

service bulletin

M87-8

Technical Portions are
FAA-DER Approved

26 February 1987

SUBJECT: **EXHAUST VALVE INSPECTION**MODELS
AFFECTED: **Part I****Rebuilt Engines Only**

Model	Serial Numbers
IO360B	235846
IO360C	60566, 60567, 60568, 60569, 60571, 60572, 60573
IO360D	62861, 62862
IO360G	244519, 244520, 244521, 244522, 244523, 244524
IO360GB	236630, 236631
IO360K	240074, 240075, 240076, 240077, 240078
TSIO360CB	236040
LTSIO360EB	233931

PART II

Exhaust Valve P/N 639283 purchased from TCM Atlanta Warehouse between March 15, 1985 and June 20, 1985 - This valve is used in 360 series engines.

COMPLIANCE: Within the Next Five (5) Hours of Operation

COMPLIANCE REQUIREMENT:

Those engines listed in Part I and valves purchased per Part II with 250 hours or less operating time.

1. Any valve inspected and not found to exhibit abnormal wear that has less than 100 hours operating time must be reinspected after 100 additional operating hours or at 150 hours operating time, whichever occurs first.
2. Any valve inspected and not found to exhibit abnormal wear that has more than 100 hours operating time but less than 200 hours operating time must be reinspected in 50 hours.
3. Any valve inspected and not found to exhibit abnormal wear that has 200 hours of operating time or more requires no further inspection.

TCM has received and verified a report of exhaust valve P/N 639283 coming loose from its retaining keys. This action was due to the valve tip not having the proper hardness. The reported valve has been traced to a limited number shipped from our vendor. Only a very small number of the valves shipped are suspected of improper hardness. This condition allows the valve tip to wear at an accelerated rate and could lead to valve failure and/or ultimate engine failure. The following action must therefore be taken.

Part I - Action

The engines listed above in Part I were rebuilt by TCM using exhaust valve P/N 639283 from the suspect group. The following inspection is therefore required:

1. Remove the exhaust rocker cover.
2. Visually inspect the exhaust valve tip for abnormal wear. See Example A and B (abnormal wear).

NOTE: If wear is normal, the valve tip should appear similar to Example D (new, unused) or Example C (used, normal wear), depending on hours in use. Valves having improper hardened tips are very soft, so that abnormal wear is readily distinguishable.

3. If a valve with abnormal wear is located, please contact Teledyne Continental Motors.
4. If upon completion of the inspection or inspections explained in the COMPLIANCE REQUIREMENT section of this bulletin no valves with abnormal wear are noted, reinstall the rocker cover using a new gasket P/N 632310 and make appropriate logbook entry as to compliance with this service bulletin.

Part II - Action

A quantity of exhaust valve P/N 639283 from the suspect group were sold from our Atlanta Warehouse to the aftermarket between March 15, 1985 and June 20, 1985; and therefore require the following action:

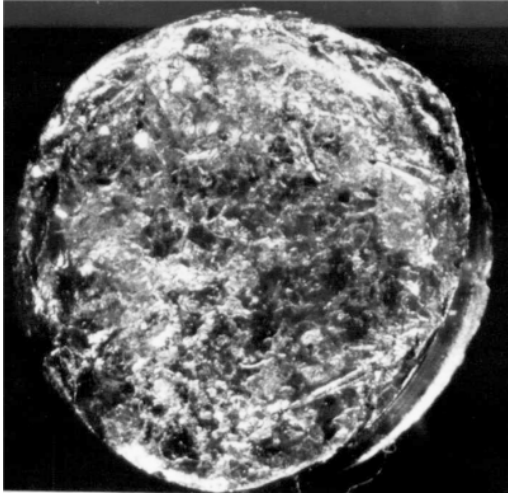
1. Any exhaust valve P/N 639283 that was purchased from the TCM Atlanta Warehouse during the above dates and subsequently installed in an engine must be inspected per the COMPLIANCE REQUIREMENT section and the procedures outlined in the Part I - Action section of this service bulletin.

NOTE: Only cylinders that had valves installed from this suspect group need to be inspected.

2. Any exhaust valve P/N 639283 that was purchased from the TCM Atlanta Warehouse during the above dates and is still in inventory must be returned to TCM for inspection. Please contact Teledyne Continental Motors.

WARRANTY: The action required to comply with this service bulletin is covered by the TCM Gold Medallion Warranty subject to its terms and conditions. Warranty claims may be filed through any TCM distributor. One-half hour of labor for a single cylinder with a maximum of two hours for a complete engine at current published shop rates will be allowed to comply with this service bulletin.

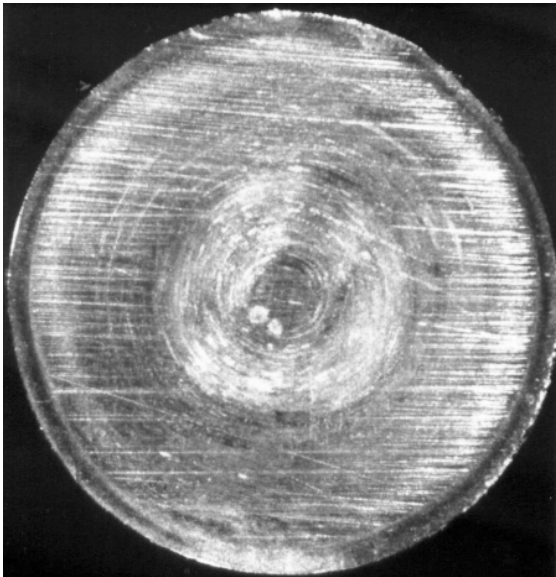
ADDRESS: Teledyne Continental Motors
Aircraft Service Department
P.O. Box 90
Mobile, AL 36601
(205) 438-3411



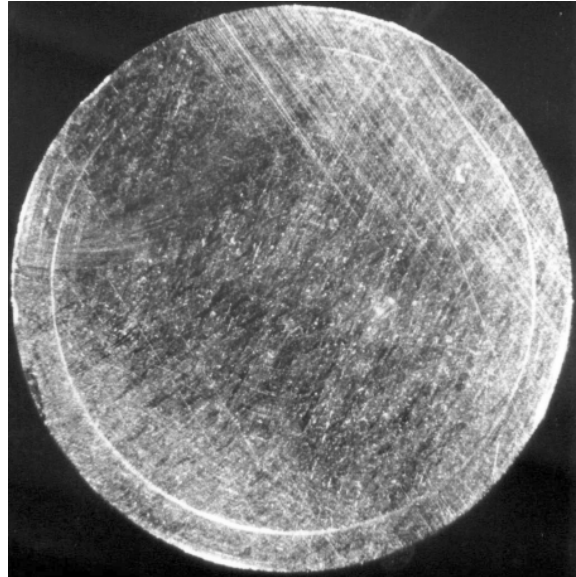
A



B



C



D