

**HARTZELL PROPELLER INC.**  
**SERVICE BULLETIN**  
**HC-SB-61-385**  
**D-5117-1 Counterweight Clamps**

1. Planning Information

A. Effectivity

- (1) Hartzell Propeller Inc. lightweight turbine propeller models HC-E4A-3(A,I,J) with E10950P(C)(B,K) blades are affected by this Service Bulletin.
  - (a) The affected propellers may be installed on, but not limited to Beech 1900D Airliner aircraft.

**WARNING:** DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS SERVICE BULLETIN. INFORMATION CONTAINED IN THIS SERVICE BULLETIN MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THIS SERVICE BULLETIN 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 BULLETIN INDEX FOR THE MOST RECENT REVISION LEVEL OF THIS SERVICE BULLETIN.

B. Concurrent Requirements

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

C. Reason

- (1) Hartzell Propeller Inc. has received several reports of cracking around the insert holes of D-5117-1 counterweight clamps that may be installed on some of the affected propellers.
- (2) Hartzell Propeller Inc. is requiring all D-5117-1 counterweight clamps be replaced with E-7016 counterweight clamps in accordance with this Service Bulletin.

**HARTZELL PROPELLER INC.**  
**SERVICE BULLETIN**  
**HC-SB-61-385**  
**D-5117-1 Counterweight Clamps**

D. Description

- (1) This Service Bulletin provides Instructions for Continued Airworthiness (ICA).
- (2) This Service Bulletin provides a counterweight clamp inspection procedure to identify the D-5117-1 counterweight clamps that must be replaced.
- (2) This Service Bulletin provides instructions for replacing the D-5117-1 counterweight clamps on the affected propeller with E-7016 counterweight clamps.

E. Compliance

(1) Initial Inspection

- (a) If the Time Since Overhaul (TSO) of the affected propeller is less than 2000 hours:
  - 1 Before the TSO reaches 2000 hours or within 60 calendar days of the release date of this Service Bulletin, whichever occurs later, perform the Counterweight Clamp Inspection Procedure in accordance with the Accomplishment Instructions in this Service Bulletin.
    - a If the propeller has four E-7016 counterweight clamps installed, no further action is required.
    - b If the propeller has one or more D-5117-1 counterweight clamps installed, perform Repetitive Inspections and Counterweight Clamp Replacement as specified in this Compliance section.
- (b) If the Time Since Overhaul (TSO) of the affected propeller is greater than 2000 hours:
  - 1 Within 60 calendar days of the release date of this Service Bulletin, perform the Counterweight Clamp Inspection Procedure in accordance with the Accomplishment Instructions in this Service Bulletin.
    - a If the propeller has four E-7016 counterweight clamps installed, no further action is required.
    - b If the propeller has one or more D-5117-1 counterweight clamps installed, perform Repetitive Inspections and Counterweight Clamp Replacement as specified in this Compliance section.

**HARTZELL PROPELLER INC.**  
**SERVICE BULLETIN**  
**HC-SB-61-385**  
**D-5117-1 Counterweight Clamps**

(2) Repetitive Inspections

- (a) At repetitive intervals not to exceed 60 days, perform the Counterweight Clamp Inspection Procedure in accordance with the Accomplishment Instructions in this Service Bulletin.

(3) Counterweight Clamp Replacement (Terminating Action)

- (a) At operator's convenience or at next propeller overhaul, whichever occurs first, replace all D-5117-1 counterweight clamps with E-7016 counterweight clamps in accordance with the Accomplishment Instructions in this Service Bulletin.

NOTE: Overhaul intervals are specified in Hartzell Propeller Inc. Service Letter HC-SL-61-61Y.

F. Approval

- (1) FAA acceptance has been obtained on technical data in this publication that affects type design.

G. Weight and Balance

- (1) Not changed

H. Electrical Load Data

- (1) Not changed

CAUTION: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF A DOCUMENT.

I. References

- (1) Hartzell Propeller Inc. Composite Propeller Blade Maintenance Manual 135F (61-13-35)
- (2) Hartzell Propeller Inc. Propeller Owner's Manual 147 (61-00-47)
- (3) Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02) - Volume 7, Consumable Materials is available on the Hartzell Propeller Inc. website at [www.hartzellprop.com](http://www.hartzellprop.com)

**HARTZELL PROPELLER INC.**  
**SERVICE BULLETIN**  
**HC-SB-61-385**  
**D-5117-1 Counterweight Clamps**

2. Material Information

A. Components Required for Counterweight Clamp Replacement

<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
E-7016	PCP: Clamp, Counterweight	AR
B-3822-36P	Screw, 3/8-24, Cap	4 (per clamp)
B-3834-0632	Washer	8 (per clamp)
B-3828-6	Nut, Hex, Self-Locking, Flanged	4 (per clamp)

B. Consumable Materials

<u>CM Number</u>	<u>Description</u>
CM19	Mold Release
CM20	Epoxy
CM106	MEK (Methyl-Ethyl-Ketone)
CM173	Acetone
CM219	MPK (Methyl-Propyl-Ketone)

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

HARTZELL PROPELLER INC.  
**SERVICE BULLETIN**  
HC-SB-61-385  
D-5117-1 Counterweight Clamps



**E-7016 Counterweight Clamp**  
**Figure 1**

HARTZELL PROPELLER INC.  
**SERVICE BULLETIN**  
HC-SB-61-385  
**D-5117-1 Counterweight Clamps**



**D-5117-1 Counterweight Clamp**  
**Figure 2**

**HARTZELL PROPELLER INC.**  
**SERVICE BULLETIN**  
**HC-SB-61-385**  
**D-5117-1 Counterweight Clamps**

3. Accomplishment Instructions

A. Counterweight Clamp Inspection Procedure

- (1) Remove the spinner dome in accordance with Hartzell Propeller Inc. Owner's Manual 147 (61-00-47).
- (2) Visually examine the attaching hardware on each counterweight clamp to determine the part number of the clamp.
  - (a) E-7016 counterweight clamps use four screws/nuts (two on each side) to attach the clamp halves. Refer to Figure 1.
    - 1 If the propeller has four E-7016 counterweight clamps installed:
      - a Make an entry in the propeller logbook indicating the findings of this counterweight clamp inspection as terminating action for this Service Bulletin.
      - b Install the spinner dome in accordance with Hartzell Propeller Inc. Owner's Manual 147 (61-00-47)
      - c No further action is required.
    - (b) D-5117-1 counterweight clamps use two screws (one on each side) to attach the clamp halves. Refer to Figure 2.
      - 1 If the propeller has one or more D-5117-1 counterweight clamps installed, continue with step (3) of this inspection procedure.
  - (3) Using a clean cloth dampened with acetone CM173, MEK CM106, or MPK CM219, wipe the visible surfaces of the D-5117-1 counterweight clamps.
  - (4) Visually examine each D-5117-1 counterweight clamp for cracks in the outside diameter adjacent to the clamp fasteners.
    - (a) If any cracks are found:
      - 1 Before further flight, remove the propeller from the aircraft in accordance with Hartzell Propeller Inc. Owner's Manual 147 (61-00-47), then replace all of the D-5117-1 counterweight clamps with E-7016 counterweight clamps in accordance with the Counterweight Clamp Replacement Procedure in this Accomplishment Instructions section.
    - (b) If no cracks are found:
      - 1 Install the spinner dome in accordance with Hartzell Propeller Inc. Owner's Manual 147 (61-00-47).

**HARTZELL PROPELLER INC.**  
**SERVICE BULLETIN**  
**HC-SB-61-385**  
**D-5117-1 Counterweight Clamps**

B. Counterweight Clamp Replacement Procedure

- (1) This procedure must be performed by a certified propeller repair station with the appropriate rating.
- (2) Remove the blades/counterweight clamps from the hub in accordance with the Disassembly chapter of Hartzell Propeller Inc. Four Blade Lightweight Turbine Propeller Maintenance Manual 143A (61-10-43).
- (3) Remove the D-5117-1 counterweight clamps in accordance with the section, "Counterweight Clamp Removal: For E10950P(B,K) Blades Only" in the Overhaul chapter of Hartzell Propeller Inc. Composite Propeller Blade Maintenance Manual 135F (61-13-35).
- (4) Install the new or serviceable E-7016 counterweight clamp(s) in accordance with the section, "Counterweight Clamp Installation: For E10950P(B,K) Blades Only" in the Overhaul chapter of Hartzell Propeller Inc. Composite Propeller Blade Maintenance Manual 135F (61-13-35).
- (5) Reassemble the propeller in accordance with the Assembly chapter of Hartzell Propeller Inc. Four Blade Lightweight Turbine Propeller Maintenance Manual 143A (61-10-43).
- (6) Perform static balance of the propeller in accordance with the Static and Dynamic Balance chapter of Hartzell Propeller Inc. Standard Practices Manual 202A (61-01-02).
- (7) Make an entry in the propeller logbook indicating the counterweight clamp replacement as terminating action for this Service Bulletin.



**HARTZELL PROPELLER INC.**  
**SERVICE BULLETIN**  
**HC-SB-61-385**  
**D-5117-1 Counterweight Clamps**

C. Recommended Service Facilities

- (1) Hartzell Propeller Inc. 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 Propeller Inc. Each service facility is audited by Hartzell Propeller Inc. to verify the continuation of the standards.
- (3) Hartzell Propeller Inc. recommends that you use one of these service facilities when having your propeller overhauled or repaired.
- (4) For a current list of Hartzell Propeller Inc. Recommended Service Facilities, contact Hartzell Propeller Inc. Product Support or refer to the Hartzell Propeller Inc. website at [www.hartzellprop.com](http://www.hartzellprop.com).

D. Contact Information

Hartzell Propeller Inc.  
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)

HARTZELL PROPELLER INC.  
**SERVICE BULLETIN**  
HC-SB-61-385  
**D-5117-1 Counterweight Clamps**

(This page is intentionally blank.)