Revision Transmittal

April 20, 2009

TO: Cessna Distributors, Single Engine Service Stations and CPC's

SUBJECT: Single Engine Service Bulletin SB08-74-01 Revision 1, Unision Industries SLICK 4200/4300/6200/6300 Mangetos Inspection

REASON FOR REVISION

To provide the following:
Ending airplane serial numbers in the Effectivity section.
Transmit Lycoming Mandatory Service Bulletin No. 583A.
Transmit Lycoming Mandatory Service Bulletin No. 584B.
Revise the Slick model numbers affected.
Provide the ending affected serial number for the magnetos.
Provide a revised parts packaged dates for the replacement cam or contact point assembly.
Provide a revised parts packaged dates for the carbon brush and distributor block assembly.
Provide Service Bulletins ending compliance requirements.
Miscellaneous changes as necessary.

REQUIRED ACTION

Please replace the Original Issue of SB08-74-01 with SB08-74-01 Revision 1.

NOTE: Compliance with SB08-74-01 Revision 1 is required if in compliance with the Original Issue.

LOG OF EFFECTIVE PAGES

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To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

Cessna Aircraft Company, Customer Service, P.O. Box 7706, Wichita, Kansas 67277, U.S.A. (316) 517-5800, Facsimile (316) 942-9006

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Single Engine

Service Bulletin

April 20, 2009

TITLE

UNISON INDUSTRIES SLICK 4200/4300/6200/6300 MAGNETOS INSPECTION

EFFECTIVITY

The following airplanes equipped with Unison Industries/Slick 4200/4300/6200/6300 magnetos that are affected by the attached Lycoming Mandatory Bulletin Nos. 583A and 584B (or later revisions), and/or Unison SLICK Mandatory Service Bulletin Nos. SB2-08A (Corrected Copy) and SB3-08A (or later revisions).

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<tr>
<td>T206H</td>
<td>T20608001 thru T20608929</td>
</tr>
</tbody>
</table>

REASON

To transmit Lycoming Mandatory Service Bulletin No. 583A: Reprint of Mandatory Unison Service Bulletin No. SB2-08, and Lycoming Mandatory Service Bulletin No. 584B: Reprint of Mandatory Unison Service Bulletin No. SB3-08A.

DESCRIPTION

Lycoming Mandatory Service Bulletin No. 583A transmits Unison Industries/Slick Service Bulletin SB2-08A (Corrected Copy): Mandatory Inspections On All Slick 4300/6300 and LASAR 4700/6700 Magnetos. According to Unison Industries/Slick, field reports indicate premature wear of breaker point cam in the serial number range of magnetos listed in SB2-08A (Corrected Copy). Premature cam wear can cause excessive timing drift, causing low magneto output power.

Lycoming Mandatory Service Bulletin No. 584B transmits Unison Industries/Slick Service Bulletin SB3-08A: Mandatory Inspections On All Slick 4200/4300/6200/6300 And LASAR 4700/6700 Magnetos. According to Unison Industries/Slick, field reports indicate premature carbon brush wear. Premature brush wear can lead to failure of the magneto to provide consistent spark and possible loss of engine power.

The magnetos should be inspected and if necessary, repaired or replaced as described in the above Service Bulletins (or later revisions).
COMPLIANCE

Mandatory: shall be accomplished as described in Lycoming Mandatory Service Bulletin Nos. 583A and 584B (or later revisions).

NOTE: Final ending compliance requirements are included in the above Service Bulletins.

NOTE: Compliance with SB08-74-01 Revision 1 is required if in compliance with the original issue.

APPROVAL

Refer to the attached Lycoming Mandatory Service Bulletin Nos. 583A and 584B (or later revisions).

MANPOWER

Determination if magnetos are affected by review of logbooks and airplane paperwork: 0.3 man-hour.

The following man-hours are based on the Lycoming Mandatory Service Bulletin Nos. 583A and 584B and Unison Industries/Slick Service Bulletins SB2-08A (Corrected Copy) and SB3-08A (or later revisions) being accomplished concurrently, includes removal and installation of the magneto, and includes replacement of the affected parts.

If necessary, for 172 models: 2.5 man-hours per magneto.

If necessary, for 182 and 206 models with the normally aspirated engine: 3.0 man-hours per magneto.

If necessary, for 182 and 206 models with the turbocharged engine: 3.5 man-hours per magneto.

Note: The man-hours listed above are for inspecting and repairing the magneto, refer to the CREDIT INFORMATION section for magneto replacement.

REFERENCES


NOTE: Make sure all publications used are complete and current.

NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for continued airworthiness and must be accomplished for ongoing airworthiness compliance as necessary in accordance with 14 CFR Part 43.13.

OTHER PUBLICATIONS AFFECTED

Model 172R & Model 172S Illustrated Parts Catalog
Model 182S/182T/T182T Illustrated Parts Catalog
Model 206H & Model T206H Illustrated Parts Catalog

NOTE: Make sure all publications used are complete and current.

MATERIAL AVAILABILITY

Replacement magnetos and related parts are available from Cessna Parts Distribution through an appropriate Cessna Service Station.
CREDIT INFORMATION

Airplanes In Warranty: Initial Inspection On Currently Installed Magnetos

Applicable parts credit will be provided as stated in Lycoming Mandatory Service Bulletin Nos. 583A and 584B (or later revisions) and Unison Industries/Slick Service Bulletins SB2-08A (Corrected Copy) and SB3-08A (or later revisions).

A labor allowance credit of 0.3 man-hour per airplane will be provided to determine if affected by review of logbooks and airplane paperwork.

If affected by Lycoming Mandatory Service Bulletin Nos. 583A and 584B/Unison Industries/Slick Service Bulletins SB2-08A (Corrected Copy) and/or SB3-08A (or later revisions), the labor allowance credit listed below will be provided.

**Option A - Magneto Replacement:**

Note: The man-hours are based on Lycoming Mandatory Service Bulletin Nos. 583A and 584B/Unison Industries/Slick Service Bulletins SB2-08A (Corrected Copy) and SB3-08A (or later revisions) being accomplished concurrently, includes removal and installation of the magneto.

For 172 models: 1.0 man-hours per magneto.

For 182 and 206 models with the normally aspirated engine: 1.5 man-hours per magneto.

For 182 and 206 models with the turbocharged engine: 2.0 man-hours per magneto.

**Option B - Magneto Repair:**

Note: The man-hours are based on the Lycoming Mandatory Service Bulletin Nos. 583A and 584B/Unison Industries/Slick Service Bulletins SB2-08A (Corrected Copy) and SB3-08A (or later revisions) being accomplished concurrently, includes removal and installation of the magneto, and includes replacement of the affected parts.

For 172 models: 2.5 man-hours per magneto.

For 182 and 206 models with the normally aspirated engine: 3.0 man-hours per magneto.

For 182 and 206 models with the turbocharged engine: 3.5 man-hours per magneto.

For initial inspections on magnetos replaced as a result of this Service Bulletin and for repetitive inspections: Not applicable.

Freight will be credited at the most economical method unless pre-approved by Cessna. For pre-approval contact Cessna Parts Distribution Warranty Administration at Telephone: 316-831-4296, Fax: 316-206-2746 or E-mail: cpd2claims@cessna.textron.com.

To receive credit, the work must be completed and a Warranty Claim submitted by a Cessna Single Engine Service Station within 30 calendar days of Service Bulletin compliance before the credit expiration dates shown below.

**NOTE:** The removed magneto or applicable parts must be included with the Warranty Claim.

<table>
<thead>
<tr>
<th>Domestic</th>
<th>October 20, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>October 20, 2010</td>
</tr>
</tbody>
</table>

Special Note to Service Stations: When you complete the Warranty Claim, the labor allowance claimed shall be itemized for each above action completed.

Airplanes Beyond Warranty

Refer to the Warranty Information section of Lycoming Mandatory Service Bulletin Nos. 583A and 584B and Unison Industries/Slick Service Bulletin Nos. SB2-08A (Corrected Copy) and SB3-08A (or later revisions).
ACCOMPLISHMENT INSTRUCTIONS

Refer to the attached Lycoming Mandatory Service Bulletin Nos. 583A and 584B and Unison Industries/Slick Service Bulletin Nos. SB2-08A (Corrected Copy) and SB3-08A (or later revisions).

Make appropriate logbook(s) entries.

NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for continued airworthiness and must be accomplished for ongoing airworthiness compliance as necessary in accordance with 14 CFR Part 43.13.

OWNER NOTIFICATION

A. On August 4, 2008 the following Owner Advisory message was sent to applicable owners of record in SB08-74-01A.

Dear Cessna Owner:

This Owner Advisory is to inform you that SB08-74-01: Unison Industries/Slick 4300/6300 Magnetos Inspection has been issued to transmit Lycoming Mandatory Service Bulletin Nos. 583A and 584A: Reprint of Mandatory Unison Service Bulletin Nos. SB2-08A and SB3-08.

The magnetos on your airplane may be affected as summarized below.

Unison Industries/Slick Service Bulletin SB2-08A concerns premature wear of the breaker point cam. Premature cam wear can lead to excessive timing drift, causing low magneto output power. SB2-08A affects Unison Industries/Slick 4300/6300 magnetos with serial numbers 0610XXXX through 0804XXXX. Also affected are Unison Industries/Slick 4300/6300 magnetos that have had the cam, or the cam as part of the contact point assembly kit, replaced on October 1, 2006 through May 11, 2008.

Compliance is mandatory: affected magnetos shall be inspected within the next 50 hours of operation as of July 1, 2008. Then, inspect every 100 hours thereafter or annual inspection, whichever comes first, except as noted below.

Note: Service Bulletin ending compliance can be documented after the cam has been replaced by one manufactured May 12, 2008 or later (controlled by manufacturer dated packaging) and an appropriate logbook entry has been made.

Note: For magnetos that have not had the cam replaced, Service Bulletin ending compliance can also be documented if, after 200 hours of magneto operation, there has been no significant engine to magneto timing drift as identified in step 1 above. Record an appropriate logbook entry.

Unison Industries/Slick Service Bulletin SB3-08 concerns premature wear of the carbon brush. Premature brush wear can lead to failure of the magneto to provide consistent spark and possible loss of engine power. SB3-08 affects Unison Industries/Slick 4300/6300 magnetos with serial numbers 0409XXXX and UP. Also affected are magnetos that have had the carbon brush or distributor block replaced after September 1, 2004.

According to Lycoming Mandatory Service Bulletin 534A, compliance is mandatory, and shall be accomplished at the first 25 hours of engine operation, then at 500 hours of engine operation, or at annual inspection; whichever occurs first, until terminating action is accomplished.

NOTE: Refer to the latest revision of the specific Service Bulletin for detailed requirements and information. The documents concerning the magnetos can be viewed at the following Internet website: http://www.lycoming.textron.com/support/publications/service-bulletins/

Airplanes In Warranty: Initial Inspection On Currently Installed Magnetos

Applicable parts credit will be provided as stated in Lycoming Mandatory Service Bulletin Nos. 583A and 584A (or later revisions) and Unison Industries/Slick Service Bulletins SB2-08A and SB3-08 (or later revisions).

A labor allowance credit of 0.3 man-hour per airplane will be provided to determine if affected by review of logbooks and airplane paperwork.
If affected by Lycoming Mandatory Service Bulletin Nos. 583A and 584A/Unison Industries/Slick Service Bulletins SB2-08A and/or SB3-08 (or later revisions), the following labor allowance credit will be provided.

Option A - Magneto Replacement:
Note: The man-hours are based on Lycoming Mandatory Service Bulletin Nos. 583A and 584A/Unison Industries/Slick Service Bulletins SB2-08A and SB3-08 (or later revisions) being accomplished concurrently, includes removal and installation of the magneto.
For 172 models: 1.0 man-hours per magneto.
For 182 and 206 models with the normally aspirated engine: 1.5 man-hours per magneto.
For 182 and 206 models with the turbocharged engine: 2.0 man-hours per magneto.

Option B - Magneto Repair:
Note: The man-hours are based on the Lycoming Mandatory Service Bulletin Nos. 583A and 584A/Unison Industries/Slick Service Bulletins SB2-08A and SB3-08 (or later revisions) being accomplished concurrently, includes removal and installation of the magneto, and includes replacement of the affected parts.
For 172 models: 2.5 man-hours per magneto.
For 182 and 206 models with the normally aspirated engine: 3.0 man-hours per magneto.
For 182 and 206 models with the turbocharged engine: 3.5 man-hours per magneto.

For initial inspections on magnetos replaced as a result of this Service Bulletin and for repetitive inspections: Not applicable.

To receive credit, the work must be completed and a Warranty Claim submitted by a Cessna Single Engine Service Station within 30 calendar days of Service Bulletin compliance before the credit expiration dates shown below.

NOTE: The removed magneto or applicable parts must be included with the Warranty Claim.

<table>
<thead>
<tr>
<th>Domestic</th>
<th>November 17, 2008</th>
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<tbody>
<tr>
<td>International</td>
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</table>

Airplanes Beyond Warranty
If applicable, refer to the Warranty Information section of Lycoming Mandatory Service Bulletin Nos. 583A and 584A and Unison Industries/Slick Service Bulletin Nos. SB2-08A and SB3-08 (or later revisions).

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB08-74-01 accomplished on your airplane.

B. On April 20, 2009 the following message will be sent to applicable owners of record in SB08-74-01AR1

Dear Cessna Owner:

This Owner Advisory is to inform you that SB08-74-01 Revision 1: Unison Industries/Slick 4200/4300/6200/6300 Magnetos Inspection has been issued to transmit Lycoming Mandatory Service Bulletin Nos. 583A and 584B: Reprint of Mandatory Unison Service Bulletin Nos. SB2-08A and SB3-08A.
The magnetos on your airplane may be affected as summarized below.

Unison Industries/Slick Service Bulletin SB2-08A (Corrected Copy) concerns premature wear of the breaker point cam. Premature cam wear can cause excessive timing drift, causing low magneto output power. SB2-08A (Corrected Copy) affects Unison Industries/Slick 4300/6300 magnetos with serial numbers 0610XXXX through 0804XXXX. Also affected are Unison Industries/Slick 4300/6300 magnetos that have had the cam, or the cam as part of the contact point assembly kit, replaced on October 1, 2006 through May 11, 2008.

Compliance is mandatory: affected magnetos shall be inspected within the next 50 hours of operation. Then, inspect every 100 hours thereafter or annual inspection, whichever comes first, except as noted below.

Note: Service Bulletin ending compliance can be documented after the cam has been replaced by one manufactured May 12, 2008 or later (controlled by manufacturer dated packaging) and an appropriate logbook entry has been made.

Note: For magnetos that have not had the cam replaced, Service Bulletin ending compliance can also be documented if, after 200 hours of magneto operation, there has been no significant engine to magneto timing drift as stated in Unison Industries/Slick Service Bulletin SB2-08A (Corrected Copy). Record an appropriate logbook entry.

Unison Industries/Slick Service Bulletin SB3-08A concerns premature wear of the carbon brush. Premature brush wear can lead to failure of the magneto to provide consistent spark and possible loss of engine power. SB3-08A affects Unison Industries/Slick 4200/4300/6200/6300 magnetos with serial numbers 0409XXXX through 08080453. Also affected are magnetos that have had the carbon brush or distributor block replaced between September 1, 2004 and August 14, 2008.

According to Lycoming Mandatory Service Bulletin 534B, compliance is mandatory, and shall be accomplished at the first 25 hours of engine operation, then at 500 hours of engine operation, or at annual inspection; whichever occurs first, until terminating action is accomplished.

NOTE: Refer to the latest revision of the specific Service Bulletin for detailed requirements and information.

The documents concerning the magnetos can be viewed at the following Internet website:

Credit Information

Airplanes In Warranty: Initial Inspection On Currently Installed Magnetos

Applicable parts credit will be provided as stated in Lycoming Mandatory Service Bulletin Nos. 583A and 584B (or later revisions) and Unison Industries/Slick Service Bulletins SB2-08A (Corrected Copy) and SB3-08A (or later revisions).

A labor allowance credit of 0.3 man-hour per airplane will be provided to determine if affected by review of logbooks and airplane paperwork.

If affected by Lycoming Mandatory Service Bulletin Nos. 583A and 584B/Unison Industries/Slick Service Bulletins SB2-08A (Corrected Copy) and/or SB3-08A (or later revisions), the following labor allowance credit will be provided.

Option A - Magneto Replacement:

Note: The man-hours are based on Lycoming Mandatory Service Bulletin Nos. 583A and 584B/Unison Industries/Slick Service Bulletins SB2-08A (Corrected Copy) and SB3-08A (or later revisions) being accomplished concurrently, includes removal and installation of the magneto.

For 172 models: 1.0 man-hours per magneto.

For 182 and 206 models with the normally aspirated engine: 1.5 man-hours per magneto.

For 182 and 206 models with the turbocharged engine: 2.0 man-hours per magneto.
**Option B - Magneto Repair:**

Note: The man-hours are based on the Lycoming Mandatory Service Bulletin Nos. 583A and 584B/Unison Industries/Slick Service Bulletins SB2-08A (Corrected Copy) and SB3-08A (or later revisions) being accomplished concurrently, includes removal and installation of the magneto, and includes replacement of the affected parts.

For 172 models: 2.5 man-hours per magneto.

For 182 and 206 models with the normally aspirated engine: 3.0 man-hours per magneto.

For 182 and 206 models with the turbocharged engine: 3.5 man-hours per magneto.

**For initial inspections on magnetos replaced as a result of this Service Bulletin and for repetitive inspections:** Not applicable.

To receive credit, the work must be completed and a Warranty Claim submitted by a Cessna Single Engine Service Station within 30 calendar days of Service Bulletin compliance before the credit expiration dates shown below.

**NOTE:** The removed magneto or applicable parts must be included with the Warranty Claim.

- Domestic . . . . . . . . . . . . . . . . . . October 20, 2009
- International . . . . . . . . . . . . . . . . . October 20, 2009

**Airplanes Beyond Warranty**

If applicable, refer to the Warranty Information section of Lycoming Mandatory Service Bulletin Nos. 583A and 584B and Unison Industries/Slick Service Bulletin Nos. SB2-08A (Corrected Copy) and SB3-08A (or later revisions).

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance in accordance with 14 CFR Part 43.13.

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB08-74-01 Revision 1 accomplished on your airplane.
DATE: July 21, 2008

Service Bulletin No. 583A
(Supersedes Service Bulletin No. 583)
Engineering Aspects are FAA Approved

SUBJECT: Reprint of MANDATORY Unison Service Bulletin No. SB2-08

MODELS AFFECTED: All Lycoming new, overhauled, rebuilt, or repaired engines with:

1. A Slick model 4300/6300 series magneto with a serial number beginning with 0610##### through 0804#####.
2. A LASAR model 4700/6700 series magneto with a serial number beginning with 0610##### through 0804#####.
3. Any magneto which has had the cam, or the cam as part of the contact point assembly kit, replaced between October 1, 2006 and May 11, 2008.

TIME OF COMPLIANCE: Within the next 50 hours of engine operation. Then at every 100 hours of engine operation or at annual inspection, whichever comes first.

NOTE 1

The magneto model number and serial number can be found on the magneto data plate. The serial number code is a 2 digit year, 2 digit month, and a 4 digit sequence number.

Lycoming has learned that all new, overhauled, rebuilt, or repaired engines with a Unison Industries Slick model 4300/6300 series or LASAR model 4700/6700 series magneto with the serial number range listed above may experience premature wear of the breaker point cam. Premature cam wear can cause excessive timing drift which may lead to low magneto output power.

Unison Industries MANDATORY Service Bulletin No. SB2-08A is reprinted in its entirety as follows. Lycoming requires compliance with all elements of this Service Bulletin and with the additional notes listed below.

This reprint is current at the time Lycoming Service Bulletin No. 583A is issued. However, when complying with this Service Bulletin, insure that compliance is in accordance with the latest revision of Unison MANDATORY Service Bulletin No. SB2-08.
NOTE 2

For affected magnetos shipped from Lycoming as a spare or an engine component, contact Lycoming. Contact information for Lycoming is:

Lycoming Engines
652 Oliver Street
Williamsport, PA 17701
Tel: 1-800-258-3279
SLICK Service Bulletin

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TO: Aircraft manufacturers, distributors, dealers, engine overhaul facilities, owners and operators of Slick Aircraft Products aircraft magnetos.

SUBJECT: Mandatory inspections on all Slick 4300/6300 and LASAR™ 4700/6700 magnetos

MAGNETO MODELS AFFECTED:
- Slick and LASAR™ magnetos with serial numbers beginning with 0610XXXX through 0804XXXX.
- Magnetos which have had the cam, or the cam as part of the contact point assembly kit, replaced between October 1, 2006 and May 11, 2008.

ENGINE MODELS AFFECTED: Engines utilizing Slick and LASAR™ magnetos.

AIRFRAME MODELS AFFECTED: Aircraft utilizing Slick and LASAR™ magnetos.

BACKGROUND INFORMATION: Field reports indicate premature wear of breaker point cam in the serial number range listed in MAGNETO MODELS AFFECTED. Premature cam wear can cause excessive timing drift, causing low magneto output power.

COMPLIANCE: All magnetos that have had a cam, or the cam as part of the contact point assembly kit, replaced between October 1, 2006 and May 11, 2008, and all magneto models in the specified serial number range noted in MAGNETO MODELS AFFECTED. Inspect affected magnetos within the next 50 hours of the effective date of this Service Bulletin. Then, inspect every 100 hours thereafter or annual inspection, whichever comes first. See Detailed Instructions for Service Bulletin ending compliance information.

PROOF OF COMPLIANCE: Appropriate logbook entries.

PARTS REQUIRED PER BULLETIN: Replace magneto or M3611 cam as required.

TOOLS REQUIRED PER BULLETIN: Slick T-100 Tool Kit, magneto timing light, T-300 SynchroLASAR™ and standard shop tools as applicable.

Unison Industries
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Rockford, Illinois, U.S.A. 61104
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ISSUED REVISED PAGE NO. REVISION
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SLICK Service Bulletin SB2-08A

WEIGHT CHANGE: None.

REQUIRED SERVICE LITERATURE: Refer to the following literature as applicable when performing the detailed instructions contained in this bulletin:

Slick 4300/6300 Magneto Maintenance and Overhaul Manual L-1363
LASAR™ 4700/6700 Magneto Maintenance and Overhaul Manual L1503
Slick Service Bulletin SB3-08, Mandatory inspections on all Slick 4300/6300 and LASAR™ 4700/6700 magnetos

WARRANTY INFORMATION: If damage or premature wear listed in this Service Bulletin is discovered during inspection, and the magneto is within Unison’s 1-year warranty period, the magneto may be returned through your point of sale for warranty replacement. For magnetos outside the 1-year warranty period in which the replacement cam, or the cam as part of the contact point assembly kit has failed, the cam may be returned under warranty through your point of sale.

DETAILED INSTRUCTIONS: 1. Check engine timing per engine operator’s manual. If engine to magneto timing is retarded more than 4° from base timing (nominal engine manufacturer’s timing), cam must be replaced per the applicable Maintenance and Overhaul Manual.

2. Service Bulletin ending compliance can be documented after the cam has been replaced by one manufactured May 12, 2008 or later (controlled by manufacturer-dated packaging) and an appropriate logbook entry has been made.

3. For magnetos that have not had the cam replaced, Service Bulletin ending compliance can also be documented if, after 200 hours of magneto operation, there has been no significant engine to magneto timing drift as identified in step 1 above. Record an appropriate logbook entry.

Unison Piston Products Technical Support Hotline: 904-739-4081
Unison Technical Publications Web-site: www.unisonpubs.com

UNISON PROPRIETARY INFORMATION – Subject to the restrictions on the cover or first page

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REVISION A

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REVISION A
S.B. 583
DATE: October 17, 2008  Service Bulletin No. 584B
(Supersedes Service Bulletin No. 584A)

ENGINEERING ASPECTS

FAA Approved

SUBJECT: Reprint of MANDATORY Unison Service Bulletin No. SB3-08A

MODELS AFFECTED:

All Lycoming new, overhauled, rebuilt, or repaired engines with:

1. A Slick model 4200/4300/6200/6300 series magneto with a serial number beginning with 0409#### through 08080453.
2. A LASAR model 4700/6700 series magneto with a serial number beginning with 0409#### through 08080453.
3. Any magneto which has had the carbon brush or distributor block assembly replaced with components packaged between September 1, 2004 and August 14, 2008.

NOTE 1: The magneto model number and serial number can be found on the magneto identification plate.

TIME OF COMPLIANCE: At the first 25 hours of engine operation, then at 500 hours of engine operation, or at annual inspection; whichever occurs first, until terminating action is accomplished.

Lycoming has learned that all new, overhaul, rebuilt, or repaired engines with a Unison Industries Slick model 4200/4300/6200/6300 series or LASAR model 4700/6700 series magneto with the serial number range listed above may experience premature carbon brush wear. Premature brush wear can lead to failure of the magneto to provide a consistent spark and may cause loss of engine power.

Unison Industries MANDATORY Service Bulletin No. SB3-08A is reprinted in its entirety as follows. The compliance measures stated in the Unison service bulletin are reflective of an assessment at the component level of a single magneto.

Lycoming Engines time of compliance differs from the Unison recommendation because the engine system is comprised of redundant magnetos. Additionally, pre-flight inspection procedures include magneto checks which ensure that both units are operational prior to flight. The system design and recommended operating procedures result in an incident rate for complete power loss below that required for Class 1 aircraft (reference: FAA AC 23.1309-1C page 16, Figure 2; available at http://rgl.faa.gov/).
NOTE 2

For affected magnetos shipped from Lycoming as a spare or engine component, contact Lycoming. Contact information for Lycoming is:

Lycoming Engines
652 Oliver Street
Williamsport, PA 17701
Tel: 1-800-258-3279

NOTE 3

For information on determining which magnetos have had carbon brush or distributor block assembly replaced with components packaged between September 1, 2004 and August 14, 2008, contact Unison Industries.
TO: Aircraft manufacturers, distributors, dealers, engine overhaul facilities, owners and operators of Slick Aircraft Products aircraft magnetos.

SUBJECT: Mandatory inspections on all Slick 4200/6200/4300/6300 and LASAR™ 4700/6700 magnetos

MAGNETO MODELS AFFECTED: • Slick and LASAR™ magnetos with serial numbers beginning with 0409XXXX through 08080453.
• Magnetos which have had carbon brush or distributor block assembly replaced with components packaged between September 1, 2004 and August 14, 2008.

ENGINE MODELS AFFECTED: Engines utilizing Slick and LASAR™ magnetos.

AIRFRAME MODELS AFFECTED: Aircraft utilizing Slick and LASAR™ magnetos.

BACKGROUND INFORMATION: Field reports indicate operators have experienced premature carbon brush wear. Premature brush wear can lead to failure of the magneto to provide consistent spark and possible loss of engine power. This bulletin describes an inspection schedule for specific serial number ranges and magneto and brush operating times due to observed variations in premature wear rates.

Bulletin SB3-08A supersedes bulletin SB3-08. The bulletin has been updated to ease the inspection schedule for low operating time magnetos, to provide an ending serial number for the affected range of magnetos, and to announce the availability of new design magnetos and replacement parts.

Inspections that were carried out per the schedule originally recommended in SB3-08 should be considered when determining the need for additional inspections per this revised bulletin.

For magnetos that require continued special inspections per this bulletin, Unison recommends replacement of the carbon brush, or distributor assembly, or magneto with new design parts as described in the Detailed Instructions to prevent the need for additional special inspections.
SLICK Service Bulletin SB3-08A

New Magneto's, manufactured after the ending serial number indicated, and new replacement Brush Kits, and Distributor Kits, manufactured after August 14, 2008, contain a new carbon brush material that is less susceptible to accelerated side-wear in the distributor gear shaft. The new material has successfully completed substantial bench and flight tests, accumulating extensive service time in both four and six cylinder engine applications. Design improvements have also been made to the distributor gear assembly, revising tolerances to reduce gear shaft end-play to help reduce brush side-wear, and to the distributor bearing support bar, adding ribs to effectively increase the distance across the insulating material surface.

COMPLIANCE:
- For all magneto's with serial numbers 0400XXXX through 0811XXXX, and all magneto's that have had a carbon brush or distributor block replaced with components packaged between September 1, 2004 and November 30, 2006 perform Compliance Step 2 only. See Detailed Instructions for Service Bulletin ending compliance information.
- For all magneto's with serial numbers between 0612XXXX and 00000453, and all magneto's that have had a carbon brush or distributor block replaced with components packaged between December 1, 2006 and August 14, 2008, perform Compliance Steps 1 or 2 as applicable based on magneto operating time. See Detailed Instructions for Service Bulletin ending compliance information.

COMPLIANCE STEPS

1. For magneto's with some operating time but less than 250 hours of engine operating time, if not previously inspected per SB3-08 initial issue, inspect within the next 25 hours of operation. Inspect again within the next 250 hours or at the 500 hour magneto service interval, whichever comes first. Subsequently follow the recommended inspection schedule in the applicable Unison or engine/airframe manufacturer's Maintenance and Overhaul publications.

2. For magneto's with greater than 250 hours of engine operating time that have not yet been inspected pursuant to this service bulletin, inspect the magneto within the next 50 hours or at next annual inspection, whichever occurs first. Subsequently, follow the recommended inspection schedule in the applicable Unison, or engine or airframe manufacturer's Maintenance and Overhaul publication(s). No further special inspections per this bulletin are required unless brush or distributor assembly is replaced.

NOTE: If the distributor block assembly or carbon brush are replaced with parts packaged between September 1, 2004 and August 14, 2008, perform Service Bulletin requirements as applicable.

PROOF OF COMPLIANCE: Appropriate logbook entries.
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PARTS REQUIRED PER BULLETIN: As required by inspections described in this Service Bulletin, do one or more of the following: replace magneto, or distributor block (4-cylinder distributor Kit P/N K3822 or 6-cylinder distributor Kit P/N K3823), or carbon brush (Kit P/N K3215), or coil (Kit P/N K3975 or K5275) specified in Maintenance and Overhaul Manuals L-1037, L-1363, or L-1503 as applicable.

TOOLS REQUIRED PER BULLETIN: Slick T-100 Tool Kit, magneto timing light, T-300 SynchroLASAR™ and standard shop tools as applicable.

WEIGHT CHANGE: None.

REQUIRED SERVICE LITERATURE: Refer to the following literature when performing the instructions listed below:

- Slick 4200/6200 Magneto Maintenance and Overhaul Manual L-1037
- Slick 4300/6300 Magneto Maintenance and Overhaul Manual L-1363
- LASAR™ 4700/6700 Magneto Maintenance and Overhaul Manual L-1503
- Slick Service Bulletin SB2-08 - Magneto Breaker Cam Inspection

WARRANTY INFORMATION: If damage or premature wear listed in this Service Bulletin is discovered during inspection, and the magneto is within Unison’s 1-year warranty period, the magneto may be returned through your point of sale for warranty replacement. For magnetos outside the 1-year warranty period in which components listed in this bulletin have failed, those components may be returned under warranty through your point of sale.

DETAILED INSTRUCTIONS: 1. Use lighted magnification (4X minimum) to inspect carbon brush for rough surface and possible tapering. REPLACE CARBON BRUSH THAT SHOWS ANY OF THE UNACCEPTABLE CONDITIONS SHOWN IN FIGURE 1 PER THE APPLICABLE MAINTENANCE AND OVERHAUL MANUAL.

Figure 1

<table>
<thead>
<tr>
<th>Smooth, semi-glossy surface</th>
<th>Undercut or nailhead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable</td>
<td>Rough surface</td>
</tr>
<tr>
<td></td>
<td>Tapering</td>
</tr>
<tr>
<td>Unacceptable</td>
<td>Rough surface</td>
</tr>
<tr>
<td></td>
<td>Tapering</td>
</tr>
</tbody>
</table>

Carbon Brush

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2. Inspect coil tab for carbon residue coating left by carbon brush. See Figure 2. REPLACE CARBON BRUSH PER THE APPLICABLE MAINTENANCE AND OVERHAUL MANUAL IF SUBSTANTIAL RESIDUE IS FOUND ON COIL TAB. Use a cotton swab and alcohol to remove residue from coil tab, or replace coil if tab cannot be cleaned. Also inspect high tension coil tab for wear caused by carbon brush. Wear is indicated by a visible depression in the tab. If tab is worn, replace coil.

Evidence of Improper Wear of Carbon Brush
Figure 2

3. Inspect bearing bar for evidence of brush residue contamination, burning, or arcing. See Figure 3. REPLACE DISTRIBUTOR BLOCK ASSEMBLY PER THE APPLICABLE MAINTENANCE AND OVERHAUL MANUAL IF THERE IS ANY EVIDENCE OF ELECTRICAL ARCING OR BURNING. The new bearing bar can be identified by either the manufacturer-dated packaging, or visually by noting the darns.

Unable to Unacceptable
(Developing bearing bar failure)
Bearing Bar
Figure 3
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4. If bearing bar does not show evidence of burning or arcing, clean and remove any normal residue per the applicable Maintenance and Overhaul Manual and reassemble into the magneto.

CAUTION: IF THE COIL TAB PROTRUDES ABOVE THE MAGNETO FRAME, IT CAN MAKE DIRECT CONTACT WITH THE DISTRIBUTOR GEAR AXLE AND CAUSE THE MAGNETO TO MALFUNCTION.

5. Prior to installing distributor block, make sure coil tab is parallel to and flush with frame mating surface to within 1/32 inch. See Figure 4.

6. Service Bulletin ending compliance can be documented if existing magneto is replaced by new magneto with serial number 08080454 or later, or if the carbon brush and/or distributor block has been replaced by one manufactured after August 14, 2008, or if the magneto has accumulated 500 hours of engine operating time and has passed the Service Bulletin inspection requirements. Make an appropriate logbook entry.

NOTE: Special provisions have been made with Unison Distributors for replacement kits. Visit www.unisonindustries.com/ourproducts/distributors.html for a list of Unison’s authorized distributors.

Unison Platon Products Technical Support Hotline: 904-739-4081
Unison Technical Publications Web-site: www.unisonpubs.com

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