



UNAPPROVED PARTS NOTIFICATION

SUSPECTED UNAPPROVED PARTS PROGRAM OFFICE, AVS-20
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HERNDON, VA 20171

U.S. Department
of Transportation

**Federal Aviation
Administration**

No. 2006-00136
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<http://www.faa.gov/aircraft/safety/programs/sups/upn/>

AFFECTED PARTS

Reciprocating aircraft engine crankcases.

PURPOSE

The purpose of this notification is to advise all aircraft owners, operators, manufacturers, maintenance organizations, and parts suppliers and distributors regarding improper maintenance performed on reciprocating engine crankcases.

BACKGROUND

Information received during a Federal Aviation Administration (FAA) suspected unapproved parts investigation revealed that between November 2003 and March 2006, Crankcase Services USA, Ltd. (Crankcase), located at 2133-2 North Sheridan Rd., Tulsa, OK 74115, improperly maintained and approved for return to service reciprocating engine crankcases. Crankcase holds Air Agency Certificate No. UMRR730X and is authorized to perform maintenance using an approved welding process to repair reciprocating engine crankcases.

Discrepancies noted in Crankcase practices included, but are not limited to, the following:

- Failing to ensure that all test and inspection instruments used to make airworthiness determinations are calibrated to a standard acceptable to the FAA. Crankcase used torque wrenches, digital depth micrometers, and dial indicators that exceeded the time allotted for recalibration by approximately two years.
- Failing to maintain required record keeping in accordance with their repair station manual.
- Approving articles for return to service without holding current FAA Repairman Certificates.

Below is a *partial* list of parts improperly approved for return to service by Crankcase.

PARTIAL LIST OF PARTS

PART NUMBER	SERIAL NUMBER	DATE
IO360	5075	Jan. 23, 2006
GO480	1040	Jan. 30, 2006
0470	136	Feb. 1, 2006
IO520	9A778S	Feb. 3, 2006
0360	4278	Feb. 7, 2006

0320	6976	Feb. 7, 2006
0470	9B105S	Feb. 7, 2006
IO550	GO60009R	Feb. 8, 2006
IO0550	9B69PL	Feb. 15, 2006
0320	7741	Feb. 15, 2006
0320	975	Feb. 15, 2006
0200	39	Feb. 16, 2006
0540	524	Feb. 22, 2006
TSI0520	F28940RPL	Feb. 22, 2006
IO520	B159501R	Feb. 22, 2006
IO320	2156	Feb. 23, 2006
IO320	687	Feb. 23, 2006
0360	367	Mar. 3, 2006

RECOMMENDATIONS

Regulations require that type-certificated products conform to their type design. Aircraft owners, operators, manufacturers, maintenance organizations, and parts suppliers and distributors should inspect their aircraft, aircraft records, and/or parts inventories for any crankcase halves approved for return to service by Crankcase. If these parts are found installed on aircraft, appropriate action should be taken. If any crankcase halves approved for return to service by Crankcase are found in existing inventory, it is recommended that they be segregated to prevent installation until their eligibility for installation is determined.

FURTHER INFORMATION

Further information concerning this investigation, and guidance regarding the above-referenced crankcase halves, may be obtained from the FAA Flight Standards District Office (FSDO) given below. The FAA would appreciate any information concerning the discovery of the above-referenced crankcases from any source, the means used to identify the source, and the actions taken to remove the crankcases from aircraft and/or stock.

This notice originated from the FAA Oklahoma City FSDO, 1300 S. Meridian, Suite 601, Oklahoma City, OK 73108; telephone (405) 951-4200, fax (405) 951-4282; and was published through the FAA Suspected Unapproved Parts Program Office, AVS-20, telephone (703) 668-3720, fax (703) 481-3002.