SERVICE BULLETIN
No. 32
- Initial Issue -

DOA No.
EASA.21J.020

Subject:
Replacement of Pitch Change Pins of Constant Speed Propellers

Affected Propeller:
All constant speed propellers 12 years or older with noticeable corrosion on steel parts like counterweight bodies, counterweight modules or screws (examples see Figure 1 & Figure 2).
In case the pin or the blade ferrule has already been replaced, again every 12 years in case of noticeable corrosion. Markings for the traceability are shown in this Service Bulletin and in the Composite Blade Overhaul Manual E-1290.

Reason:
Corrosion was found on a pitch change pin of a constant speed propeller

Accomplishment:
At next overhaul of the propeller

Action:
The pitch change pins must be replaced after disassembly of the propeller according to the procedures described in the Composite Blade Overhaul Manual E-1290. The replacement of the pitch change pins must be marked in the blade ferrule as shown in Figure 5.
If corrosion can be seen in the bore for the pitch change pin in the blade ferrule as shown in Figure 4 then the blade ferrule must be replaced as well. The replacement of the blade ferrule is described in the Composite Blade Overhaul Manual E-1290 and must be marked in the same way as shown in Figure 5.

Required Material:
The pitch change pins are available from MT-Propeller Entwicklung GmbH Germany or MT-Propeller USA Inc. in Florida. The pin has a different part number according to the propeller:

<table>
<thead>
<tr>
<th>Propeller MTV</th>
<th>Pitch Change Pin Part No.</th>
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<tbody>
<tr>
<td></td>
<td>Old design</td>
</tr>
<tr>
<td>-1, -5, -6, -7, -10, -11, -12, -14, -17, -18, -21, -22, -25, -29, -30, -33, -34, -36</td>
<td>C-005-C</td>
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<td>-9, -15, -16, -20, -23, -27-1</td>
<td>C-026-B</td>
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<tr>
<td>-16, -27-1-N</td>
<td>C-081-A</td>
</tr>
<tr>
<td>-8, -27-( )-J</td>
<td>C-042</td>
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</tbody>
</table>

This Service Bulletin has been approved according to the procedures established for the EASA-certified Design Organization No.: EASA.21J.020.

Checked/Approved by:
Head, Office of Airworthiness

Issued by:

Martin Albrecht
Date: May 30, 2017

Tina Halbritter
Date: May 30, 2017
Whether the installed pitch change pin is “old design” or “new design” can be seen when the pin is removed from the blade ferrule. The corresponding drawings can be found in the Composite Blade Overhaul Manual E-1290. When replacing the pin the same design must be used.

The latest revision of the Composite Blade Overhaul Manual E-1290 can be downloaded from www.mt-propeller.com

Contact: MT-Propeller Entwicklung GmbH
E-mail: techsupport@mt-propeller.com
The following pictures show examples of heavy corrosion on a counterweight module, counterweight body and screws.

Figure 1: Corrosion on counterweight module
Figure 2: Corrosion on counterweight body and screws

The following pictures show corrosion on the blade pitch change pin and in the bore for the pitch change pin in the blade ferrule:

Figure 3: Corrosion on pitch change pin
Figure 4: Corrosion in blade ferrule bore for pitch change pin
The replacement of the pitch change pin shall be marked on the blade ferrule for traceability. Therefore in case the pitch change pin is replaced the blade ferrule is marked with “-PXX” where XX represents the last two digits of the year in which the pin is replaced. For example, if the pin replaced in the year 2017 then the blade ferrule is marked “-P17” as shown in Figure 7. When the pitch change pin is replaced together with the blade ferrule, the blade ferrule is also marked with “-PXX”. If the pitch change pin is replaced a second time, the blade ferrule again must be marked with the year of the replacement.

Figure 5: Blade ferrule marked with “-P17” for replacement of the pitch change pin in the year 2017

The new pin must be installed in the blade ferrule with Hysol EA 9359.3 as described in the Composite Blade Overhaul Manual E-1290. The necessary tools as well as the length of the pitch change pin are also shown in the E-1290.

Figure 6: Apply Hysol EA 9359.3 in the inner bore of the blade ferrule
Figure 7: Apply Hysol EA 9359.3 at the bigger diameter of the pitch change pin