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SERVICE INSTRUCTION

DATE: April 22, 2004

Service Instruction No. 1510A
(Supersedes Service Instruction No. 1510)

SUBJECT: Adapter Kit for Magneto Isolation Drive

MODELS AFFECTED: Lycoming AEIO-360-B1F aircraft engines installed in Grob G115E aircraft and AEIO-360-B1B aircraft engines installed in Grob G115EG.

TIME OF COMPLIANCE: At owner's discretion.

It has been found that some operators of the AEIO-360-B1B, -B1F engines with lightweight propellers have experienced higher than typical levels of torsional vibration above 2500 RPM in the magnetos. As a product improvement, a modification kit is available to the field. This kit adds magneto drive adapter assembly (P/N 68N23130) to isolate the vibratory forces that possibly could be transmitted from the propeller. Longer studs are provided to accommodate the installation. This kit also includes replacements for existing expendable parts.

Lycoming Service Instruction No. 1506 must first be complied with for the left magneto. An impulse magneto cannot be used with the adapter kit.

This product improvement consists of removing the magneto, replacing the attaching studs in the accessory housing and replacing the drive components of the magneto, as shown in Figure 1.

1. Remove the magneto and the attaching studs in the accessory housing. Clean away old gasket.
2. Install the two (2) P/N 31C-16-P03 studs in the accessory housing. The correct driven height of these studs is 1.34/1.38 inch. Apply Loctite 290 or equivalent to the threads before installing studs. Refer to Table of Limits for minimum drive torque.
3. Remove the cotter pin, nut, washer and drive gear from the magneto drive shaft. Discard old cotter pin and drive gear.
4. Clean the magneto shaft with a cloth wetted with methyl-ethyl ketone or clean unleaded gasoline. Dry thoroughly and apply a light coat of Loctite Food Grade Anti-Sieze, P/N 51168 (8 oz. can) or Go-Jo No Lok to the tapered portion of the magneto shaft.
5. Install the P/N LW-14910 magneto drive coupling on the magneto shaft; then reassemble the washer and nut removed in step 4. Tighten the nut to 20-25 ft.-lbs. torque and secure the nut with the new P/N STD-713 cotter pin.
6. Place a new P/N 62224 gasket over the studs on the magneto mounting pad in the accessory housing. Then install the P/N 68N23130 magneto drive adapter over the studs.
7. Install two P/N LW-14230 drive cushions in the P/N 68N23130 magneto drive adapter, then place a P/N LW-12681 gasket between the magneto and adapter and reassemble the magneto to the engine.

8. Time the magneto as described in Section IV of Direct Drive Overhaul Manual, P/N 60294-7.

9. Record compliance with this modification in the records for the aircraft.

PARTS DATA:

Kit P/N LW-15436 Magneto Isolation Drive consists of the following parts for one magneto only; two kits needed for two magnetos:

(2)	31C-16-P03	Stud
(1)	68N23130	Magneto drive adapter assembly
(2)	LW-14230	Magneto drive cushions
(1)	LW-14910	Magneto drive coupling
(2)	62224	Gasket (1 used with Slick magnetos)
(1)	STD-713	Cotter pin
(1)	LW-12681	Gasket (Slick magneto)

The kit is designed to accommodate different magneto installations. Parts shown in Figure 1 apply only to modification of the Slick magneto in the AEIO-360-B1B, -B1F engines. Parts in the kit not shown in the illustration are not used for this application.

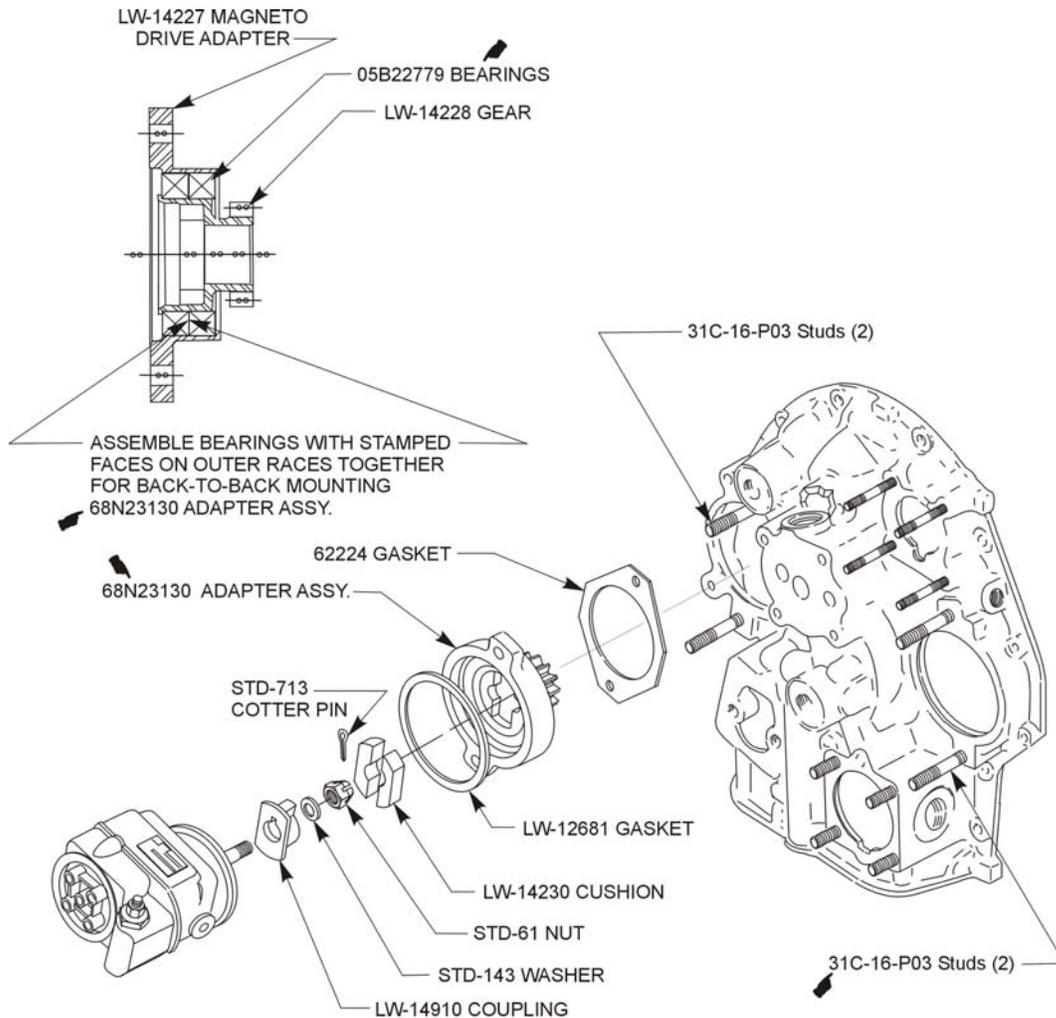


Figure 1.