

TEXTRON Lycoming

Reciprocating Engine Division/
Subsidiary of Textron Inc.
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MANDATORY SERVICE BULLETIN

DATE: December 18, 1990
Service Bulletin No. 411B
(Supersedes Service Bulletin No. 411A)
Engineering Aspects are
FAA Approved

SUBJECT: Adapter Kit for Magneto Isolation Drive

MODELS AFFECTED: All O-360-A4A and A4J series engines with serial number up to and including L23659-36A, IO-360-B4A series engines with serial number up to and including L17977-51A and remanufactured engines shipped prior to August 17, 1977 are subject to this modification, also any O-360 model converted to O-360-A4A or A4J must comply with this Service Bulletin.

All O-360-A3A engines installed in Avions Pierre Robin Aircraft with serial numbers up to and including L-32684-36A and any remanufactured or overhauled engines ordered for Avions Pierre Robin Aircraft and shipped prior to December 1, 1990 **must** comply with this Service Bulletin.

All O-360-A3A engines installed in Avions Pierre Robin Aircraft with serial number L-32685-36A and up and any remanufactured or overhauled engines ordered for Avions Pierre Robin Aircraft and shipped after December 1, 1990 are in compliance with this Service Bulletin.

TIME OF COMPLIANCE: During next routine 100 hour inspection of the engine or during annual inspection; however, installation of the kit herein described should not be delayed longer than the next 100 hours of operation - regardless if engine is new, remanufactured or overhauled.

The O-360-A4A, -A4J, -A3A and IO-360-B4A engines are built with a crankshaft designed to match the operating characteristics of the propeller. This combination, by effecting efficient power transfer, insures satisfactory performance of the aircraft. However, service records of aircraft with this engine and propeller combination indicate requirement for more than usual maintenance of the right hand magneto drive components.

To provide a more maintenance free magneto drive system, a new magneto drive adapter and rubber cushion has been designed to isolate the magneto from the vibratory forces that could be transmitted by the driving components. This product improvement has been introduced in both new and remanufactured engines with serial number and date as shown above.

Also, a modification kit is now available for field installation as described in the following procedure. Note that this modification consists of removing the right magneto, replacing the attaching studs in the accessory housing and replac-

ing the drive components of the magneto as shown in the illustration.

1. Remove the right magneto and the attaching studs in the accessory housing.
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.
3. Place a new P/N 62224 gasket over the studs on the magneto mounting pad in the accessory housing. Then install P/N LW-15416 magneto drive adapter over the studs.
4. Remove the cotter pin, nut, washer and drive gear from the magneto drive shaft.
5. Clean the magneto shaft with a cloth wetted with methyl-ethyl ketone or clean unleaded gasoline. Dry thoroughly and apply a light coat of Go Jo No Lok

No. 72 compound to the tapered portion of the magneto shaft.

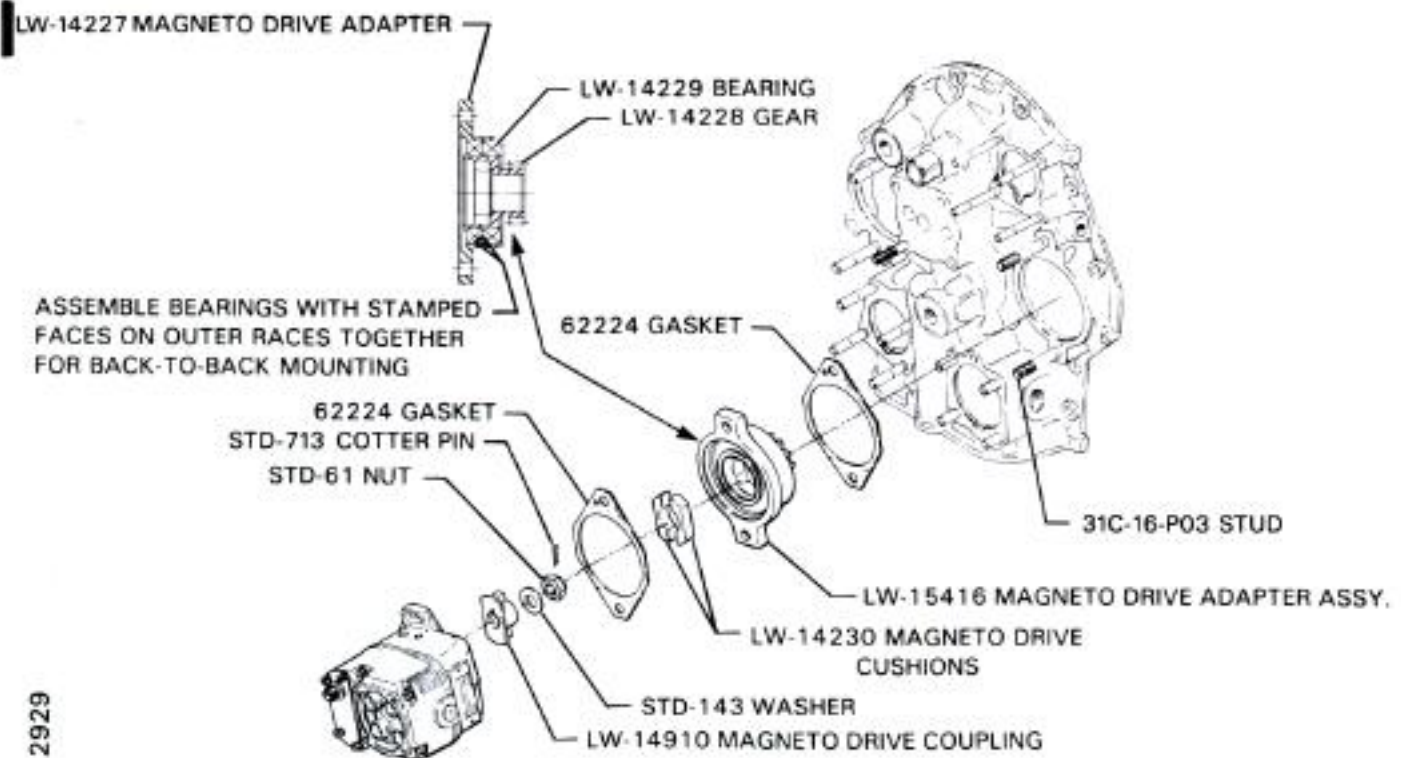
6. Install the P/N LW-14910 magneto drive coupling on the magneto shaft; then reassemble the washer and nut removed in step 4. Tighten the nut to 20/25 ft. lbs. torque and secure the nut with a new P/N STD-713 cotter pin.

7. Install two P/N LW-14230 drive cushions in the P/N

LW-15416 magneto drive adapter, then place a P/N 62224 gasket over the studs against the adapter and reassemble the magneto on 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.



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Magneto Drive and Component Parts

O-360-A4A, -A4J, -A3A and IO-360-B4A Engines

PARTS DATA:

The following kit of parts to accomplish this modification is available through all Textron Lycoming Distributors.

Kit P/N LW-15436 Magneto Isolation Drive consists of the following parts.

Qty.	Part No.	Description
(2)	31C-16-P03	Stud
(1)	LW-15416	Right magneto drive adapter assembly
(2)	LW-14230	Right magneto drive cushions
(1)	LW-14910	Right magneto drive coupling
(2)	62224	Gasket
(1)	STD-713	Cotter pin

NOTE: Revision "B" adds O-360-A3A to Models Affected.

19559, 19644 — These numbers for Textron Lycoming reference only.