

Installation

Before installing, view the magneto from the distributor cap (X1622B) and mark the gear housing (X2086) with pencil or chalk immediately opposite the centre of the upper right-hand distributor cap terminal tower.

Then remove the distributor cap and turn the magneto shaft in an anti-clockwise rotation until the distributor arm is in line with the pencil or chalk mark.

Then (1) remove the securing nut from magneto shaft, (2) remove cover and pinion assembly, (3) slacken the drive sleeve from magneto shaft, (4) re-assemble drive pinion assembly, fit cover and securing nut leaving this slack—that is leaving the auto-advance and retard drive unit free to rotate on magneto drive shaft. Without disturbing crankshaft or magneto setting, tighten nut securing magneto drive unit.

Re-check timing after tightening magneto drive unit, making sure the auto-advance and retard unit operates freely.

Turn the engine crank shaft until the piston of No. 1 cylinder is approximately $\frac{1}{4}$ " before top dead centre, when on compression stroke (*i.e.*, when both valves are closed).

The magneto should then be coupled to the engine by (4) $\frac{1}{4}$ " B.S.F. set screws.

When removing the Magneto from the engine, mark both the Magneto and engine couplings to eliminate any possible error when re-installing.

Lubrication

The magneto is provided with two spring oilers. Once every 200 hours either one of these oilers should be filled to overflowing with Castrolite. After every 1,000 hours it is necessary to re-lubricate the cam grease pad. This is done by removing the pad and squeezing and working into it a Summer grade of motor transmission grease which will closely resemble that used at the factory. Do not use ordinary grease.

Replacement of breaker points

If the points need replacing, both the fixed and moving points should be replaced at the same time.

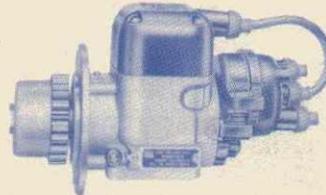
To remove the breaker arm, take off the breaker arm clamp screw, lock-washer and clamping washer, together with the breaker arm terminal screw and pull the assembly off the breaker arm pivot. The fixed contact plate may then be taken off the breaker arm pivot, after removing the fixed contact screw.

Removal of condenser

Remove screw holding down the breaker arm spring. The condenser is then taken from the breaker box by removing the two screws fastening it down.

Removal of coil

Remove the top cover (X1412) and the gear housing assembly (X2086). Viewing the magneto from the driving end, remove the right-hand side stop switch and release the primary lead by loosening the earth stud. Then remove the two screws holding down the core clamps. Turn the magneto shaft until the magnetism no longer grips the core coil to the main housing, pull the coil 00137 and the coil core (X1409) free. The coil is held on the core by a wedge. If the coil is to be replaced, considerable force may be necessary to remove the coil from the core.



THIS MAGNETO IS FITTED AS
STANDARD EQUIPMENT TO THE

HOWARD

ROTAVATOR

Gem

SERIES IV MODEL (360°)

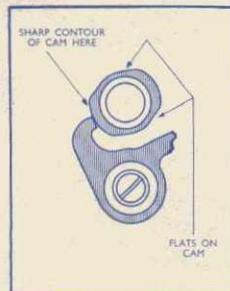
MAIN DETAILS OF MAGNETO

Type	Series "A2"
Rotation	Clockwise
Mounting	Flange
Centre height of shaft	35 mm.
Drive	Gear (fitted with Auto-advance and retard unit).
Switch	Push Type (Both sides)
H.T. leads	(2) 16" 7 mm.
Breaker point setting	.015"
Engine cylinders	360° Twin

When replacing the coil and core unit, be sure that the longest side of the core is against the housing, that the primary lead to the earthing stud is properly located and that the primary earth lead is fastened under the coil core clamp screw.

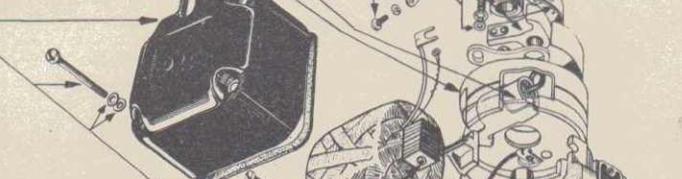
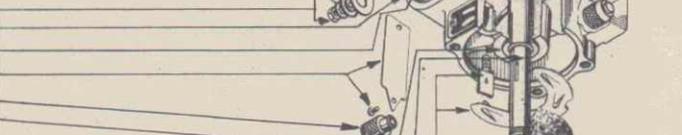
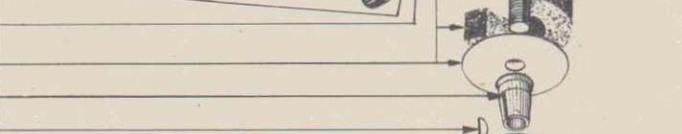
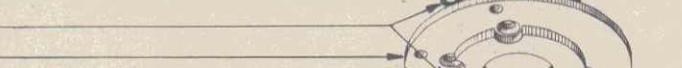
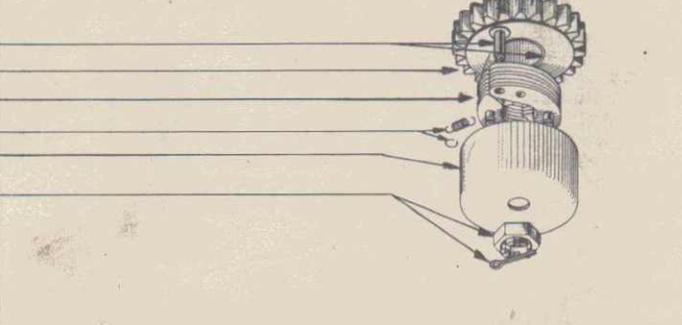
Breaker point opening

The correct breaker point opening is mentioned in the panel above. When re-adjustment is necessary, loosen the screw which locks the fixed contact plate and turn the eccentric-headed screw until the correct opening of points is obtained. Then lock the plate securely.



A 1483HZ

SPARE PARTS LIST

UNITS	COMPONENTS & SETS	PARTS IN EXPLODED VIEW
IKFP-121 H.T. Lead Wire Group (16") S0034 Rubber Protector Set		
X1619B Distributor Cap Unit	Interlead Group X1615Z X1622B Distributor Cap Group 00590 Carbon Brush and Spring Set Distributor Arm 16X477B X2086	
X2090 Gear Housing Unit	Gear Housing Assembly (includes 16X477B) Gasket 2072	
X1588 Breaker Cam Unit	Fixing Set 06407 Breaker Cam 1372 Contact Set 06401 06402	
X1415 Breaker Box Unit	Box Screws and LVV Set S0039 Gear Housing Fixing Set Condenser Set 06400 Breaker Box X2175	
X1412 Cover Unit (includes 06406)	Cover Fixing Set 06406	
00138 Coil and Core Unit	Coil Fixing Set 06399 Coil Group 00137 Core Group X1409	
B140X Stop Button Unit		
01569 Main Housing Unit (Rotor not included)	Ground Lead Set 06390 06393 Oil Instruction Plate Set Oiler Set 06391 Bearing Set 06392	
06289 Rotor		
X1669C Oiling Disc Unit		
S0035 Taper Set	Taper Adaptor A113XC Key 1146C	
ZX153 End Plate Set	Oil Seal B33X End Plate Fixing Set S0033 End Plate Group FX153	
S0031 Auto Advance and Retard Drive Unit	S0027 Taper Adaptor Drive Sleeve Pivot Pin and Bush Set S0024 Gearwheel Assembly S0029 (includes S0024) Flyweight Set S0030 Spring and Circlip Set S0028 Cover Set S0026 (includes S0025) Nut Set S0025	

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