

TITLE

IGNITION - TRANSMITTAL OF CONTINENTAL MOTORS SB15-4A, LYCOMING SB 622A, AND CHAMPION AEROSPACE SLICK SERVICE BULLETIN SB1-15A

EFFECTIVITY

All airplane serial numbers for the models that follow and have a Champion SLICK 4200 series, 4300 series, or 4700 series (LASAR) Magnetos installed.

Cessna Models

MODEL	SERIAL NUMBERS
120-140	8000 thru 15075
140A	15200 thru 15724
150	17001 thru 17999, 59001 thru 59018
150A	628, 15059019 thru 15059350
150B	15059351 thru 15059700
150C	15059701 thru 15060087
150D	15060088 thru 15060772
150E	644, 15060773 thru 15061532
150F	15061533 thru 15064532
150G	15064533 thru 15067198
150H	15067199 thru 15069308
150J	15069309 thru 15071128
150K	15071129 thru 15072003
150L	15072004 thru 15075781
150M	15075782 thru 15079405
A150K	A1500001 thru A1500226
A150L	A1500227 thru A1500432, A1500434 thru A1500523
A150M	A1500524 thru A1500734, 15064970
A-150L	A-1501001 thru A-1501039
A-A150L	A-A1500001 thru A1500009
F150F	F150-0001 thru F150-0067
F150G	F150-0068 thru F150-0219
F150H	F150-0220 thru F150-0389
F150J	F150-0390 thru F150-0529
F150K	F15000530 thru F15000658

November 14, 2019

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Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

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F150L	F15000659 thru F15001143
F150M	F15001144 thru F15001428
FA150K	FA1500001 thru FA1500081
FA150L	FA1500082 thru FA1500120
FRA150L	FRA1500121 thru FRA1500261
FRA150M	FRA1500262 thru FRA1500336
152	15279406 thru 15286033
A152	A15200681, A1500433, A1520789, A1520735 thru A1521049
F152	F15201429 thru F15201980
FA152	FA1520337 thru FA1520425
162	643, 16200001 thru 16200237, 16200302
172I	17256513 thru 17257161
172K	17257162 thru 17259223
172L	17259224 thru 17260758
172M	17260759 thru 17267584
172N	17267585 thru 17274009
172P	17274010 thru 17276673
172Q	17275869 thru 17276259
172RG	172RG0001 thru 172RG1191
F172L	F17200805 thru F17201034
F172M	F17201035 thru F17201514
F172N	F17201515 thru F17202039
F172P	F17202040 thru F17202254
177	17700001 thru 17701164
177A	17701165 thru 17701370
177B	17701371 thru 17702752
177RG	177RG0001 thru 177RG1366
F177RG	F177RG0001 thru F177RG0177

Beechcraft Models**MODEL**

19A
M19A
B19
23
A23
A23A

SERIAL NUMBERS

MB-289 thru MB-460
MB-461 thru MB-480
MB-481 thru MB-722, MB-724 thru MB-905
M-1, M-2, M-4 thru M-554
M-3, M-555 thru M-900
M-901 thru M-1094

A23-19	MB-1 thru MB-288
A23-24	MA-1 thru MA-363
B23	M-1095 thru M-1284
C23	M-1285 thru M-2392
A24	MA-364 thru MA-368
A24R	MC-2 thru MC-150
B24R	MC-152 thru MC-488, MC-450 thru MC-451
C24R	MC-449, MC-452 thru MC-795
77	WA-1 thru WA-312

Spares Stock

Also affected are any Champion SLICK 4200 series, 4300 series, or 4700 series (LASAR) Magneto or K3822 Distributor replacement kit or K3008 Distributor Gear replacement kit dated September 26, 2008 thru September 1, 2016 that are in spares stock.

REASON

Champion Aerospace has issued SLICK Service Bulletin SB1-15A concerning a possible condition in the distributor gear assemblies of 4-cylinder magnetos that can lead to decreased service life. Typical symptoms are unusual RPM drop during magneto check, difficulty starting, and/or rough running engines.

DESCRIPTION

This service document transmits Continental Motors SB15-4A, LYCOMING SB 622A, and Champion Aerospace SLICK Service Bulletin SB1-15A which has instructions for doing an inspection for suspect magneto distributor gear.

COMPLIANCE

RECOMMENDED. This service document should be accomplished at the next 100-hour or 12-month (annual-type) inspection.

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- 1) The mechanic must complete all of the instructions in the service document, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

CONSUMABLE MATERIAL

No specialized consumable materials are required to complete this service document.

TOOLING

For a list of specialized tooling, refer to the Champion Aerospace SLICK Service Bulletin SB1-15A (or latest revision)

REFERENCES

Applicable Model Maintenance/Service Manual

Lycoming SB 622A (Revision A or latest revision)

Continental Motors SB15-4A (Revision A or latest revision)

Champion Aerospace SLICK Service Bulletin SB1-15A (Revision A or latest revision)

PUBLICATIONS AFFECTED

None

ACCOMPLISHMENT INSTRUCTIONS

1. Review the engine log book for documentation of prior compliance with the service bulletins listed:
 - Continental Motors SB15-4A (Revision A or latest revision)
 - Lycoming SB 622A (Revision A or latest revision)
 - Champion Aerospace SLICK Service Bulletin SB1-15A (Revision A or latest revision)

NOTE: Revision A of the Continental Motors SB15-4, Lycoming SB 622A , and Slick/Champion Aerospace Service Bulletin SB1-15 have extended the serial range for the Magnetos with Revision A. Because of the extended serial range, Revision A or later revision must be reviewed and complied.

 - A. If Continental Motors SB15-4A, or Lycoming SB 622A, and Slick/Champion Aerospace Service Bulletin SB1-15A (Revision A or latest revision) have not been complied with, go to Step 2.
 - B. If Continental Motors SB15-4A, or Lycoming SB 622A, and Slick/Champion Aerospace Service Bulletin SB1-15A (Revision A or latest revision) has been complied with, go to Step 7.
2. Prepare the airplane for maintenance.
 - A. Make sure that the airplane is electrically grounded.
 - B. Make sure that all switches are in the OFF/NORM position.
 - C. Disconnect electrical power from the airplane.
 - (1) Disconnect external electrical power.
 - (2) Disconnect the airplane battery.
 - D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
3. Remove the engine cowl. (Refer to the applicable Model Maintenance/Service Manual.)
4. Refer to the referenced service documents to complete the magneto inspection.
 - Continental Motors SB15-4A (Revision A or latest revision)
 - Lycoming SB 622A (Revision A or latest revision)
 - Champion Aerospace SLICK Service Bulletin SB1-15A (Revision A or latest revision)
5. Install the engine cowl. (Refer to the applicable Model Maintenance/Service Manual.)
6. Remove the maintenance warning tags and connect the airplane battery.
7. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

MATERIAL INFORMATION

For parts information, refer to Champion Aerospace SLICK Service Bulletin SB1-15A (Revision A or later revision).

TITLE

IGNITION - TRANSMITTAL OF CONTINENTAL MOTORS SB15-4A, LYCOMING SB 622A, AND CHAMPION AEROSPACE SLICK SERVICE BULLETIN SB1-15A

TO:

To Cessna and Beechcraft Aircraft Owners of Models that follow:

Cessna Models

120-140, 140A, 150, 150A, 150B, 150C, 150D, 150E, 150F, 150G, 150H, 150J, 150K, 150L, 150M, A150K, A150L, A150M, A-150L, A-A150L, F150F, F150G, F150H, F150J, F150K, F150L, F150M, FA150K, FA150L, FRA150L, FRA150M, 152, A152, F152, FA152, 162, 172I, 172J, 172K, 172L, 172M, 172N, 172P, 172Q, 172RG, F172L, F172M, F172N, F172P, 177, 177A, 177B, 177RG, F177RG.

Beechcraft Models

19A, M19A, B19, 23, A23, A23-A, A23-19, A23-24, B23, C23, A24, A24R, B24R, C24R, 77.

REASON

Champion Aerospace has issued SLICK Service Bulletin SB1-15A concerning a possible condition in the distributor gear assemblies of 4-cylinder magnetos that can lead to decreased service life. Typical symptoms are unusual RPM drop during magneto check, difficulty starting, and/or rough running engines.

NOTE: This service letter applies to airplanes that have Champion SLICK 4200 series, 4300 series, or 4700 series (LASAR) Magnetos installed with a K3822 Distributor replacement kit or K3008 Distributor Gear replacement kit dated September 26, 2008 thru September 1, 2016.

NOTE: Also affected are any Champion SLICK 4200 series, 4300 series, or 4700 series (LASAR) Magneto or K3822 Distributor replacement kit or K3008 Distributor Gear replacement kit dated September 26, 2008 thru September 1, 2016 that are in spares stock.

COMPLIANCE

RECOMMENDED. This service document should be accomplished at the next 100-hour or 12-month (annual-type) inspection.

LABOR HOURS

For planning purposes only:

WORK PHASE	LABOR-HOURS
Inspection	1.0
Replacement and Operational Check	2.0

MATERIAL AVAILABILITY

Refer to the Parts Required Per Bulletin Section in the Champion Aerospace SLICK Service Bulletin SB1-15A (Revision A or later revision).

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WARRANTY

This service document is *recommended*. Eligible airplanes may qualify for parts and labor coverage to the extent noted in the *Labor Hours* and *Material Availability* sections of this document.

Eligibility: Airplanes identified within the serial number effectivity of this service document must have active Engine warranty coverage on the original issue date of this document and the coverage must be active on the day the work is accomplished.

Parts Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities, operators, or other maintenance facilities may submit a claim for the parts required to accomplish this service document as defined in the *Material Availability* section of this document.

Labor Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities rated to perform maintenance on the specific model of Beechcraft or Cessna Aircraft may submit a claim for the labor necessary to accomplish this service document as defined in the *Labor Hours* section of this document.

Credit Application: After this service document has been accomplished, a claim must be submitted to Textron Aviation within 30 days of the service document completion. Claims for compliance of this service document are to be filed as a W4 type claim.

Please submit your claim form online at ww2.txtav.com/Parts or email the completed Textron Aviation Claim Form to warranty@txtav.com. If submitted on-line a Return Authorization will be provided. If a paper claim is submitted your claim will be entered into the system and a Return Authorization will be sent to you.

The Return Authorization must accompany any required return parts (see *Material Availability*), to the point of purchase.

Parts to be returned to Textron Aviation Parts Distribution should be forwarded to:

Textron Aviation Parts Distribution
Warranty Administration
285 South Greenwich Road
Bldg B89, Docks 1-4
Wichita, KS 67206
USA

Expiration: November 14, 2020 (after this date the owner/operator assumes the responsibility for compliance costs)

Textron Aviation reserves the right to void continued airplane warranty coverage for the parts affected by this service document until the service document is accomplished.

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at www.txtavsupport.com to register.

PROPRIETARY STATEMENT

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TO: Aircraft Manufacturers, Aircraft Engine Manufacturers, Distributors, Dealers, Engine Maintainers, Engine Overhaul Facilities, Owners and Operators of Slick Aircraft Magnetos.

SUBJECT: Potential decreased service life of Slick 4-cylinder magneto distributor gear assemblies. Based on process and component improvements following the initial release of this service bulletin, the serial number range is being extended in this revision. Magnetos previously returned for compliance to SB1-15 must be returned or inspected for compliance to this revision SB1-15A.

MAGNETO MODELS

AFFECTED: The following 4-cylinder magnetos with serial numbers between 08090001 thru 16071072, K3822 distributor block replacement kits, and K3008 distributor gear assemblies dated September 26, 2008 thru September 1, 2016:

4301, 4302, 4303, 4307, 4309, 4310, 4316, 4324, 4330, 4331, 4333, 4342, 4344, 4345, 4346, 4347, 4348, 4353, 4354, 4370, 4371, 4372, 4373, 4374, 4377, 4381, 4392, 4755, 4761, 4766, 4770, 4771, 4776

NOTE: 08090001 = SN manufacture date of September 2008 and 16071072 = SN manufacture date of July 2016

If it is not possible to confirm the version of the distributor gear that is installed in a given magneto from maintenance records, the magneto may be removed from the engine in order to have the housing and distributor block removed to allow visual inspection of the distributor gear. Distributor gears with Copper electrodes must be replaced with distributor gears with Monel electrodes.



Figure 1. Replacement Kit Box Label Date Code



Figure 2. Magneto ID Label Date Code

* Changes from SB1-15 initial release in red

ISSUED			REVISED		
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A

ENGINE MODELS

AFFECTED: Engines utilizing Slick 4200 series, 4300 series or 4700 series (LASAR) magnetos.

AIRFRAME MODELS

AFFECTED: Aircraft utilizing Slick 4200 series, 4300 series or 4700 series (LASAR) magnetos.

BACKGROUND INFORMATION:

The initial release of SB1-15 was based on a limited number of field reports and product returns, Champion Aerospace has identified a possible condition in the distributor gear assemblies of 4-cylinder magnetos that can lead to decreased service life. Some of the returned products contained distributor gears exhibiting loosening of the electrode finger. This condition was observed in magnetos with a varying number of service hours. Typical symptoms are unusual RPM drop during magneto check, difficulty starting, and/or rough running engines.

While the subject magneto distributor gear assemblies met all acceptance criteria at the time of production, the previous Service Bulletin was issued in order to eliminate any affected 4-cylinder magneto distributor gear assemblies (see below: MAINTENANCE PARTS AFFECTED). Champion Aerospace improved the new replacement K3008 distributor gear assembly to address this issue. Champion Aerospace has made further improvements to the K3008 distributor gear assembly with the final change being the change from a Copper to a Monel distributor gear electrode as of August 2016, making the ultimate product more robust.

COMPLIANCE: REMOVE affected distributor gear assembly in subject magnetos and REPLACE with replacement distributor gear assembly, K3008, as soon as possible, not to exceed the next 50 hours. Document Service Bulletin compliance as written entry in applicable Aircraft and/or Engine logbook.



Figure 3. Affected K3008 Distributor Gear With Copper Electrode



Figure 4. K3008 Distributor Gear Marked 510406 (Backside)

* Changes from SB1-15 initial release in red

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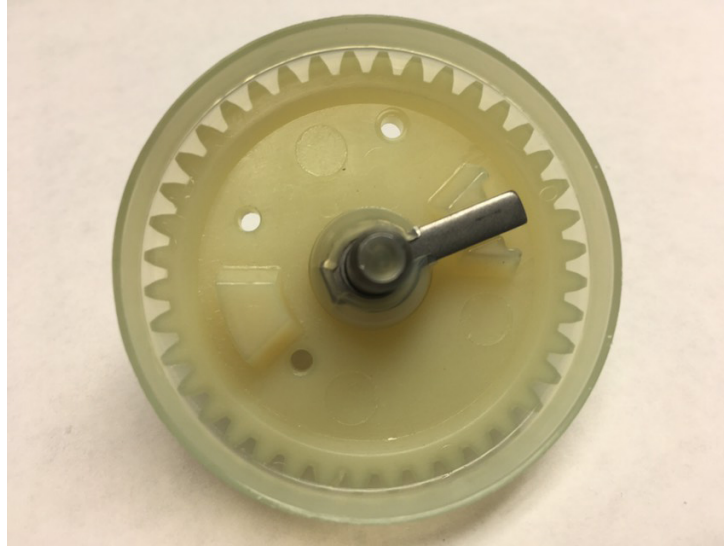


Figure 5. K3008 Distributor Gear With Monel Electrode

**PROOF OF
COMPLIANCE:**

Appropriate logbook entries. See SB 1-15A "COMPLIANCE" and "WARRANTY INFORMATION". Make sure that the removed affected part is returned to Champion through the normal warranty process.

**MAINTENANCE
PARTS AFFECTED:**

- Any 4200 series, 4300 series or 4700 series (LASAR) magnetos which have had the distributor block assembly replaced with a K3822 distributor block replacement kit dated **Sept. 26, 2008 thru Sept. 1, 2016** installed as part of a repair
- Individual K3822 distributor block replacement kits dated **Sept. 26, 2008 thru Sept. 1, 2016**
- Individual K3008 distributor gear replacement kits dated **Sept. 26, 2008 thru Sept. 1, 2016**

**PARTS REQUIRED
PER BULLETIN:**

Replacement K3008 distributor gear assemblies. (The K3008 distributor gear assembly is a subassembly of the K3822 distributor block assembly.)

TOOLS REQUIRED:

T-150 E-gap tool, T-118 mag timing pin, mag timing light, and standard shop tools.

WEIGHT CHANGE:

None.

**REQUIRED SERVICE
LITERATURE:**

Refer to the latest revision of Champion Slick F-1100 Master Service Manual or L-1500 LASAR Master Service Manual, as applicable, when performing the detailed instructions contained in this Service Bulletin.

* Changes from SB1-15 initial release in red

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**RETURN/REPLACEMENT
INFORMATION:**

NOTE: Labor is not included per Champion warranty policy.

Affected magnetos must be returned to Champion for rework and returned at no-charge. Return directions follow.

- Ship prepaid to:
Champion Aerospace LLC
1230 Old Norris Road
Liberty, SC/USA 29657
ATTN: Slick SB1-15A Returns
- Include name, shipping address, model number, serial number of the magneto(s) being returned and time-in-service information in the box with the magneto(s). The estimated turnaround time for returned parts is (5) business days after Champion receives the parts. The same magneto will be returned to the listed shipping address with new distributor gear installed.

NOTE: Do not leave engine components (i.e., drive gears, couplers, etc.) installed on magnetos. Champion cannot guarantee the return of these components.

Alternatively, if operator does not wish to return the entire magneto for repair, then the affected distributor gear assembly may be returned to Champion through the normal warranty process including proof of purchase. A credit for a replacement K3008 distributor gear assembly will be issued to the customer via the distributor.

If the magneto has had the distributor block or distributor gear replaced with parts affected by this Service Bulletin, then the affected distributor gear assembly must be returned to Champion through the normal warranty process including proof of purchase. A credit for a replacement K3008 distributor gear assembly will be issued to the customer via the distributor.

**DETAILED
INSTRUCTIONS:**

REMOVE K3008 distributor gear assembly in subject magnetos and REPLACE with replacement K3008 distributor gear assembly **as soon as possible**, not to exceed the next 50 hours.

NOTE: This repair does not affect normal inspection and maintenance intervals as defined in the latest revision of the F-1100 Master Service Manual or L-1500 LASAR Master Service Manual.

*** Changes from SB1-15 initial release in red**

Champion Slick Piston Helpline: 904-772-1909

Champion Slick Technical Publication Website: www.championaerospacepubs.com

Champion Slick Piston Products Technical Support E-mail: slicksupport@champaero.com

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SERVICE BULLETIN

Compliance Will Enhance Safety

**CATEGORY 3
SB15-4A****Supersedes SB15-4
TECHNICAL PORTIONS
FAA APPROVED****SUBJECT:** Champion Aerospace SLICK Service Bulletin
SB1-15A**PURPOSE:** Potential decreased service life of SLICK 4-cylinder magneto distributor gear assemblies.**COMPLIANCE:** At earliest convenient maintenance time, not to exceed the next 50 hours. Reference attached Champion Aerospace SLICK Service Bulletin SB1-15A.**MODELS****AFFECTED:** All Continental Motors (CMI) O-200 and IO-240 series aviation gasoline (AvGas) engines using SLICK 4200 series, 4300 series or 4700 series (LASAR) magnetos.

I. GENERAL INFORMATION

To inform owner/operators that Champion Aerospace has issued SLICK Service Bulletin SB1-15A concerning a possible condition in the distributor gear assemblies of 4-cylinder magnetos that can lead to decreased service life.

Based on process and component improvements following the initial release of this service bulletin, the serial number range is being extended in this revision. Magnetos previously returned for compliance to SB1-15 must be returned or inspected for compliance to this revision SB1-15A.

Please reference the attachment for detailed compliance information.

For your convenience, please use the following cross-reference table to identify affected CMI Part Numbers:

Part Numbers	
SLICK	CMI
4301	653262
4309	655367
4310	655368

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TO: Aircraft Manufacturers, Aircraft Engine Manufacturers, Distributors, Dealers, Engine Maintainers, Engine Overhaul Facilities, Owners and Operators of Slick Aircraft Magnetos.

SUBJECT: Potential decreased service life of Slick 4-cylinder magneto distributor gear assemblies. Based on process and component improvements following the initial release of this service bulletin, the serial number range is being extended in this revision. Magnetos previously returned for compliance to SB1-15 must be returned or inspected for compliance to this revision SB1-15A.

MAGNETO MODELS

AFFECTED: The following 4-cylinder magnetos with serial numbers between 08090001 thru 16071072, K3822 distributor block replacement kits, and K3008 distributor gear assemblies dated September 26, 2008 thru September 1, 2016:

4301, 4302, 4303, 4307, 4309, 4310, 4316, 4324, 4330, 4331, 4333, 4342, 4344, 4345, 4346, 4347, 4348, 4353, 4354, 4370, 4371, 4372, 4373, 4374, 4377, 4381, 4392, 4755, 4761, 4766, 4770, 4771, 4776

NOTE: 08090001 = SN manufacture date of September 2008 and 16071072 = SN manufacture date of July 2016

If it is not possible to confirm the version of the distributor gear that is installed in a given magneto from maintenance records, the magneto may be removed from the engine in order to have the housing and distributor block removed to allow visual inspection of the distributor gear. Distributor gears with Copper electrodes must be replaced with distributor gears with Monel electrodes.



Figure 1. Replacement Kit Box Label Date Code



Figure 2. Magneto ID Label Date Code

* Changes from SB1-15 initial release in red

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ENGINE MODELS

AFFECTED: Engines utilizing Slick 4200 series, 4300 series or 4700 series (LASAR) magnetos.

AIRFRAME MODELS

AFFECTED: Aircraft utilizing Slick 4200 series, 4300 series or 4700 series (LASAR) magnetos.

BACKGROUND INFORMATION:

The initial release of SB1-15 was based on a limited number of field reports and product returns, Champion Aerospace has identified a possible condition in the distributor gear assemblies of 4-cylinder magnetos that can lead to decreased service life. Some of the returned products contained distributor gears exhibiting loosening of the electrode finger. This condition was observed in magnetos with a varying number of service hours. Typical symptoms are unusual RPM drop during magneto check, difficulty starting, and/or rough running engines.

While the subject magneto distributor gear assemblies met all acceptance criteria at the time of production, the previous Service Bulletin was issued in order to eliminate any affected 4-cylinder magneto distributor gear assemblies (see below: MAINTENANCE PARTS AFFECTED). Champion Aerospace improved the new replacement K3008 distributor gear assembly to address this issue. Champion Aerospace has made further improvements to the K3008 distributor gear assembly with the final change being the change from a Copper to a Monel distributor gear electrode as of August 2016, making the ultimate product more robust.

COMPLIANCE: REMOVE affected distributor gear assembly in subject magnetos and REPLACE with replacement distributor gear assembly, K3008, as soon as possible, not to exceed the next 50 hours. Document Service Bulletin compliance as written entry in applicable Aircraft and/or Engine logbook.



Figure 3. Affected K3008 Distributor Gear With Copper Electrode



Figure 4. K3008 Distributor Gear Marked 510406 (Backside)

* Changes from SB1-15 initial release in red

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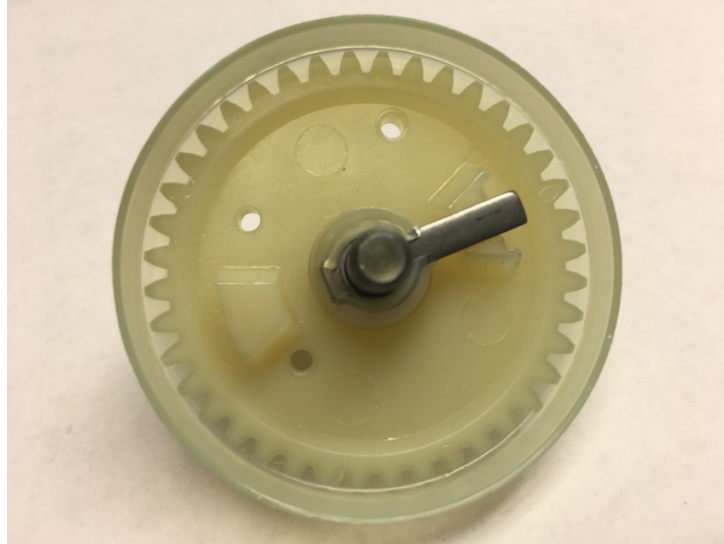


Figure 5. K3008 Distributor Gear With Monel Electrode

**PROOF OF
COMPLIANCE:**

Appropriate logbook entries. See SB 1-15A "COMPLIANCE" and "WARRANTY INFORMATION". Make sure that the removed affected part is returned to Champion through the normal warranty process.

**MAINTENANCE
PARTS AFFECTED:**

- Any 4200 series, 4300 series or 4700 series (LASAR) magnetos which have had the distributor block assembly replaced with a K3822 distributor block replacement kit dated **Sept. 26, 2008 thru Sept. 1, 2016** installed as part of a repair
- Individual K3822 distributor block replacement kits dated **Sept. 26, 2008 thru Sept. 1, 2016**
- Individual K3008 distributor gear replacement kits dated **Sept. 26, 2008 thru Sept. 1, 2016**

**PARTS REQUIRED
PER BULLETIN:**

Replacement K3008 distributor gear assemblies. (The K3008 distributor gear assembly is a subassembly of the K3822 distributor block assembly.)

TOOLS REQUIRED:

T-150 E-gap tool, T-118 mag timing pin, mag timing light, and standard shop tools.

WEIGHT CHANGE:

None.

**REQUIRED SERVICE
LITERATURE:**

Refer to the latest revision of Champion Slick F-1100 Master Service Manual or L-1500 LASAR Master Service Manual, as applicable, when performing the detailed instructions contained in this Service Bulletin.

* Changes from SB1-15 initial release in red

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A

**RETURN/REPLACEMENT
INFORMATION:**

NOTE: Labor is not included per Champion warranty policy.

Affected magnetos must be returned to Champion for rework and returned at no-charge. Return directions follow.

- Ship prepaid to:
Champion Aerospace LLC
1230 Old Norris Road
Liberty, SC/USA 29657
ATTN: Slick SB1-15A Returns
- Include name, shipping address, model number, serial number of the magneto(s) being returned and time-in-service information in the box with the magneto(s). The estimated turnaround time for returned parts is (5) business days after Champion receives the parts. The same magneto will be returned to the listed shipping address with new distributor gear installed.

NOTE: Do not leave engine components (i.e., drive gears, couplers, etc.) installed on magnetos. Champion cannot guarantee the return of these components.

Alternatively, if operator does not wish to return the entire magneto for repair, then the affected distributor gear assembly may be returned to Champion through the normal warranty process including proof of purchase. A credit for a replacement K3008 distributor gear assembly will be issued to the customer via the distributor.

If the magneto has had the distributor block or distributor gear replaced with parts affected by this Service Bulletin, then the affected distributor gear assembly must be returned to Champion through the normal warranty process including proof of purchase. A credit for a replacement K3008 distributor gear assembly will be issued to the customer via the distributor.

**DETAILED
INSTRUCTIONS:**

REMOVE K3008 distributor gear assembly in subject magnetos and REPLACE with replacement K3008 distributor gear assembly **as soon as possible**, not to exceed the next 50 hours.

NOTE: This repair does not affect normal inspection and maintenance intervals as defined in the latest revision of the F-1100 Master Service Manual or L-1500 LASAR Master Service Manual.

*** Changes from SB1-15 initial release in red**

Champion Slick Piston Helpline: 904-772-1909

Champion Slick Technical Publication Website: www.championaerospacepubs.com

Champion Slick Piston Products Technical Support E-mail: slicksupport@champaero.com

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MANDATORY

SERVICE BULLETIN

DATE: March 13, 2019

Service Bulletin No. 622A
(Supersedes Service Bulletin No. 622)
Engineering Aspects are
FAA Approved

SUBJECT: Reprint of Slick/Champion Aerospace Service Bulletin SB1-15A
MODELS AFFECTED: All Lycoming engines equipped with Slick 4200, 4300, or 4700 Series (LASAR) magnetos.

TIME OF COMPLIANCE: Next maintenance event, not to exceed 50 hours

REASON FOR REVISION: Release of Slick/Champion Service Bulletin SB1-15A

NOTICE: Incomplete review of all the information in this document can cause errors. Read the entire Service Bulletin to make sure you have a complete understanding of the requirements.

This Service Bulletin is notification of required action for mandatory compliance with Slick/Champion Aerospace Service Bulletin No. SB1-15A dated 11/12/2018, regarding Lycoming engine models with Slick 4200, 4300, or 4700 Series (LASAR) Magnetos (Serial Numbers between 08090001 thru 16071072 identified in Slick/Champion Aerospace Service Bulletin SB1-15A) approved for use on Lycoming engines.

Slick/Champion Aerospace Service Bulletin No. SB1-15A dated 11/12/2018 is reprinted in its entirety as follows and is current at the time Lycoming Service Bulletin No. 622A is issued. However, compliance with this Service Bulletin is to be in accordance with the latest revision of the Slick Service Bulletin.

NOTICE: Refer to the latest revision of Service Instruction No. 1443 for cross references of Slick model numbers and Lycoming part numbers.

Due to the Slick Service Bulletin SB1-15A having an expanded date range (September 26, 2008 – September 1, 2016) and the possibility of magneto replacement during that time period, Lycoming is unable to publish an accurate list of potentially affected engine serial numbers. To maintain the highest level of safety possible, Lycoming is requiring the following action.

Required Action

NOTICE: Compliance with Slick/Champion Service Bulletin SB1-15A, or the current revision, is required, even if the magneto distributor gear assembly was replaced per instructions in the original Slick/Champion Service Bulletin SB1-15.

1. Identify all Slick 4200, 4300, or 4700 series magnetos with serial numbers of 08090001 through 16071072 installed on your Lycoming 4-cylinder engine.
2. Identify all K3822 distributor block replacement kits, and K3008 distributor gear assemblies dated September 26, 2008 through September 1, 2016 installed in the magneto or in spares inventory.
3. Obey the instructions in the attached Slick/Champion Aerospace Service Bulletin No. SB1-15A.



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PROPRIETARY STATEMENT

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TO: Aircraft Manufacturers, Aircraft Engine Manufacturers, Distributors, Dealers, Engine Maintainers, Engine Overhaul Facilities, Owners and Operators of Slick Aircraft Magnetos.

SUBJECT: Potential decreased service life of Slick 4-cylinder magneto distributor gear assemblies. Based on process and component improvements following the initial release of this service bulletin, the serial number range is being extended in this revision. Magnetos previously returned for compliance to SB1-15 must be returned or inspected for compliance to this revision SB1-15A.

MAGNETO MODELS

AFFECTED: The following 4-cylinder magnetos with serial numbers between 08090001 thru 16071072, K3822 distributor block replacement kits, and K3008 distributor gear assemblies dated September 26, 2008 thru September 1, 2016:

4301, 4302, 4303, 4307, 4309, 4310, 4316, 4324, 4330, 4331, 4333, 4342, 4344, 4345, 4346, 4347, 4348, 4353, 4354, 4370, 4371, 4372, 4373, 4374, 4377, 4381, 4392, 4755, 4761, 4766, 4770, 4771, 4776

NOTE: 08090001 = SN manufacture date of September 2008 and 16071072 = SN manufacture date of July 2016

If it is not possible to confirm the version of the distributor gear that is installed in a given magneto from maintenance records, the magneto may be removed from the engine in order to have the housing and distributor block removed to allow visual inspection of the distributor gear. Distributor gears with Copper electrodes must be replaced with distributor gears with Monel electrodes.



Figure 1. Replacement Kit Box Label Date Code



Figure 2. Magneto ID Label Date Code

* Changes from SB1-15 initial release in red

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ENGINE MODELS

AFFECTED: Engines utilizing Slick 4200 series, 4300 series or 4700 series (LASAR) magnetos.

AIRFRAME MODELS

AFFECTED: Aircraft utilizing Slick 4200 series, 4300 series or 4700 series (LASAR) magnetos.

BACKGROUND INFORMATION:

The initial release of SB1-15 was based on a limited number of field reports and product returns, Champion Aerospace has identified a possible condition in the distributor gear assemblies of 4-cylinder magnetos that can lead to decreased service life. Some of the returned products contained distributor gears exhibiting loosening of the electrode finger. This condition was observed in magnetos with a varying number of service hours. Typical symptoms are unusual RPM drop during magneto check, difficulty starting, and/or rough running engines.

While the subject magneto distributor gear assemblies met all acceptance criteria at the time of production, the previous Service Bulletin was issued in order to eliminate any affected 4-cylinder magneto distributor gear assemblies (see below: MAINTENANCE PARTS AFFECTED). Champion Aerospace improved the new replacement K3008 distributor gear assembly to address this issue. Champion Aerospace has made further improvements to the K3008 distributor gear assembly with the final change being the change from a Copper to a Monel distributor gear electrode as of August 2016, making the ultimate product more robust.

COMPLIANCE: REMOVE affected distributor gear assembly in subject magnetos and REPLACE with replacement distributor gear assembly, K3008, as soon as possible, not to exceed the next 50 hours. Document Service Bulletin compliance as written entry in applicable Aircraft and/or Engine logbook.



Figure 3. Affected K3008 Distributor Gear With Copper Electrode



Figure 4. K3008 Distributor Gear Marked 510406 (Backside)

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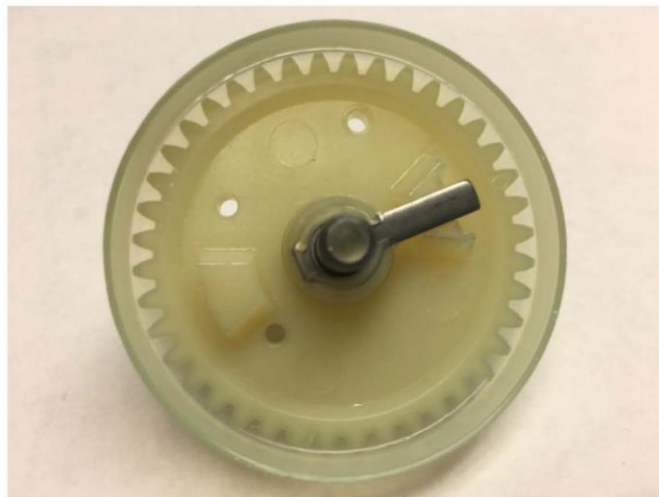


Figure 5. K3008 Distributor Gear With Monel Electrode

PROOF OF COMPLIANCE:

Appropriate logbook entries. See SB 1-15A "COMPLIANCE" and "WARRANTY INFORMATION". Make sure that the removed affected part is returned to Champion through the normal warranty process.

MAINTENANCE PARTS AFFECTED:

- Any 4200 series, 4300 series or 4700 series (LASAR) magnetos which have had the distributor block assembly replaced with a K3822 distributor block replacement kit dated **Sept. 26, 2008 thru Sept. 1, 2016** installed as part of a repair
- Individual K3822 distributor block replacement kits dated **Sept. 26, 2008 thru Sept. 1, 2016**
- Individual K3008 distributor gear replacement kits dated **Sept. 26, 2008 thru Sept. 1, 2016**

PARTS REQUIRED PER BULLETIN:

Replacement K3008 distributor gear assemblies. (The K3008 distributor gear assembly is a subassembly of the K3822 distributor block assembly.)

TOOLS REQUIRED:

T-150 E-gap tool, T-118 mag timing pin, mag timing light, and standard shop tools.

WEIGHT CHANGE:

None.

REQUIRED SERVICE LITERATURE:

Refer to the latest revision of Champion Slick F-1100 Master Service Manual or L-1500 LASAR Master Service Manual, as applicable, when performing the detailed instructions contained in this Service Bulletin.

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Champion Slick Piston Helpline: 904-772-1909

Champion Slick Technical Publication Website: www.championaerospacepubs.com

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