

Service Bulletin

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

SUBJECT: Mandatory inspection of impulse coupled Slick magnetos

MAGNETO MODELS

AFFECTED: The following magneto models with serial numbers between 16010001 and 18050664:

4301, 4303, 4316, 4330, 4333, 4346, 4354, 4371, 4372, 4373, 4374, 4381, 4392, 6310, 6314, 6320, 6324, 6331, 6351, 6352, 6355, 6361, 6362, 6364, 6367, 6377, 6379, 6380, 6382, 6399

NOTE: 16010001 = SN manufacture date of January 2016 and
18050664 = SN manufacture date of May 2018

ENGINE MODELS

AFFECTED: 4300 series and 6300 series magnetos.

AIRFRAME MODELS

AFFECTED: 4300 series and 6300 series magnetos.

BACKGROUND INFORMATION:

There have been limited reports in which impulse coupling stop pins have moved relative to the factory placement within the magneto frame of Slick magnetos. There has been one report of a liberated stop pin. A liberated stop pin could potentially enter the gear train of the engine, resulting in damage to the gear train, damage to engine accessories and could ultimately cause catastrophic engine failure.

COMPLIANCE:

Inspect affected magneto models for movement of impulse coupling stop pin at the next convenient maintenance interval, not to exceed the next 100 hours or 400 hours Time in Service (TIS), and every 500 hours thereafter. Alternatively, replace the affected magneto with an approved model magneto, outside the above serial number range, or compliant with the SB1-19 dimensions herein for the stop pin. Document service bulletin compliance as written entry in the applicable Aircraft and/or Engine logbook.

PROOF OF COMPLIANCE:

Appropriate logbook entries. See SB1-19 COMPLIANCE and WARRANTY INFORMATION.

MAINTENANCE PARTS AFFECTED:

None.

Proprietary Statement

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**PARTS REQUIRED
PER BULLETIN:**

Replacement magnetos as required.

TOOLS REQUIRED:

T-118 mag timing pin, mag timing light, calibrated measuring device, and standard shop tools.

WEIGHT CHANGE:

None.

**REQUIRED SERVICE
LITERATURE:**

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

**WARRANTY
INFORMATION:**

NOTE: Labor is not included per Champion warranty policy.

If the magneto is within the listed s/n range and fails the inspection within these DETAILED INSTRUCTIONS, the magneto should be returned for warranty consideration through the original point of sale. Champion Aerospace will not accept direct returns. Affected magnetos that fail the required inspections must be returned with proof of purchase to the original point of sale (either Authorized Champion Distributor or Aircraft Engine Manufacturer) for warranty consideration. Champion waives the published warranty limits for TIS and calendar period for parts affected by this Service Bulletin. Warranty Credits will only be processed to an Authorized Champion Distributor or Aircraft Engine Manufacturer after final receipt of magneto and confirmation of required measurement. Champion reserves the right to deny warranty and return magneto if measurements are subsequently found to be compliant with the Service Bulletin.

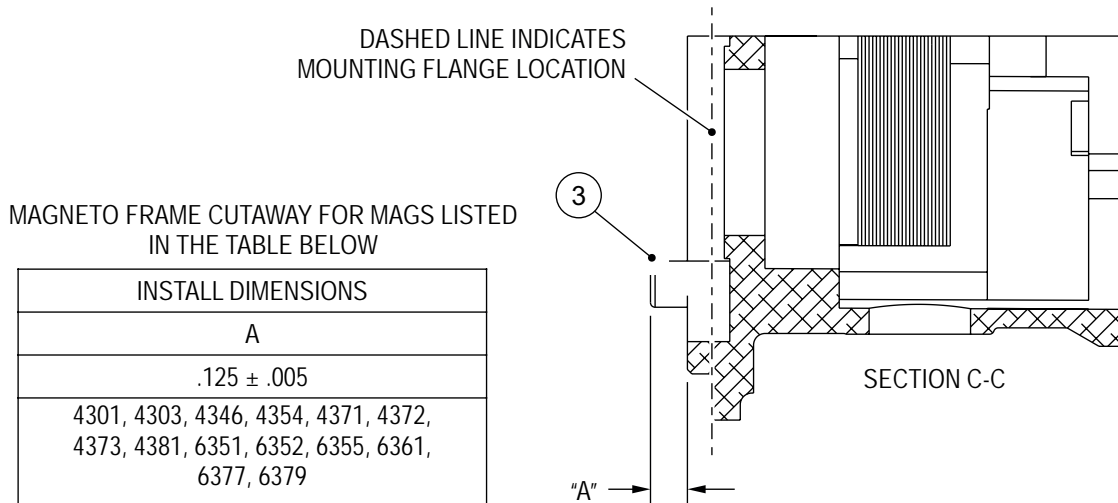
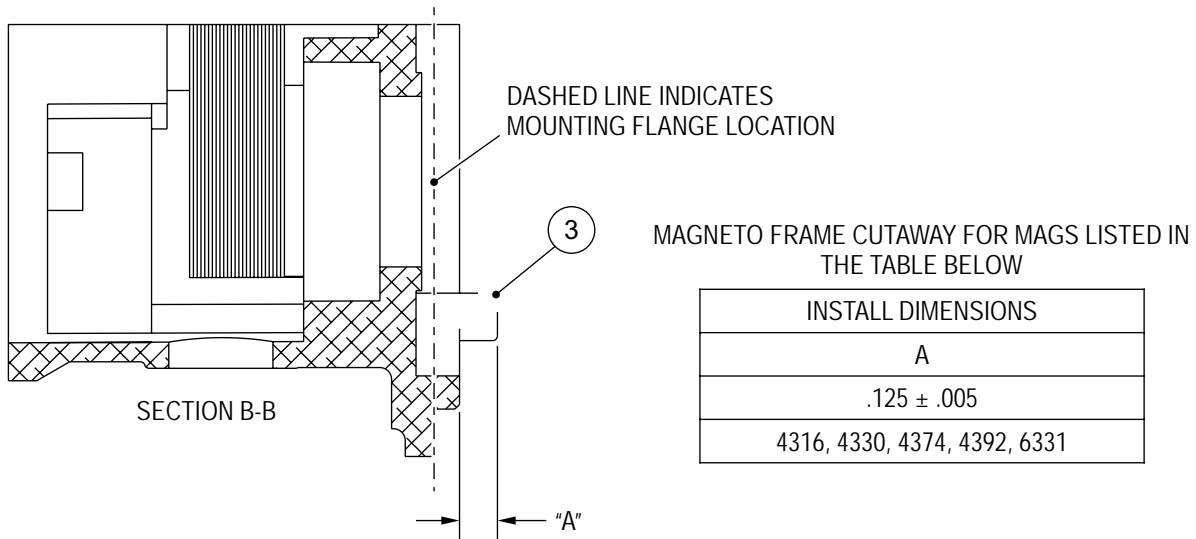
**DETAILED
INSTRUCTIONS:**

- Warranty form must include name, shipping address, model number, serial number of the magneto(s) being returned and TIS information in the box with the magneto(s). (Distributors have warranty forms)
- Do not leave drive gears installed on the magneto(s). Champion cannot guarantee return of these components
 - A. Locate magneto serial number on magneto dataplate. If magneto serial number is determined to be within the range specified in this bulletin, remove the magneto from engine in accordance with the latest revision of the engine manufacturer's manual(s).
 - B. Inspect the magneto to confirm the necessary recess/projection (based on individual magneto type) of the stop pin. If the stop pin installation depth is not in compliance with the dimension shown in Figures 1 through 6, the magneto must be replaced with a new or serviceable unit that is in compliance with this service bulletin.
 - C. Repeat this inspection every 500 hours TIS, until end of product life.

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USE A CALIBRATED MEASURING DEVICE TO MEASURE DISTANCE "A", AS SHOWN IN CUTAWAY SECTIONS B-B AND C-C. MAKE SURE THE FRAME SURFACE IS FREE OF CONTAMINANTS. ANY MEASUREMENT GREATER THAN 0.130 INCH OF ANY PART OF THE STOP PIN (3), THE MAGNETO SHOULD BE REMOVED FROM SERVICE AND RETURNED TO CHAMPION FOR WARRANTY.

FIGURE 1. MAGNETO FRAME CUTAWAY SECTIONS B-B AND C-C

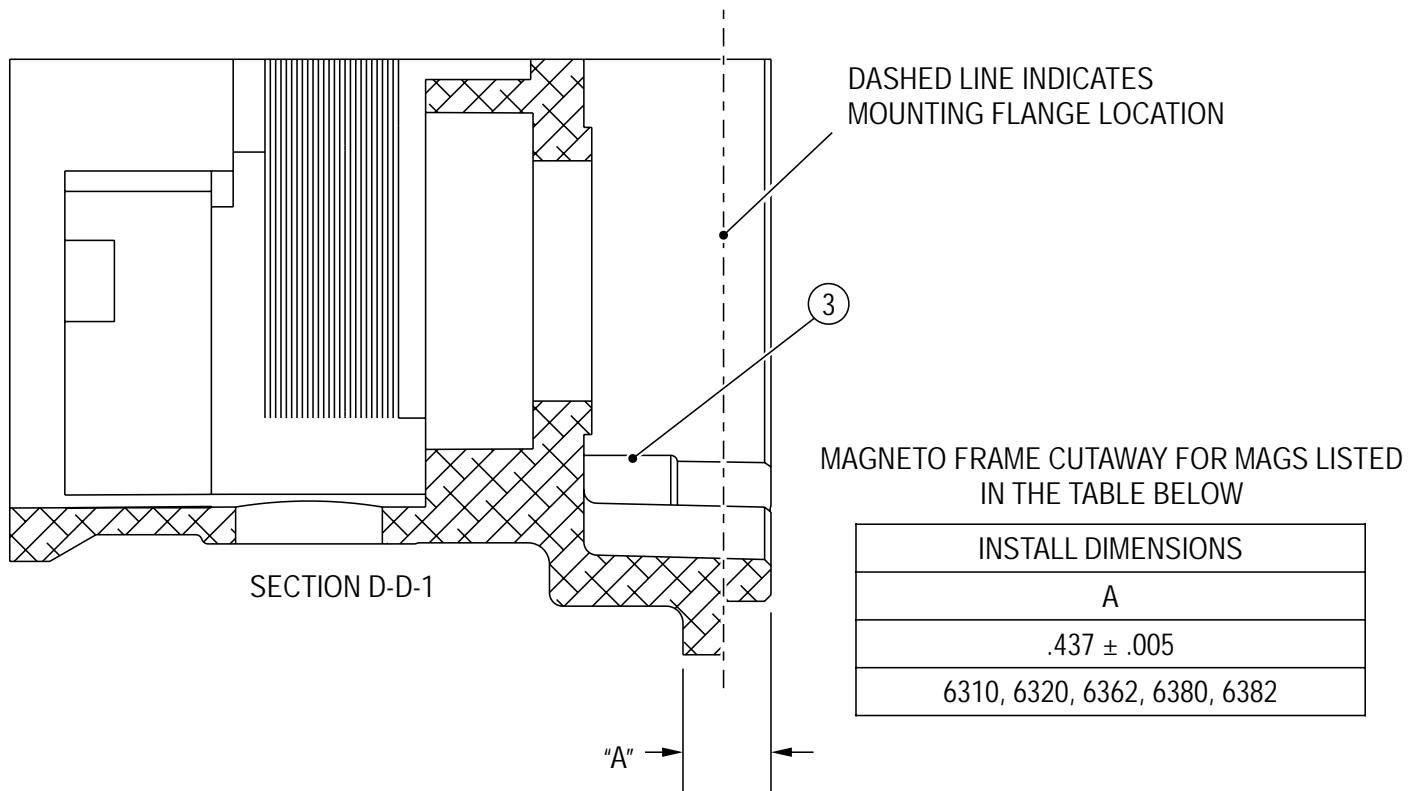
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USE A CALIBRATED MEASURING DEVICE TO MEASURE DISTANCE "A", AS SHOWN IN CUTAWAY SECTION D-D-1. MAKE SURE THE FRAME SURFACE IS FREE OF CONTAMINANTS. ANY MEASUREMENT LESS THAN 0.432 INCH OF ANY PART OF THE STOP PIN (3), THE MAGNETO SHOULD BE REMOVED FROM SERVICE AND RETURNED TO CHAMPION FOR WARRANTY.

FIGURE 2. MAGNETO FRAME CUTAWAY SECTION D-D-1

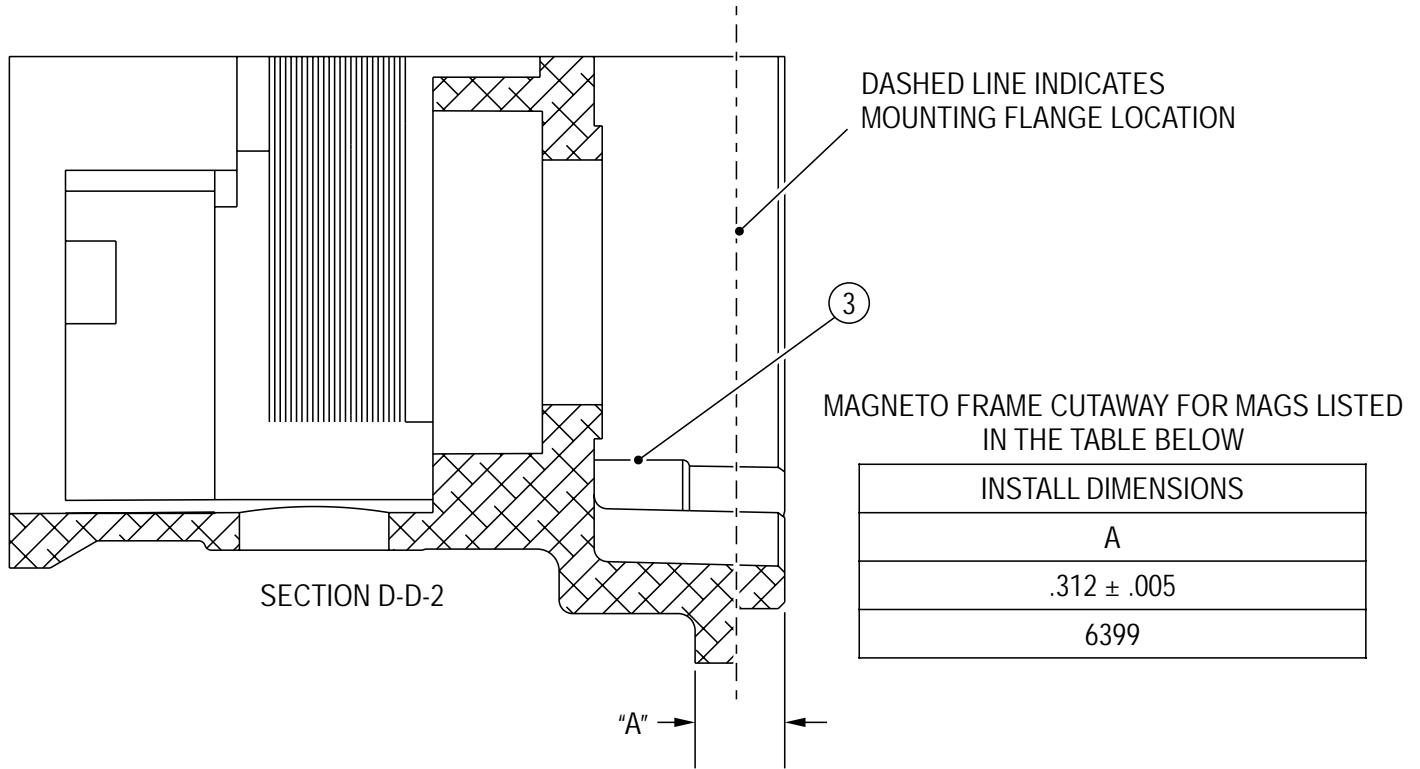
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USE A CALIBRATED MEASURING DEVICE TO MEASURE DISTANCE "A", AS SHOWN IN CUTAWAY SECTION D-D-2. MAKE SURE THE FRAME SURFACE IS FREE OF CONTAMINANTS. ANY MEASUREMENT LESS THAN 0.307 INCH OF ANY PART OF THE STOP PIN (3), THE MAGNETO SHOULD BE REMOVED FROM SERVICE AND RETURNED TO CHAMPION FOR WARRANTY.

FIGURE 3. MAGNETO FRAME CUTAWAY SECTION D-D-2

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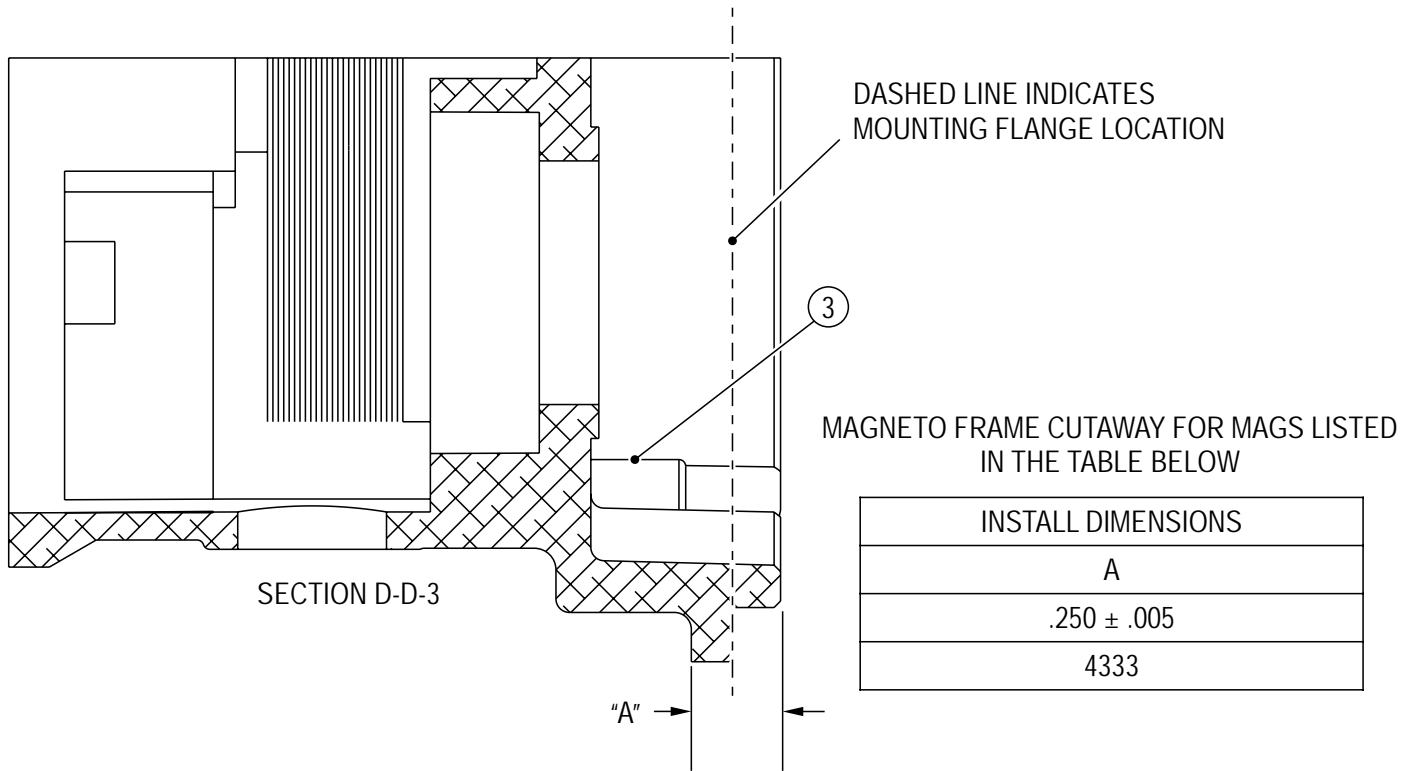
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FIGURE 4. MAGNETO FRAME CUTAWAY SECTION D-D-3

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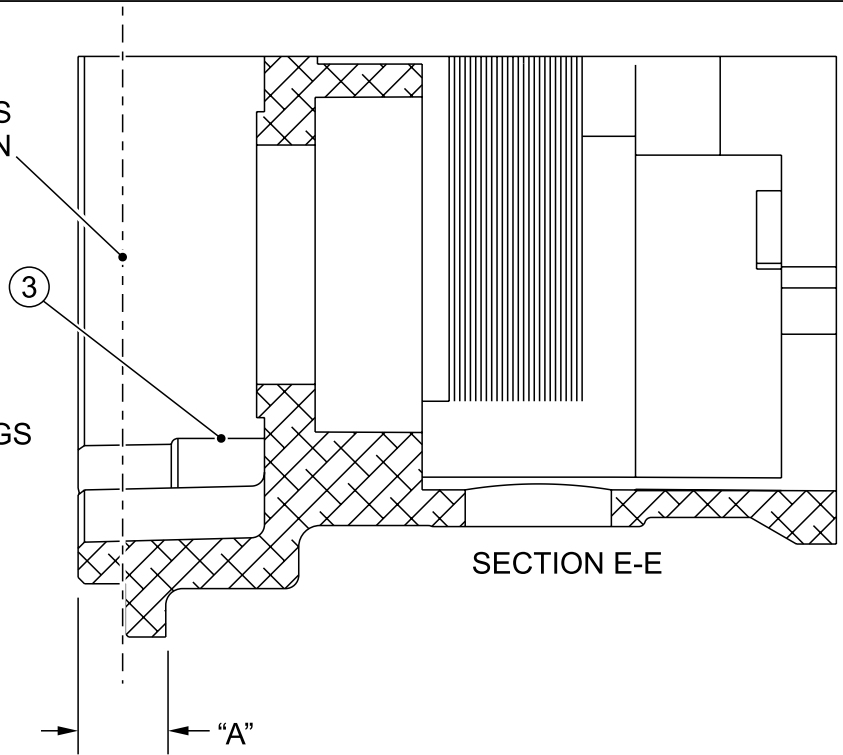
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DASHED LINE INDICATES MOUNTING FLANGE LOCATION

3

MAGNETO FRAME CUTAWAY FOR MAGS LISTED IN THE TABLE BELOW

INSTALL DIMENSIONS
A
.437 ± .005
6314, 6324



USE A CALIBRATED MEASURING DEVICE TO MEASURE DISTANCE "A", AS SHOWN IN CUTAWAY SECTION E-E. MAKE SURE THE FRAME SURFACE IS FREE OF CONTAMINANTS. ANY MEASUREMENT LESS THAN 0.432 INCH OF ANY PART OF THE STOP PIN (3), THE MAGNETO SHOULD BE REMOVED FROM SERVICE AND RETURNED TO CHAMPION FOR WARRANTY.

FIGURE 5. MAGNETO FRAME CUTAWAY SECTION E-E

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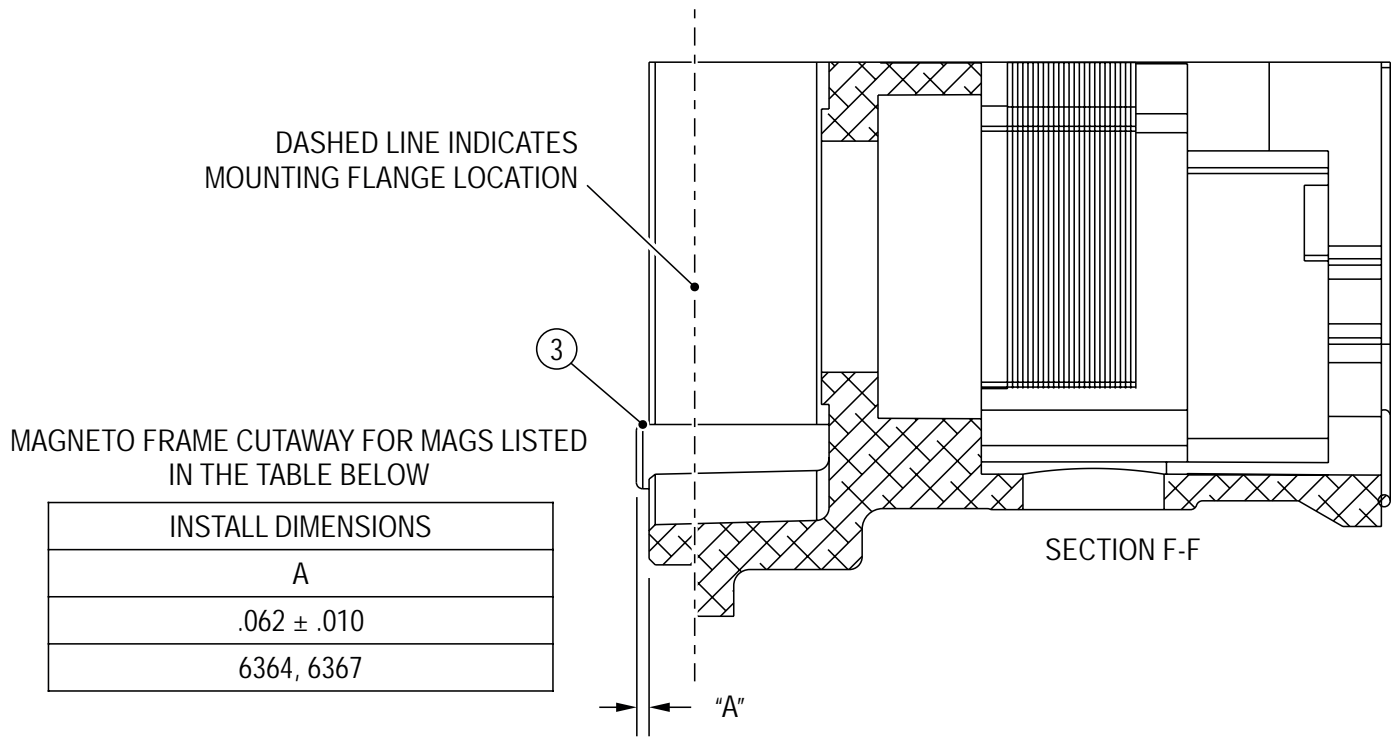
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USE A CALIBRATED MEASURING DEVICE TO MEASURE DISTANCE "A", AS SHOWN IN CUTAWAY SECTION F-F. MAKE SURE THE FRAME SURFACE IS FREE OF CONTAMINANTS. ANY MEASUREMENT GREATER THAN .072 INCH OF ANY PART OF THE STOP PIN (3), THE MAGNETO SHOULD BE REMOVED FROM SERVICE AND RETURNED TO CHAMPION FOR WARRANTY.

FIGURE 6. MAGNETO FRAME CUTAWAY F-F

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