

SERVICE INSTRUCTION

DATE: April 12, 2005

Service Instruction No. 1164B
(Supersedes Service Instruction No. 1164A)

SUBJECT: Oil Pump Application

MODELS AFFECTED: All Lycoming direct drive engines except engines that incorporate an integral crankcase and accessory housing assembly.

TIME OF COMPLIANCE: When oil pump replacement is necessary.

Replacement parts for the original two-piece oil pump body and cover assembly are no longer available. One-piece oil pump bodies which have been designed to eliminate the possibility of oil leakage between the oil pump body and cover assembly are now installed on all new applicable engines and are the recommended replacement pumps for all applicable engines in service at this time.

Refer to the latest revision of Service Instruction No. 1341 when installing a new oil pump with a rotating driven impeller shaft in place of an older pump with a pinned in stationary shaft.

The following table lists engines in 4, 6 and 8 cylinder categories. Each category is further broken down into groups that are identified by using engine crankshaft rotation, magneto application and fuel pump application as the descriptive factors. The current oil pump replacement components are listed with each engine group. These oil pump components are to be used in complete sets only. For additional information refer to the latest revision of Service Bulletin No. 524.

NOTE

Right-hand rotation is clockwise as viewed from the accessory end of the engine. Left-hand rotation is counterclockwise as viewed from the accessory end of the engine.

4 CYLINDER

Engine Group	Oil Pump Body Part Number	Drive Impeller Part Number	Driven Impeller Part Number	Drive Shaft/Drive Gear Part Number
1. Right-hand rotation, individual magneto units, provision for A.C. plunger operated fuel pump or no fuel pump.	78531	LW-18109*	LW-18110*	61174
2. Right-hand rotation, individual magneto units, provision for AN type fuel pump.	78528	LW-18109*	LW-18110*	61174
3. Right-hand rotation, dual magneto unit, all fuel pump applications.	LW-10342	LW-18109*	LW-18110*	LW-14040
4. Left-hand rotation, individual magneto units, all fuel pump applications.	LW-11839	LW-18109*	LW-18110*	61174
5. Left-hand rotation, dual magneto unit, all fuel pump applications.	LW-15567	LW-18109*	LW-18110*	LW-14040

6 CYLINDER

Engine Group	Oil Pump Body Part Number	Drive Impeller Part Number	Driven Impeller Part Number	Drive Shaft/Drive Gear Part Number
1. Right-hand rotation, individual magneto units, provisions for A.C. plunger operated fuel pump or no fuel pump.	78531	LW-18109*	LW-18110*	74641
2. Right-hand rotation, individual magneto units, AN fuel pump drive. (See No. 3 also.)	78528	LW-18109*	LW-18110*	74641
3. Right-hand rotation, individual magneto units, AN fuel pump drive. (Large oil pump for turbocharged engines, IO-540-P1A5, -S1A5.)	51A22618	51B23274**	51C23290**	76784
4. Right-hand rotation, dual magneto unit, all fuel pump applications.	LW-10344	51B23274**	51C23290**	LW-10318
5. Left-hand rotation, individual magneto units, all fuel pump applications.	LW-16718	51B23274**	51C23290**	76784
6. Left-hand rotation, dual magneto unit, all fuel pump applications.	LW-11253	51B23274**	51C23290**	LW-10318

8 CYLINDER

Engine Group	Oil Pump Body Part Number	Drive Impeller Part Number	Driven Impeller Part Number	Drive Shaft/Drive Gear Part Number
1. Right-hand rotation, individual magneto units, AN fuel pump drive.	51A22618	51B23274**	51C23290**	73281
2. Right-hand rotation, dual magneto unit, AN fuel pump drive.	LW-10344	51B23274**	51C23290**	LW-10318
3. Right-hand rotation, individual magneto units, AN fuel pump drive, .59:1 ratio hydraulic pump drive. (Special Riley IO-720-A1B installation.)	LW-14389	51B23274**	51C23290**	73281
4. Right-hand rotation, individual magneto units, AN fuel pump drive. (Optional 20-25% greater flow capacity oil pump.)	78890	LW-18297†	51C21698†	73281
5. Right-hand rotation, dual magneto unit, AN fuel pump drive. (Optional 20-25% greater flow capacity oil pump.)	LW-16601	LW-18297†	51C21698†	LW-10318

* - In complete sets only, Kit P/N 05K19423-S.

** - In complete sets only, Kit P/N 05K23463.

† - In complete sets only, Kit P/N 05K19422-S.

CAUTION

ALTHOUGH SOME OIL PUMP BODIES APPEAR TO BE IDENTICAL IN CONSTRUCTION, INSTALLATION OF AN OIL PUMP BODY OTHER THAN WHAT IS LISTED IN THE PRECEDING TABLES COULD RESULT IN LOW ENGINE OIL PRESSURE OR ENGINE FAILURE DUE TO A LACK OF LUBRICATING OIL TO CERTAIN ISOLATED BEARING SURFACES.