple, are not recommended unless adequate test equipment is available.

MAGNETO SERVICE FACILITIES

Fairbanks-Morse Magneto Service Accounts are located throughout our country and in many foreign lands. They have the trained personnel and the necessary equipment to insure efficient repair service to all owners of Fairbanks-Morse magnetos.

Refer to Bulletin FM-18, latest state, Directory of Service Accounts to locate the magneto service station nearest you.

Genuine Fairbanks-Morse magneto replacement parts, which may be obtained from all Authorized Service Stations, should always be insisted upon for repairs. The use of spurious parts usually proves less satisfactory and economical, in addition to voiding the manufacturer's guaranty.

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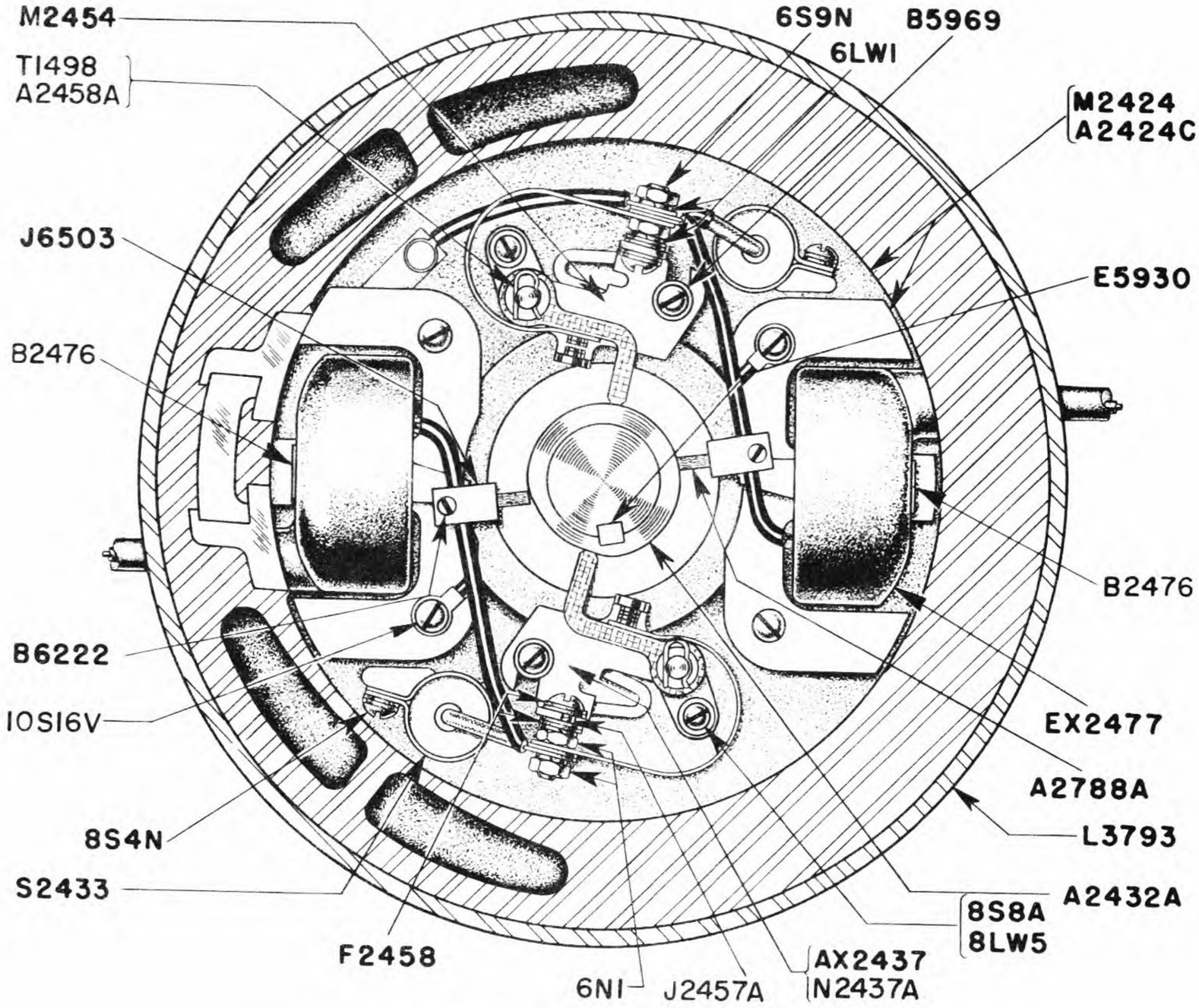

Order by Part No.	Name of Part	No. Used
A195	Name Plate	1
T1498	Fulcrum Pin Snap Ring	1
M2424	Stator Plate Assembly	1
A2424C	Plate, Field Lamination, Coil, Breaker Arm, Point Set and Condenser.	1
10S16V	Field Lamination Screw - #10-24 x 1"	4
A2432A	Cam	2
S2433	Condenser	2
8S4N	Condenser Mounting Screw - #8-32 x 1/4"	2
AX2437	Breaker Arm and Spring	2
N2437A	Breaker Arm and Contact Support Assembly	2
6S9N	Breaker Arm Terminal Screw - #6-32 x 9/16"	2
6LW1	Breaker Arm Terminal Screw Lockwasher	2
6N1	Breaker Arm Terminal Screw Nut	4
M2454	Contact Support	2
8S8A	Contact Support Screw	4
8LW5	Contact Support Screw Lockwasher	6
J2457A	Breaker Arm Terminal Screw Bushing	2
F2458	Breaker Arm Screw Plate Washer - #6	2
A2458A	Fulcrum Pin Plate Washer - #6	2
B2476	Coil Retaining Clip	2
EX2477	Coil	2
A2788A	Cam Wick	2
L3793	Flywheel Assembly	1
E5930	Key - Drive Shaft to Flywheel	1
B5969	Contact Support Locking Screw Plate Washer - #8	2
B6222	Cam Wick Holder Screw	2
J6503	Cam Wick Washer	2