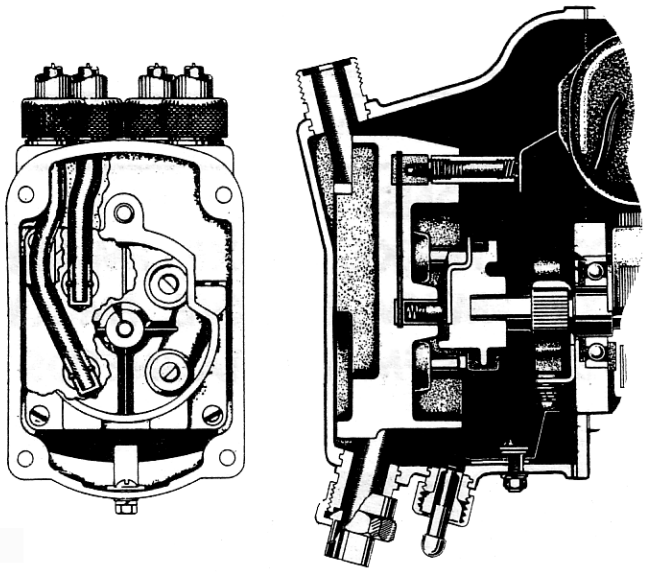


Fig. 2. End Cap and High Tension Cable Terminals

Carbon Brush and Spring

Magnetos for engines with two or more cylinders have a carbon brush and spring assembly in the center of the end cap cover, Fig. 3. Multi-cylinder radio-shielded magnetos have a distributor block in the end cap which contains a carbon brush and spring. Examine the brush and replace it if worn or damaged. The brush should move freely in its holder and should be under slight spring pressure. The high tension lead and suppressor assembly can be unscrewed from the distributor block for inspection, cleaning or replacement.

Breaker Arm, Support Bracket and Points

Breaker points should be checked and adjusted every 500 hours of operation.

To remove the breaker point assembly, Fig. 4, take out the breaker arm terminal screw which releases the coil lead wire, condenser lead, ground contact, and breaker arm spring. Then slide off the fulcrum pin snap ring and lift the breaker arm off the fulcrum pin. Take out the two contact support locking screws, lockwashers, and plate washers, and lift the support bracket from the bearing support.

Inspect the breaker points for pitting or pyramiding. A small tungsten file or fine stone should be used to resurface the points. If the points are badly worn or pitted they should be replaced. When the breaker points have been resurfaced or replaced be sure to adjust them to their proper clearance of 0.015 ±.002 in. at high point of cam. This adjustment is made in the following manner: Loosen the two contact support locking screws. Insert a screwdriver in the horizontal slot at the bottom of the contact support and move it by pivoting the tool between the two small bosses on the bearing support until the breaker points are adjusted to the correct clearance. 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. Oil film should be removed from the breaker points by using a brush and a small quantity of petroleum solvent.

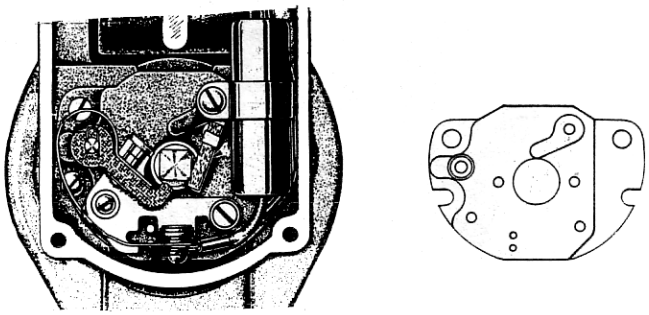
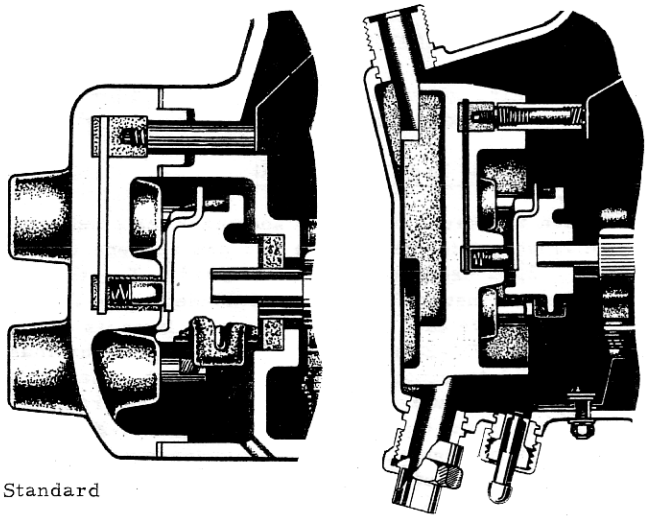


Fig. 4. Bearing Support with and without Point Set, Condenser and Cam Wick

Condenser

Remove the standard condenser from the magneto by unscrewing the condenser mounting screw, Fig. 5. To remove the feed-thru condensers on the FM-E6, FM-XE, FM-XFE, FM-XVE, FM-XYE and FM-XZE multiple cylinder radio-shielded magnetos, take out the two condenser mounting screws.

Clean the condenser and lead wire with a dry cloth; do not damage the lead wire. Then inspect lead wire for damage. Test the condenser for open circuit on a reliable condenser tester or substitute an identical new condenser in its place. The capacity of the AX-M-R-2433 condenser is 0.17-0.23 mfd. The capacity of the S-X-Y



Standard

Radio Shielded with Distributor Block

Fig. 3. Magnetos with Brush and Spring

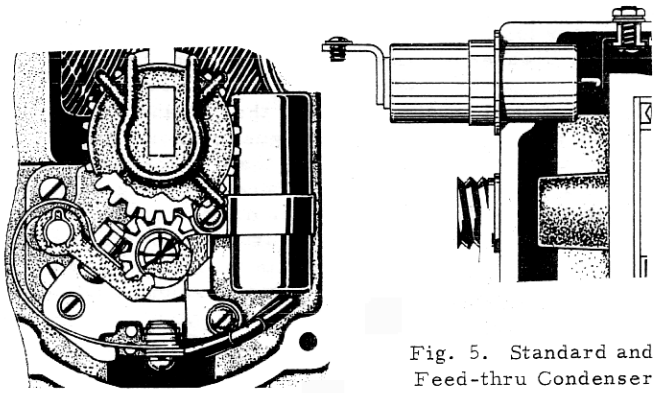


Fig. 5. Standard and Feed-thru Condenser