

**HARTZELL PROPELLER LLC**  
**SERVICE LETTER**  
**HC-SL-61-377**  
**Counterweight Clamp Corrosion**

1. Planning Information

A. Effectivity

- (1) Hartzell Propeller LLC lightweight turbine propeller models HC-E5A-2( ) are affected by this Service Letter.

**WARNING:** DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS SERVICE LETTER. INFORMATION CONTAINED IN THIS SERVICE LETTER MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THIS SERVICE LETTER OR THE USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE. REFER TO THE SERVICE LETTER INDEX FOR THE MOST RECENT REVISION LEVEL OF THIS SERVICE LETTER.

B. Concurrent Requirements

- (1) Additional service documents may apply to the components/propellers affected by this Service Letter. Compliance with additional service documents may be necessary in conjunction with the completion of the Accomplishment Instructions in this Service Letter. Refer to the Hartzell Propeller website at [www.hartzellprop.com](http://www.hartzellprop.com) for a cross-reference of service documents.

C. Reason

- (1) Hartzell Propeller has received reports of corrosion/pitting on the outboard surface of the counterweight clamps on affected propellers. Refer to Figure 1.
  - (a) In the reported cases, the corrosion/pitting was found during scheduled maintenance inspections and did not affect flight safety.

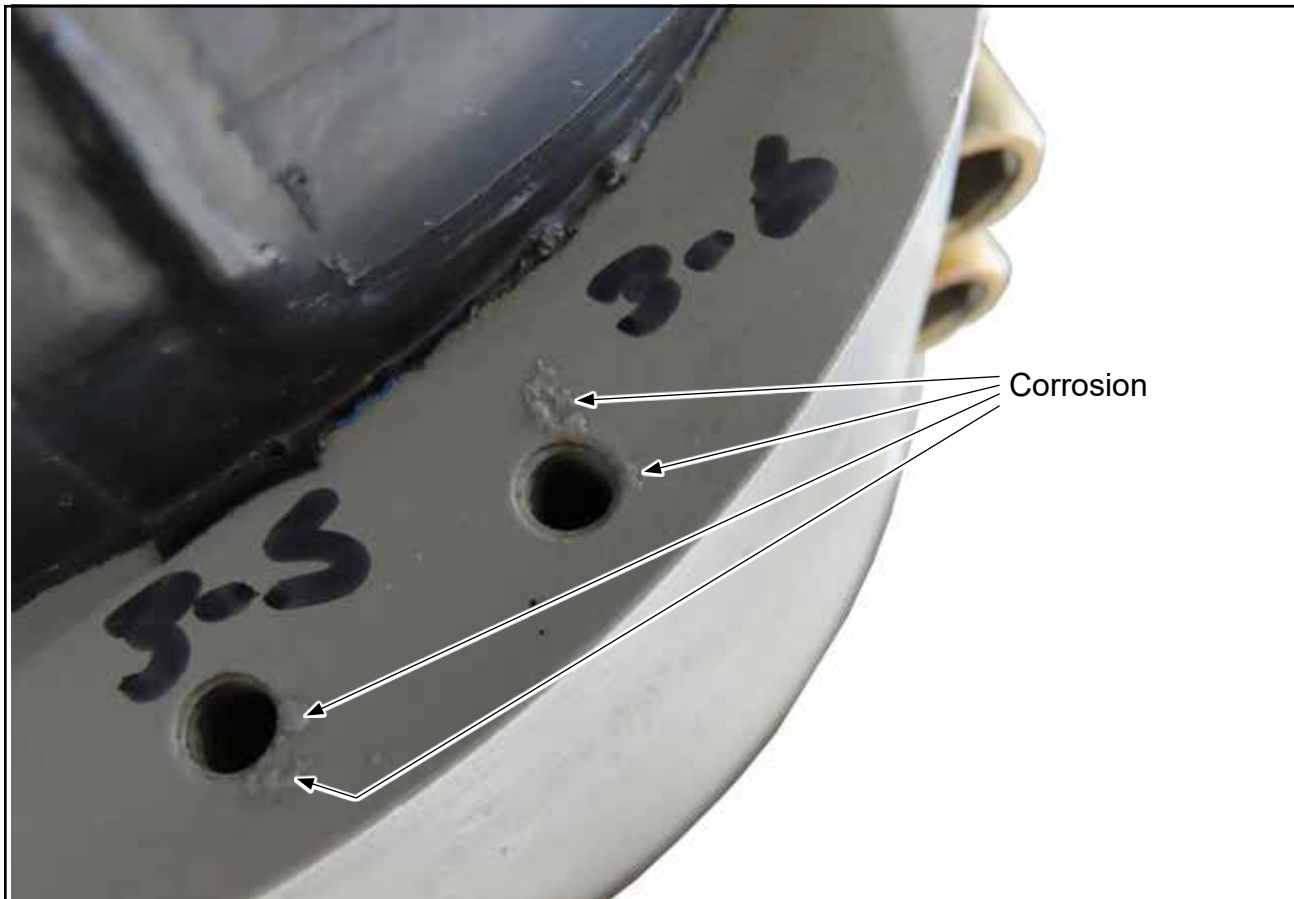
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**D. Description**

- (1) This Service Letter provides Additional Maintenance Information (AMI).
- (2) This Service Letter provides instructions for removing corrosion/pitting from the outboard surface of the counterweight clamps with the affected propeller on-wing.

**E. Approval**

- (1) This technical document is approved by Hartzell Propeller LLC.



**Example of Corrosion**  
**Figure 1**

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**F. References**

- (1) Hartzell Propeller Owner's Manual 147 (61-00-47)
- (2) Hartzell Propeller Standard Practices Manual 202A (61-01-02) - Volume 7, Consumable Materials is available on the Hartzell website at [www.hartzellprop.com](http://www.hartzellprop.com)

**2. Material Information**

**A. Consumable Materials**

<u>CM Number</u>	<u>Description</u>
CM47	Abrasive Pad
CM345	Anti-corrosion Compound
-	Alodine (corrosion inhibitor)

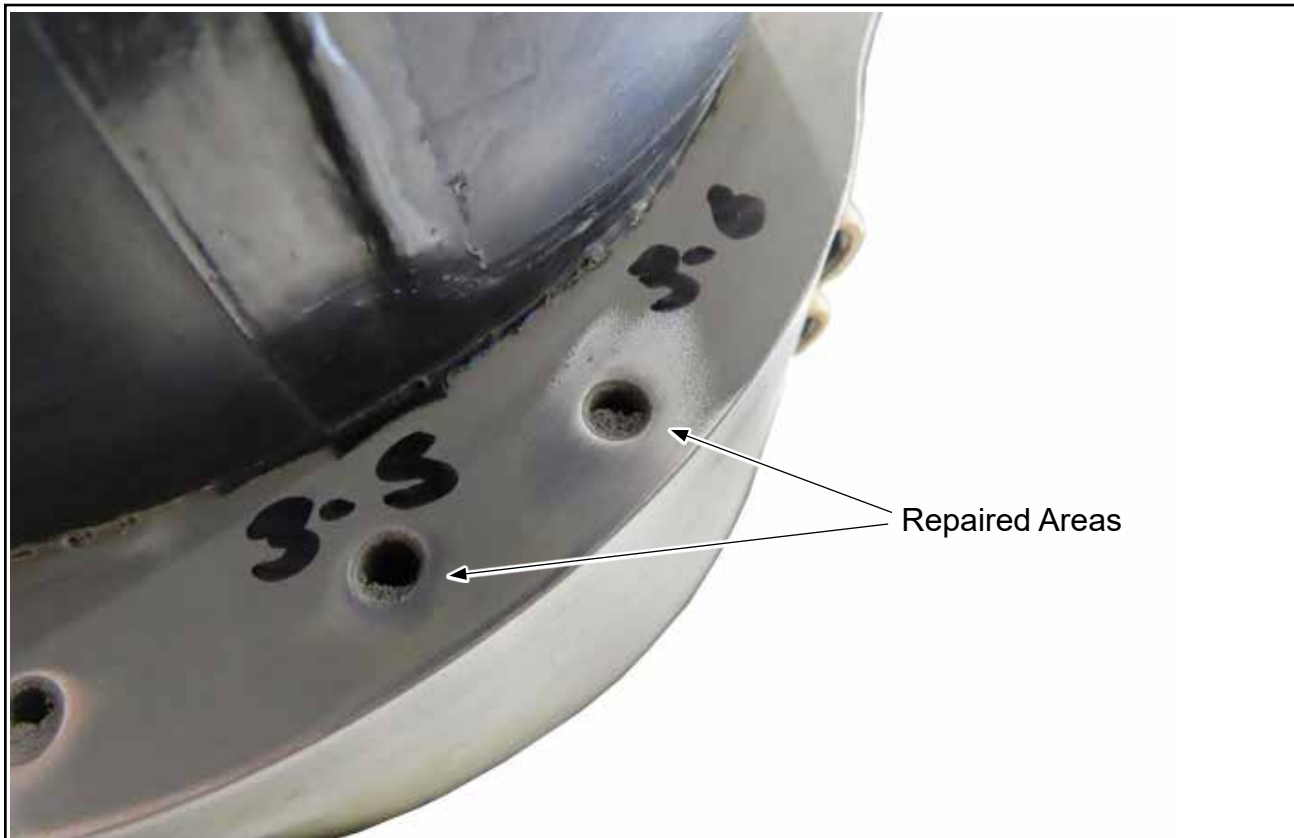
**NOTE:** All CM numbers in this Service Letter refer to the Consumable Materials chapter of Hartzell Propeller Standard Practices Manual 202A (61-01-02).

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3. Accomplishment Instructions

A. Corrosion/Pitting Removal

- (1) Using an abrasive pad CM47 or equivalent, polish to remove corrosion/pitting from the outboard surface of the counterweight clamp. Refer to Figure 2.
  - (a) Polish to a surface finish of 89 Ra micro-inches (2.3 Ra micro-meters) or smoother.
  - (b) The maximum permitted depth of material removal is 0.010 inch (0.25 mm).
    - 1 If the depth of material removal is deeper than the permitted limit, replace the counterweight clamp.



**Repaired Areas**  
**Figure 2**

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- (2) Apply alodine (corrosion inhibitor) to the repaired area(s) of the counterweight clamp.
  - (a) Let the alodine dry in accordance with the manufacturer's instructions.
- (3) Apply paint to the repaired area in accordance with the "Blade Paint Touch-Up" section in the Maintenance chapter of Hartzell Propeller Owner's Manual 147 (61-00-47). Refer to Figure 3.



**Repaired Area After Alodine and Paint**  
**Figure 3**

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- (4) OPTIONAL: Apply anti-corrosion compound CM345 to the counterweights and counterweight clamps in accordance with the following steps:

**CAUTION:** DO NOT APPLY ANTI-CORROSION COMPOUND CM345  
ONTO ICE PROTECTION SYSTEM COMPONENTS  
(TERMINAL STRIPS, BOOTS, HARNESSSES, ETC.).

- (a) Apply masking materials to the areas around the counterweights and counterweight clamps.
- (b) Apply anti-corrosion compound CM345 onto all surfaces of the counterweights and counterweight clamps.
- (c) Let the anti-corrosion compound CM345 cure for a minimum of three hours before flight.

**B. Recommended Service Facilities**

- (1) Hartzell Propeller LLC has a worldwide network of Recommended Service Facilities for overhaul and repair of our products.
- (2) Each service facility must meet standard FAA requirements and additional Hartzell Propeller requirements before being recommended by Hartzell. Each service facility is audited by Hartzell Propeller to verify the continuation of the standards.
- (3) Hartzell Propeller recommends that you use one of these service facilities when having your propeller overhauled or repaired.
- (4) For a current list of Hartzell Propeller Recommended Service Facilities, contact Hartzell Product Support or refer to the Hartzell website at [www.hartzellprop.com](http://www.hartzellprop.com).

**C. Contact Information**

Hartzell Propeller LLC  
Attn.: Hartzell Propeller Inc. Product Support  
One Propeller Place  
Piqua, Ohio 45356-2634 USA  
Phone: (001) 937.778.4379  
Fax: (001) 937.778.4215  
E-mail: [techsupport@hartzellprop.com](mailto:techsupport@hartzellprop.com)