



WYTWÓRNIA SPRZĘTU KOMUNIKACYJNEGO
„PZL - Rzeszów” S.A.
Hetmańska Street 120
35-078 RZESZÓW; POLAND
PHONE: (0-17) 8546100, 8546200, FAX: (0-17) 8620750
GILC Certificate: JAR-21 Subpart G No. P-001, JAR-145 No. PL-001



SERVICE BULLETIN

DATE: MARCH 2002

NUMBER: PZL-F/69/2002

CATEGORY: MANDATORY

NAME – TYPE/MODEL: FRANKLIN ENGINE

SERIES / NUMBER: ALL FRANKLIN ENGINES

REFERS TO: Limited interchangeability of parts.

TIME OF ACCOMPLISHING: Immediately on receipt of this service Bulletin.

Approved by General Inspectorate of Civil Aviation

This Bulletin is the translation from Polish language, made by WSK “PZL-Rzeszów”.

Reason:

There have been several occurrences where the teeth of the camshaft or the teeth of the oil pump drive gear are excessively worn out in the case of using one of these parts manufactured by *WSK-Rzeszów* and the other one manufactured by *Franklin Engine Company*. This situation is caused by bad mating of the toothed gears manufactured from materials of different hardness. This may lead to loss of oil pump functioning and seizing of engine bearings.

Recommendations:

If during engine overhaul it is required to replace the camshaft or the oil pump it is forbidden to install these parts manufactured by different Manufacturers, i.e., made from different materials.

Corective actions:

1. Engine inspection

This inspection applies to the engines the camshaft or oil pump were replaced or ordered to be replaced by a User for elements not meeting the mentioned above requirements. It applies also to *SN 061028* and *52903-3* engines overhauled by *WSK PZL-Rzeszów*. These engines will be inspected by service personnel of *WSK PZL-Rzeszów*.

Inspection procedure:

- Drain oil through a sieve and check for occurrence of cast iron filings/particles. If found any, disassemble the engine, verify the parts and install them following the recommendations of this Service Bulletin.
- If no filings are found, remove the oil sump and replace the oil pump drive gear to meet the recommendations of this Service Bulletin. The procedure of the replacement is given in Overhaul Instruction of Franklin Engines, Doc. No. *26.0.143*, paras. 6-5.

2. Additional information, related to engine repairs.

Engines, 6A-350-C1R, C1, C2:

In case when it is required to replace the camshaft and the new camshaft used is manufactured by *WSK* it is necessary to use the oil pump, No. *26.11.6490* or *26.11.0470* manufactured by *WSK*. If the installed oil pump was manufactured *F.E.C.* and it was decided to use this pump, it is necessary to replace the oil pump drive gear for the gear No. *26.11.1118* manufactured by *WSK*.

The procedure of this replacement is given in Overhaul Instruction of Franklin Engines, Doc. No. *26.0.143*, paras. 6-5.

List of information and descriptions:

Name	Part Number	Manufacturer	Description
Camshaft	<i>26.11.0278</i>	<i>WSK-Rzeszów</i>	Made from steel forging.
Camshaft	<i>19961</i>	<i>Franklin Engine Company</i>	Made from cast iron.
Oil Pump	<i>26.11.6490</i>	<i>WSK-Rzeszów</i>	Pump with increased delivery rate mates with casted oil sump.
Oil Pump PLS-6	<i>26.11.0470</i>	<i>WSK-Rzeszów</i>	Pump mates with press stamped oil sump interchangeable with <i>F.E.C.</i> pump.
Oil Pump	<i>17998</i>	<i>Franklin Engine Company</i>	With drive gear made from cast iron.

In relation to the matters mentioned above, the Illustrated Parts Catalog, Doc. No. *26.0.440* shall be updated by canceling the information on interchangeability of camshafts. This will be accomplished by replacement of Pages 2-29 / 2-30.

Engines 4A-235-B3, B31, B4:

In case when it is required to replace the camshaft and the new camshaft used is manufactured by WSK it is necessary to use the oil pump, No. 26.11.1440 manufactured by WSK. If the installed oil pump was manufactured F.E.C. and it was decided to use this pump, it is necessary to replace the oil pump drive gear for the gear No. 26.11.1118 manufactured by WSK.

The procedure of this replacement is given in Overhaul Instruction of Franklin Engines, Doc. No. 26.0.143, paras. 6-5.

List of information and descriptions:

Name	Part Number	Manufacturer	Description
Camshaft	26.11.0321	WSK-Rzeszów	Made from steel forging.
Camshaft	20590	Franklin Engine Company	Made from cast iron.
Oil Pump	26.11.1440	WSK-Rzeszów	Used interchangeable with 21712.
Oil Pump	27712	Franklin Engine Company	With drive gear made from cast iron.

In relation to the matters mentioned above, the Illustrated Parts Catalog, Doc. No. 26.0.450 and 26.0.480 shall be updated by canceling the information on interchangeability of camshafts. This will be accomplished by replacement of Pages 2-29 /2-30 in the Illustrated Parts Catalog, Doc. No. 26.0.450 and Pages 2-23 / 2-24. in the Illustrated Parts Catalog, Doc. No. 26.0.480.