



SERVICE DIRECTIVE BULLETIN

Service Directive Bulletin No. 0060

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Date: July 28, 1982

Subject: Compliance to Avco Lycoming Service Bulletin No. 461 and Bendix Service Bulletin No. 617A.

Models: F-28C, F-28C-2, 280C, F-28F and 280F

Effectivity: All F-28C, F-28C-2 and 280C Models manufactured prior to June 1, 1982 or with engine serial numbers noted in text.

All F-28F Models prior to and including S/N 714.

All 280F Models prior to and including S/N 1508.

Compliance: As noted in text.

Data presented in this Service Directive Bulletin is taken from Avco Lycoming Service Bulletin No. 461 to provide data relating specifically to Enstrom helicopters.

Subject: Bendix Service Bulletin No. 617A

Models Affected: Engines listed below that are equipped with Bendix D-2000 or D-2200 series magnetos. Affected magneto serial numbers are red label magnetos with serial numbers below 35480 and blue label magnetos with serial numbers below 8122106. All engine serial numbers listed below are to be read as "up to and including."

Engine ModelNo.

Serial No.

HIO-360-E1AD

L-22371-51A

HIO-360-E1BD

L-22802-51A

HIO-360-F1AD

L-22902-51A

Remanufactured engines, of all models listed above, shipped prior to Jan. 15, 1982.



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Time of Compliance: Avco Lycoming engine records show that engines with serial numbers above the “up” serial numbers listed were equipped with magnetos that are in compliance with subject Service Bulletin, upon shipment from this plant (Avco Lycoming). Providing the magneto has not been removed or replaced, no further action is required.

See “Equipment Affected” portion of Bendix Service Bulletin No. 617A for compliance information.

Parts needed to accomplish this magneto repair can be obtained from your authorized Bendix Aircraft Distributor. Compensation for the work involved in complying with this service bulletin will be made in accordance with established warranty policy upon submission of a warranty claim through a currently authorized Bendix Engine Products Division Distributor.



AIRCRAFT

SUBJECT:

Inspection and/or replacement of distributor gears in D-2000/2200 series magnetos.

REASON FOR BULLETIN:

1. To alert users of a possible loose distributor gear electrode on the subject gears. This condition could lead to rough engine operation or cylinder or engine damage.
2. To provide users with inspection and replacement procedures.

EQUIPMENT AFFECTED:

All D-2000/2200 series magnetos below serial number 35480 (red label magnetos) and below serial number 8122106 (blue label magnetos) unless identified with an "x" in the upper left corner of the identification plate before the word "Bendix" (see figure 1). The "x" on the identification plate indicates previous compliance.

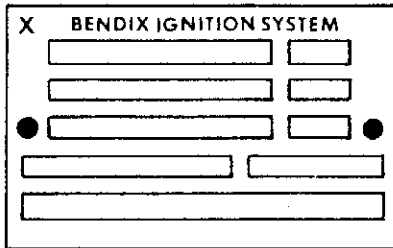


Figure 1. Location of "x" on Identification Plate

Maintenance (Spare) Parts Affected:

- Gear P/N 10-382894 4&8 Cyl.
- Gear P/N 10-382896 6 Cyl.
- Gear Kit P/N 10-682014 4&8 Cyl.
- Gear Kit P/N 10-682016 6 Cyl.

All new gears 10-382894 and 10-382896 should be returned to an Authorized Bendix Engine Products Division Distributor for credit.

All Gear Kits 10-682014 and 10-682016 with gears not identified in paragraph 1 of Compliance must be returned to an Authorized Bendix Engine Products Division Distributor.

Compliance:

1. All subject magnetos having from 0 to 500 operating hours must have the distributor gears inspected within the next 100 operating

hours or at the next regularly scheduled inspection, whichever occurs first, and reinspected every 100 operating hours until the magneto has 500 operating hours. If the gears fail the inspection they must be replaced immediately with new, serviceable gears; if they pass each inspection they may remain in service until magneto overhaul, at which time they must be replaced with new, serviceable gears. At owner's option, gears that pass inspection may be replaced at any time during the compliance period with new, serviceable gears as identified in this paragraph and figure 2. Serviceable gears are identified by the presence of the letter "z" or the letters "x" and "o" appearing together, laser etched on the retaining ring end of the gear axle, or the letter "L" stamped on the electrode (see figure 2).

2. All subject magnetos having 500 or more operating hours must have the distributor gears inspected within the next 100 operating hours or at the next regularly scheduled inspection, whichever occurs first. If the gears fail this inspection they must be replaced immediately with new, serviceable gears; if they pass this inspection they may remain in service until magneto overhaul, at which time

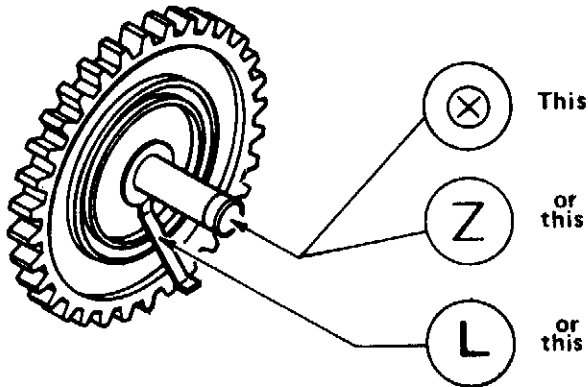


Figure 2. Location of Identification Mark(s)
on Distributor Gear

they must be replaced with new, serviceable gears. At owner's option, gears that pass inspection may be replaced at any time during the compliance period with new, serviceable gears as identified in paragraph 1 of Compliance.

General Information:

Field reports indicate that the distributor gear electrode has been found to be loose on some D-2000/2200 series magnetos. If this condition exists, the distributor gear electrode may contact the distributor block stationary electrodes causing contamination in the distributor in the form of dusty brass particles. This contamination may cause arcing within the distributor resulting in misfiring. This could in turn cause rough engine operation or cylinder or engine damage.

Detailed Instructions:

(Refer to D-2000 Installation Instructions, Bendix Publication L-928 and D-2000 Overhaul Instructions, Bendix Publication L-945.)

1. Remove cover from magneto and inspect the retaining ring end of the distributor gear axles for the letter "z" or the letters "x" and "o". (The letter "x" may or may not be circled by the letter "o".) If the letter "z" or the letters "x" and "o" together are laser etched on the end of the axles, the gears are serviceable and the cover can be reinstalled. Identify the magneto per

paragraph 6 of Detailed Instructions.

2. If the axle ends are not identified with "z" or "x" and "o", remove the magneto from the engine. Remove the block from the magneto and remove the gears from the block.
3. Inspect the block for serviceability and replace any block found to be unserviceable.
4. Clean and inspect each gear. If the gear is part of an insulated gear kit (identifiable by the presence of a nylon insulating washer on the gear axle between the gear and the block) inspect for the presence of the letter "L" on the electrode (see figure 2). If "L" is stamped on the electrode, the gear is serviceable and can be reinstalled. If "L" is not present, the gear must be replaced with serviceable gear, P/N 10-682014 for 4 or 8 cylinder magnetos or P/N 10-682016 for 6 cylinder magnetos.
5. If the gear is the uninsulated type (no nylon washer) inspect the gear for a loose electrode. Grasp the gear firmly in one hand and alternately exert clockwise and counterclockwise force against the electrode with maximum hand pressure. This should be done in a manner that would attempt to pivot the electrode around the axle (see figure 3). If any movement is detected between the electrode and the gear, the gear must be discarded and replaced with a new, serviceable gear.

If gears are found to be serviceable, they may be reinstalled or replaced at owner's option.

CAUTION

When timing magneto on bench or when reinstalling magneto on engine, no gear holding timing device should be used as hidden gear tooth damage may result.

6. If new serviceable gears, identified with the "z", the "x" and "o", or the "L" are installed in the magneto, identify the magneto by stamping the letter "x" in the upper left corner of the identification plate, before the word "Bendix" (see figure 1).



Figure 3. Checking for Loose Electrode

7. Make an appropriate engine log book entry recording magneto serial number to indicate that the distributor gears have been inspected and comply with the requirements of this service bulletin, or that the gears have been replaced with new, serviceable gears.

Warranty Consideration:

All D-2000/2200 series magnetos that are within Bendix Engine Products Division Standard Warranty period will be covered for these procedures, for one (1) inspection only. Standard warranty period is twelve months from date of delivery to the first end user, or 1,000 operating hours, whichever occurs first.

Note:

For warranty consideration all claims must be submitted no later than June 9, 1983.

Compensation:

Compensation for the work and parts involved in complying with this service bulletin for those magnetos under warranty will be made upon submission of a Warranty Claim submitted through a currently Authorized Bendix Engine Products Division Distributor. Compensation will be made in accordance with established Bendix Warranty procedures.

Parts Required per Magneto

2 Kits 10-682014	4&8 Cylinder Magnetos
2 Kits 10-682016	6 Cylinder Magnetos

Special Tools Required:

Refer to applicable manuals

Man Hours Required:

2.5 hours per engine

Weight Change:

None