

Fig. 18. Pressing Sleeve Bearing into Bearing Support

Petroleum solvent. Then dry the housing thoroughly before reassembling the magneto.

Replacement of Drive End Bearing

Types FM-X1, FM-X2, FM-X4, FM-XE4

The drive end ball bearing used in types FM-X1, FM-X2, FM-X4, and FM-XE4 magnetos, when cleaned, inspected, and repacked with FMCO11 magneto bearing grease, may be replaced in the housing, Fig. 17. Center the bearing by hand, in the housing, and place the housing in the screw press. Place the bearing above the support block carefully centering it with the bearing. Then turn down the drive screw of the press, placing the brass cap between the drive screw and the support block. Be sure the assembly is perpendicular in the press before forcing the bearing into the housing. Replace the magnetic rotor drive end bearing snap ring.

Replacement of Sleeve Bearings

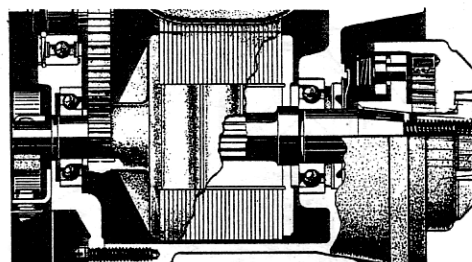
Push the new sleeve bearing on the end of tool TD2252A and place the bearing support plate and tool in the 370TD hand screw press in the same position as for removal, Fig. 18. Apply an even, gradual pressure, pushing the bearing into the bearing support until it is flush with the breaker side of the plate. When both the magnetic rotor bearing and the distributor bearing in types FM-XF2, FM-X4, and FM-XE4 magnetos have been replaced, the bearing support is ready to be replaced in the housing.

Press the distributor ball bearing into its recess, types FM-E, FM-XR, FM-XOR, using the 370TD press, and replace the distributor bearing snap ring. Then press the distributor shaft into place using the hand press, and replace the distributor shaft snap ring. The bearing support is ready to be replaced in the housing.

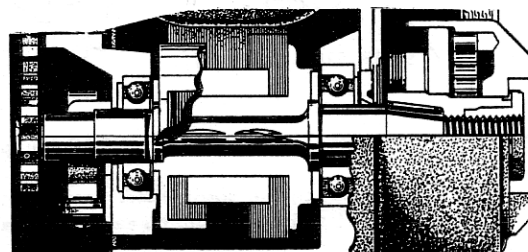
Reassembly of Magnetic Rotor

Types FM-XV, FM-XOR, FM-E

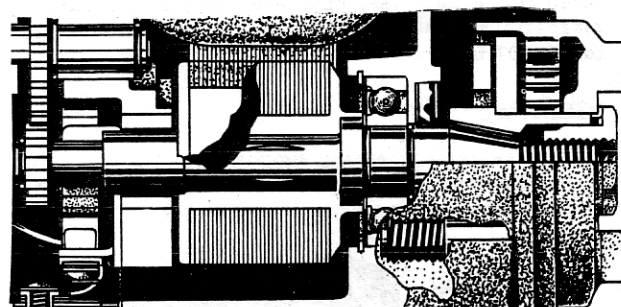
Place a new magnetic rotor bearing oil seal in the drive end recess of the rotor, and a new magnetic rotor seal



Two-pole Rotor with Perpendicular Bar Magnets



Four-pole Rotor with Cylindrical Magnet



Two-pole Rotor with Block Magnets

Fig. 19. Three Types Magnetic Rotors Assembled in Housing

in the cam end recess of the rotor for type FM-XV magnetos, Fig. 19. Slide the bearing thrust washer next to the magnetic rotor gear on rotors for types FM-XR, FM-XOR, and FM-E magnetos. Place the assembly in the hand screw press and with the rotor accurately aligned with the bearing race, press the inner bearing race onto the rotor using the inner race driver OMT82 as an auxiliary tool. Press the bearing race for the drive end bearing of types FM-XR, FM-XOR, and FM-E magnetos onto the rotor until it reaches the shoulder of the lamination assembly. Press the races for the other bearings onto the rotor as far as the washers and cork seals will permit. Place the ball retainer on the inner bearing races and replace the rotor and bearing into the housing.

Replacement of Magnetic Rotor into Housing

Types FM-X1, FM-X2, FM-X4

The magnetic rotor types FM-X1, FM-X2, FM-XF2 and FM-XE4 magnetos must be pressed into the housing, Fig. 20, using the 370TD screw press. Place housing in the press with the drive end bearing accurately centered over the large hole in base plate. Then, with brass cap over cam end of the rotor, press the rotor into the bearing until the shoulder of the lamination assembly touches the inner race of drive end bearing. Replace the rotor drive end shaft snap ring in its groove on