



TECHNICAL SUPPORT
TECHNICAL DEPARTMENT
ENGINEERING ORDER

009/TEK-TS/VIII/2023

Rev. No Original

Rev. Date 25 Aug 2023

ENGINEERING ORDER

005/TEK-TS/VIII/2023

**INSTALLATION OF PROPELLER MCCAULEY MODEL 4HFR34C778 Series
ON CESSNA 208B GRAND CARAVAN**

PT. SMART CAKRAWALA AVIATION

Prepared	Checked	Approved
Technical Support	Technical Manager	Chief Inspector
Signature: 	Signature: 	Signature:
Name: Dwi M	Name: Istiono	Name: Yanuar A. F.
Date: 25 Aug 2023	Date: 25 Aug 2023	Date: 25 Aug 2023



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**SMART AVIATION
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Aircraft Reg.: PK-SNI (208B5068)	Make/Model: C208B	No. EO: 009/TEK-TS/VIII/2023	Rev. No. : Original
Total Flight Hours: 8392 :26 Hrs	Total Flight Cycle: 14073	Date Issued : 25 Aug 2023	
Task Description : INSTALLATION OF PROPELLER MCCAULEY MODEL 4HFR34C778 Series ON CESSNA 208B GRAND CARAVAN		Technical Data Reference : <u>MCCAULEY PROPELLER SYSTEMS Propeller</u> <u>Owner/Operator Information Manual</u> <u>C700/C750/C1000 Propeller Removal/Installation</u>	
Effectivity : CESSNA 208B EQUIPPED WITH PROPELLER MCCAULEY MODEL 4HFR34C778 Series			



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1. Description.

This EO is issued, to perform installation checklist Propeller Assembly maintenance practices the 4HFR34C778 Series Propeller on Cessna 208B Grand Caravan.

2. Aircraft Effectivity.

REGISTRATION	SERIAL NUMBER
PK-SNI	208B5068

3. Distribution :

TECHNICAL MANAGER	[<input checked="" type="checkbox"/>]	MATERIAL SUPPORT	[<input checked="" type="checkbox"/>]
SAFETY & QUALITY MANAGER	[<input checked="" type="checkbox"/>]	TECHNICAL SUPPORT	[<input checked="" type="checkbox"/>]
CHIEF INSPECTOR	[<input checked="" type="checkbox"/>]	FILE	[<input checked="" type="checkbox"/>]

4. Man Hours

18.0 man-hour to do the inspection

5. Material

A1633-72 Packing
A1639-32 Nut, Propeller

6. Special Tool Required

Tracking, Propeller
Adapter, Torque Wrench
Start Lock Release

7. Compliance

The Propeller model 4HFR34C778 Series have 4 of Blades, do a removal the propeller installed on Engine refer to accomplishment instruction task card, and install the Serviceable/New Propeller on the aircraft refer to accomplishment instruction task card.



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PROPELLER INSTALLATION

Date : **29 August 2023** WO Number :
Part No. Propeller : **4HFR34C778-1** A/C Total Hours : **8392:26 Hrs**
Serial No. Propeller : **181160** A/C Total : **14073**
Propeller Time : **TSN:3699:12 TSO:0:00**
Install to A/C Reg. : **PK-SNI**

Description	Eng.	RII	Remarks
B. INSTALL PROPELLER (Refer to Figure 01 to 04).			
NOTE: McCauley recommends that the propeller mounting nuts (McCauley part number A-1639-32) be replaced at each propeller installation, whenever possible. However, nuts may be reused if the locking material prevents turning of the nut on the stud by hand.			
1. Install the D-5945 feedback collar retractor tool on the propeller.			
2. Remove protective cover from the end of engine propeller flange.			
3. Make sure the flange is clean and free of nicks and burrs.			
4. Make mounting sure stud that the holes are engine clean, propeller dry, and flange, free of dowels, nicks and and burrs.			
5. Remove protective cover from the propeller hub mounting the flange.			
6. Make sure and that the propeller studs hub mounting flange, dowel pin holes, are clean mounting and, undamaged.,			
7. Make sure that a new O-ring is installed in the groove of the propeller hub mounting flange. Lubricate the O-ring with engine oil prior to installation of the propeller. NOTE: Refer to the Installation Parts For Turbine Engine Propellers, Table 1002 for the O-ring part number. NOTE: In the past, new propeller assemblies shipped from McCauley, the propeller hub/engine O-ring was installed in the O-ring groove of new propellers and hub assemblies. This practice has been discontinued. The O-ring is now included in the propeller unattached parts kit, which is included in the box with the propeller or hub assembly. Install the O-ring according to the assembly instructions in this Owner/Operator Manual.			
8. Use a propeller sling and hoist, or additional personnel, to position the propeller close to the engine propeller flange and align engine			



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flange dowel pins with the dowel pin holes on the propeller hub mounting flange. Rotate engine propeller mounting flange as required to align the dowel pin holes.

- A. Hoist straps must be a minimum of 4 inches (100 mm) wide
- B. The sling and hoist should have a weight limit rating at least twice the weight of the propeller that is to be installed.
- C. The straps of the propeller sling should be placed on two of the propeller blades at least 6 inches (152 mm) outboard of the propeller hub. Make sure you protect the deice boots or anti-ice shoes from potential propeller sling abrasion damage, if installed.

[Handwritten signatures/initials for items A, B, and C]

CAUTION: Propeller must be installed straight onto the engine flange. Any rocking of the propeller with respect to the flange could result in damage to the engine/propeller flange mating surfaces.

- 9. Mount the propeller on the engine propeller shaft.
- 10. Make sure the alignment mark on the spinner aft bulkhead and the propeller blade with are in alignment.
- 11. Ensure threads of nuts and studs are free of burrs, nicks, and similar damage, and clean of foreign material.

[Handwritten signatures/initials for items 9, 10, and 11]

CAUTION: Do not use oil as a substitute for approved lubricant. It is imperative that the correct specification of lubricant be used during installation. Substitution of the approved grease with an unapproved lubricant (or no lubricant) could result in undertorquing or severe over-torquing of propeller attaching parts.

- 12. Lubricate the threads of studs and nuts and the faces of nuts, spacers, or washers with MIL-PRF-83483 (McCauley part number A-1637-16) grease.

[Handwritten signatures/initials for item 12]

- 13. Install mounting nuts on mounting studs.

[Handwritten signatures/initials for item 13]

- 14. Torque the mounting nuts in an alternating sequence to prevent the hub rocking on the engine flange.

- 15. When the hub is seated fully on the engine flange, torque to the specification called out in the mounting decal located on propeller hub at the number 1 socket.

[Handwritten signatures/initials for item 15]

NOTE: If the decal containing the propeller installation instructions is missing or illegible, install a new decal. All Pratt & Whitney engine installations, use a part number A-2230-7 decal. The A-2230-7 decal specifies a lubricated 68 to 72 foot-pounds (92.196 to 97.619 N-m) torque.

- 16. After you apply the final torque, apply torque seal to nut and stud threads.

[Handwritten signatures/initials for item 16]

- 17. If required, install the deice leads.

[Handwritten signatures/initials for item 17]

- 18. McCauley Torque Wrench Adapter:



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CAUTION: If an adaptor or extension (such as McCauley part number B-5588) is attached to torque wrench drive end and this adds to its length, then the actual applied torque will be greater than the dial reading. The following formula should be used to find what the dial should read in order to obtain the correct applied torque:

$$\text{Dial Reading} = \frac{\text{Torque Wrench Length} \times \text{Desired Torque}}{\text{Torque Wrench Length} + \text{Extension Length}}$$

19. Remove the D-5945 feedback collar retractor tool from the propeller

[Signature]

20. Make sure of proper rigging of engine controls. Refer to aircraft maintenance manual or STC maintenance manual supplement.

[Signature]

[Signature]

a. Feather, reverse, and low blade angles are set during assembly or overhaul. These angles are NOT adjustable in the field.

[Signature]

[Signature]

CAUTION: Do not operate the propeller below the minimum propeller idle speed operating restriction. The minimum propeller idle speed operating restriction is the result of a specific vibratory resonant condition known as "reactionless mode". Ground operation, at or near a reactionless mode vibratory resonance speed, can cause very high stresses in the propeller blades and hubs. These high stresses are more severe when operating in a tail-wind condition. If the propeller is operated within a restricted RPM range or below a minimum RPM restriction for an extended period of time, the propeller blades and hubs may become unairworthy due to fatigue. Hub or blade failure has the potential of causing a catastrophic event due to blade separation. The propeller RPM restriction is often placed below the minimum idle RPM; however, certain aircraft have a restriction that is above the propeller idle RPM setting. Either restriction is important. The propeller operating restrictions or limitations may be found in the Airplane Flight Manual (AFM) or Airplane Flight Manual Supplement (AFMS). The propeller installations may be controlled by the various airframe manufacturers Type Certificate (TC) or by Supplemental Type Certificate (STC).

21. Install Propeller Spinner

[Signature]

22. Start engine I.A.W Pilots Operating Handbook and FAA

[Signature]

23. Perform propeller dynamic balancing ref. C208B MM chapter 61-11-00 Dynamic balancing (McCauley) - Adjustment test. Refer also to related balancer tools manual.

[Signature]

24. Make an appropriate entry in Work Order and Aircraft Flight & Maintenance Log (AFML).

[Signature]

***** END OF THE TASK *****



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MAINTENANCE RELEASE

I hereby certify that the above stated maintenance and/or inspection was performed in accordance with the approved Aircraft Maintenance Manual and meets requirements of Civil Aviation Safety Regulations.

Name : Sampurna H.

Stamp :



Signature : [Signature]

Place/Date : NBX / 30 August 2023

- END -



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PROPELLER CHANGE - Component Inventory Record

Registration	: PK-SN1	Work Order Number	:
Airframe Time	: 8392:26	Airframe Landing	: 14073
Propeller Time	: 00:00 Hrs TSO 3699:12 Hrs TSN	Propeller Cycle	: -

Propeller OFF				Propeller ON		
Description	Part Number	Serial Number	Time Remaining	Part Number	Serial Number	Time Remaining
Propeller Hub	ON TO	PK-SN6		4HFR34C778-1	181160	
Blade#1	ON TO	PK-SN6		102BHA-0	ANE 30008	
Blade#2	ON TO	PK-SN6		102BHA-0	AND 30080	
Blade#3	ON TO	PK-SN6		102BHA-0	AND 30072	
Blade#4	ON TO	PK-SN6		*102BHA-0	AND 30083	

NOTE: ANY OTHER COMPONENT CHANGES MUST BE FILLED ON ADDITIONAL WORKSHEET (SCA-MTC 030)



**McCAULEY C750
PROPELLER WORKSHEETS
ASSEMBLE OUTSTATION**

W.O REF. :
P/N : 4HFR34C778-1
S/N : 181160
DATE : 29 August 2023

TYPE NO. :	REASON :	AFTER OVERHAULED	
INSTALLED TO : PK-SAJI	MANUAL :		

DESCRIPTION	Mech	Eng
ASSEMBLY 1. Be sure to use the correct parts as specified and approved by McCauley. 2. Refer to the SPM 100 Standard Practice Manual for special tools that are required for propeller assembly. 3. Torque value are list in Table 701.		
Assemble Feedback Collar Assembly (129). (1) Lightly spray threaded holes in collar (130) with sealant primer (2) Apply Loctite 242 sealant to the short threads of studs (131). (3) Install studs (131) in collar (130) and immediately torque studs (4) Install beta rod lock nuts (132) on the studs with a loose fit, they will be torqued after beta rod installation. (5) Lubricate O-rings (44, 46) with Orelube K-2 and install.		
ASSEMBLE HUB For the basic hub assembly, refer to the SPM sec 61-11-26 a. Inspect the beta rod bushing (121) interior and exterior O-ring grooves by running a clean cotton swap in each O-ring groove to clean and make sure there are no nick,burns or foreign material in the grooves b. Lubricat O-ring (120) with dow corning 55 grease and insert inside beta rod bushing (121) and mak sure that o-ring is not twist in thegroove c. Install o-ring hub (123) oring hub to prop shaft d. Install the hub on an assembly stand. e. Turn the hub until the number 1 socket is in the down position.		
Blades Preparation Make sure that the following has been accomplished 1. Paint the blades. 2. Decals installed 3. Balance individual blades. 4. Apply blade protection wrap		

Ball and Spacer Installation Make sure balls and spacers are good condition Ball and Spacer Installation			
	McCAULEY C750 PROPELLER WORKSHEETS ASSEMBLE OUTSTATION	W.O REF. :	
		P/N :	S/N :
		DATE :	
TYPE NO. :	REASON :		
INSTALLED TO :	MANUAL :		
DESCRIPTION	Mech	Eng	
CAUTION: Always install the correct number of balls and ball separators in each blade retention bearing. Any alteration of number can cause damage to the blade, hub, and/or internal parts.			
(4) Install 29 ball bearings (95) and 29 ball separators (94) in the (93) outer bearing races. (5) Insert and place the matching inner race (93) in position against the ball bearings and spacers. (6) Hold the reassembled bearings in place temporarily with a pair of tongue depressors crisscrossed inside the hub and fastened together with a strong rubber band to another pair of tongue depressors criss-crossed outside of the hub.			
(7) Put the other blade sockets in the down position, and install the ball bearings, ball separators and inner bearing races in each while you support the inner bearing. (8) Use wood spatulas and rubber bands to hold all reassembled bearings temporarily in place.			
Blade Installation			
NOTE: Make sure the beta yoke is inserted in the hub and the A-6374 alignment tool is in place before installing blades. It is impossible to install the yoke after the blades are installed.			
A. Install Blade			
(1) Make sure that the applicable letters and or numbers are stamped beneath the model designation on the blade butt to indicate that the overhaul procedure has been performed. (2) Make sure the blade is protected with a blade sack or blade wrap out to the nine inch station.			

(3) Place the following parts on the blade butt:

- (a) Blade wire ring (99) installed in the retention groove
- (b) Blade retaining ring (100). Put in the counterweight groove.
- (c) Solid shim (98)
- (d) Split shim (97)
- (e) Shim carrier (96)



**McCAULEY C750
PROPELLER WORKSHEETS
ASSEMBLE OUTSTATION**

W.O REF. :

P/N :

S/N :

DATE :

TYPE NO. :

REASON :

INSTALLED TO :

MANUAL :

DESCRIPTION

Mech

Eng

NOTE: The shim carrier/shim pack that is identified for the specific blade should be reused if possible.

CAUTION: Hold the bearing parts in place while the blade butt is inserted into the hub and moved for installation of the retainer ring halves.

(4) Position the hub with the appropriate socket down.

(5) Apply a thin film to the O-ring (101) and install the O-ring in the groove of the blade butt.

(6) Apply a thin coat of Orlube K-2 on the blade butt from the O-ring inboard and inside diameter of hub sockets.

(7) Apply a thin coat of Orlube K-2 on all shims and the shim carrier.

(8) Wash both split retainer ring halves (92 - matched pair) in solvent

(9) Apply a thin film of Orlube K-2 to the split retainer halves.

NOTE: It is important that bearing parts (inner race, balls, spacers) be held in position while the blade butt is inserted and moved for installation of retainer ring halves.

(10) With hub socket number 1 facing down, remove the spatulas from the number 1 socket.

(11) Insert the blade up through hub and bearing races so that the shim carrier is against the hub socket.

(12) Hold the blade in this position, and install the split retainer (92) as follows:

CAUTION: Split retainer halves (92) are manufactured as matched sets and must be installed as a matched pair (identifiable by serial number

Etched on outside diameter).

(a) Insert one retainer-half through the front hub opening with the square (non-radius) step on the outer diameter facing down, toward the blade tip. (Refer to Figure 708.)

(b) Position the retainer-half over the collar of the blade butt so that its

Form SCA-M1 Center line coincides with that of the butt.

<p>Center line coincides with that of the butt.</p> <p>(c) Grasp the retainer-half at its approximate center and move it out (away from center) allowing ends of the retainer-half to drop down (angle of approximately 45 degrees) toward the blade recess below the collar.</p> <p>(d) Move the retainer-half down, starting at the open ends into the blade recess. Continue until retainer-half seats on the collar ledge in the recess.</p> <p>(e) Continue to move the retainer-half down until it is seated in the recess (opposite cylinder opening).</p> <p>(f) Install the second half in the same manner.</p> <p>(g) Lower the blade, allowing the split retainer to engage the bearing inner race</p>			
	McCAULEY C750 PROPELLER WORKSHEETS ASSEMBLE OUTSTATION		W.O REF. : P/N : S/N : DATE :
	TYPE NO. :	REASON :	
	INSTALLED TO :	MANUAL :	
	DESCRIPTION		Mech
<p>CAUTION: Be careful not to scratch the blade as you move the retaining ring (100) to engage the groove in the butt. Retaining ring corners are sharp. If blade shank is scratched by installation of the retaining ring, the scratch must be polished out and blade shank refinished (refer to the Blade Overhaul Manual). Scratches are focal points for Corrosion and for the start of fatigue cracks.</p> <p>(13) Rotate the blade back and forth several time to confirm proper engagement.</p> <p>(14) Position the shim carrier (96) and shims (97, 98) against the surface of the hub socket</p>			
<p>CAUTION: Do not scratch the blade while moving the retaining ring into the groove on the blade butt.</p>			
<p>CAUTION: If the sharp corners of the retaining ring (100) scratch the blade shank during installation then the scratch must be polished out and blade shank refinished (refer to the Blade Overhaul Manual).</p>			
<p>(15) Using a snap ring pliers, carefully expand the retaining ring (100) and install it in the designated groove in the blade butt.</p> <p>(16) After the retaining ring is installed, make sure the ring is properly seated.</p>			

<p>(a) Insert the blade of a straight screw driver into one of the snap ring holes, and tap lightly until the other side of the snap ring starts to move around the blade.</p> <p>(b) Insert the blade of a straight screw driver into the opposite snap ring hole, and tap lightly until the other side of the snap ring starts to move around the blade.</p> <p>(17) Rotate the blade so the actuating pin is clear of the next blade to be installed.</p>		
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<p>CAUTION: When you insert the blades, make sure all of the blade faces are forward. It may be impossible to rotate the opposite blade to the correct position if it is installed incorrectly with the actuating pins (104) installed.</p>		
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<p>(18) Put each blade socket in the down position and do the procedure again for all four blades.</p>		
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	<p>McCAULEY C750 PROPELLER WORKSHEETS ASSEMBLE OUTSTATION</p>	<p>W.O REF. : P/N : S/N : DATE :</p>
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TYPE NO. :	REASON :		
INSTALLED TO :	MANUAL :		

DESCRIPTION	Mech	Eng
Yoke Installation		
(1) Set beta yoke (89) in the hub with the center bore toward the center of the hub		
(2) Insert a A-6374 beta yoke alignment tool through the beta fork center bore and into the rear hub bushing.		
(3) Make sure the beta yoke forks (89) are aligned with the beta rod holes.		
(4) Restraine the beta yoke as far aft in the hub as possible.4. Blade		
Pitch Control Parts Installation		

<p>A. Install Pitch Control Parts (Refer to Figure 709).</p> <p>(1) Remove the A-6374 beta yoke alignment fixture from the hub bushing and yoke.</p> <p>(2) Install spring (90) on piston rod (91) and insert the piston rod (91) through the beta yoke (89).</p>		
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Form SCA-MTC 115		
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3) Deflect piston rod at a slight angle in order to install a retaining ring (88) over the aft end of piston rod (91) (use external retaining ring pliers).			
NOTE: It is not necessary to use the snap ring pliers to move the snap ring into the groove at this time.			
(4) Slide retaining ring on piston rod. (a) Insert piston rod (91) into the hub rear bushing (114).			
CAUTION: When you tap the piston rod into the hub bushing, make sure the piston rod yoke does not make contact with actuating pins. Contact will damage the pin and require replacement			
(b) Tap the piston rod aft until the retaining ring (88) is engaged in the piston rod groove. (c) Verify that retaining ring is properly set in its groove. (5) Insert one beta rod and bushing assembly (51, 60) in hub to hold beta yoke in proper alignment for further assembly. Do not attach to feedback collar stud. (6) Lubricate bearing bores in link assemblies (84) with Orelube K-2. (7) Install link assemblies on actuating pins with flanged side of phenolic link bushing (87) facing away from the blade butt. (8) Put washer (83) on actuating pin (against link bushing flange)			
	McCAULEY C750 PROPELLER WORKSHEETS ASSEMBLE OUTSTATION		
	W.O REF. :		
	P/N :		
	S/N :		
	DATE :		
TYPE NO. :	REASON :		
INSTALLED TO :	MANUAL :		
DESCRIPTION		Mech	Eng
CAUTION: The following requires repositioning actuating pin aft of its normal operating position; it is possible for actuating pin or link to damage hub or beta yoke. Take care to prevent contact between actuating pins and hub or yoke when you turn blades.			
(9) Rotate each blade a little at a time toward feather position while pushing on piston rod (91) until beta yoke contacts hub. (a) At this point, stop pushing on piston rod but continue rotating blades towards feather position until all link assemblies are aft of the piston rod bosses.			
(10) Rotate piston rod boss so that groove for piston index plate is 90 degrees clockwise from the number 1 blade (groove at 3 o'clock)			

<p>with blade at 12 o'clock).</p> <p>(11) Position all four links (84) in slots of piston rod (91) bosses.</p> <p>(12) Rotate each blade a little at a time toward reverse position while you pull the piston rod forward.</p> <p>(a) With blades and piston rod in full reverse position, link assemblies can be attached to piston rod.</p> <p>(13) Lubricate pins (81) with Orelube K-2 and insert through piston rod boss holes and link, and install bolts (80), washers (79) (one on each side of pin) and nuts (78). Torque to the value .</p>			
<p>NOTE: All bolts must be installed in the same direction, with the bolt heads in the direction of rotation.</p>			
<p>(14) Turn blades to feathered position and verify that beta yoke (89) is properly aligned over beta rod bushings (121) in rear of hub.</p>			
<p>NOTE: Without front support plate installed, turning blades to feather is somewhat difficult and must be done by carefully turning each blade evenly to prevent cocking of piston rod.</p>			
<p>(15) Lubricate O-ring (48) with Orelube K-2 and install in the contoured groove of support plate assembly (38)</p>			
	<p>McCAULEY C750 PROPELLER WORKSHEETS ASSEMBLE OUTSTATION</p>	W.O. REF. :	
		P/N :	
<p>TYPE NO. :</p>		S/N :	
<p>INSTALLED TO :</p>		DATE :	
DESCRIPTION		Mech	Eng
<p>(16) Install plastic assembly bridge, part number B-5074, on piston rod.</p> <p>(a) Ring shaped piece of assembly bridge is installed in the retaining ring groove in piston rod (91) and the pin shaped piece is installed in piston rod oil port.</p>			
<p>NOTE: Installation of assembly bridge is necessary to prevent damage to the support plate O-ring (43).</p>			
<p>(17) Lubricate the inner bore of the support plate (39) with Orelube K-2.</p> <p>(18) Make sure O-ring (48) is in place and Install support plate assembly on hub, align with locating pins (118).</p>			

on hub, align with locating pins (118). (a) Secure plate with four screws (37). (b) Torque screws to the value listed in Table 701.				
(19) Install the beta rod assemblies as follows: (a) Check the A dimension of each beta rod assembly . (b) Temporarily install the cylinder (22) with four equally spaced screws (29). (c) Apply Orelube K-2 to the first 0.25 inch (6 mm) of feedback collar studs into which the beta rods thread.			J	
CAUTION: When threading beta rod onto the feedback collar assembly, blades must be in a high blade angle or feathered position to prevent uneven loading and possible damage to beta rod assembly, or the beta yoke. Such damage would be internal and could be easily overlooked.				
(d) Align studs of feedback collar assembly (129) with the beta rod holes in hub. (e) Attach the L-shaped alignment feet to the D-5147 fixture and to the feedback collar assembly. (Be careful not to scratch feedback collar). If the L-shaped alignment feet are not available, use the following reference setup dimensions a 1.180 inches (29.97 mm) for C754, C762, C766, C768, C769, C771, C774, C775, C776, C778 model propellers (d) Align studs of feedback collar assembly with the beta rod holes in hub. (f) Attach the L-shaped alignment feet to the D-5147 fixture and to the feedback Collar assembly. (Be careful not to scratch feedback collar).			J	
(g) Insert all four beta rod assemblies (51, 60) through hub and thread (by hand) onto studs. Insert retainer plates (50) and continue threading until retainer plates make contact with cylinder flange.			J	
	W.O REF. : P/N : S/N : DATE :			
	TYPE NO. :		REASON :	
	INSTALLED TO :		MANUAL :	
	DESCRIPTION NOTE: Make sure a 0.001 inch feeler gauge cannot be inserted between the retainer plates and the cylinder flange.			
(a) Install screws (49), torque to the value listed in Table 701. <small>Form SCA-1000-125</small>			Mech	Eng

(h) Remove Orelube K-2 from exposed threads of feedback collar studs with MPK so that a "dry" torque can be applied to jam nuts (132).

(i) Tighten jam nuts (132) while you hold beta rod stationary with a 5/32 inch wrench. Torque per Table 701.

Install Counterweight

CAUTION: Be careful not to over tighten counterweight attaching screws. If aluminum threads in the blade are stripped, refer to the Standard Practice Manual for repair.

- 1) Apply sealant compound, Loctite #2 or Permatex #2 to screw (14) threads, to the washer (15) face of screw, and to counterweight (9) counterbore face.
- (2) Install washer (15) with rounded edge next to screw head.
- (3) Attach one counterweight (9) to each blade with screw (14) and washer (15). Do not allow any sealant between the counterweight and the blade.
- (4) Torque screw (14) per table 701.
- (5) Apply sentry seal from the head of the screw to the counterweight.

Assemble Support Plate Assembly

- (1) Install O-ring (45) and bushing (44) in the support plate (39). Refer to Repair.
- (2) Install O-ring (43) in bushing (44) after machining and load test.
- (3) Install used feather stop bolts (40), shims (41), and spacers (42) in the support plate.

NOTE: The feather stop bolts are patched. They can be installed only once. The new feather stop bolts are only installed after determination of the correct number of shims has been made.

4) Torque the feather stop bolts (40) to the value listed in Table 701.
(Torque bolts again after
feather angle adjustment.)

(5) Lubricate O-rings (43, 46) with Orelube K-2 and install.



McCAULEY C750 PROPELLER WORKSHEETS ASSEMBLE OUTSTATION

W.O REF. :

P/N :

S/N :

DATE :

TYPE NO. :

REASON :

INSTALLED TO :

MANUAL :

DESCRIPTION	Mech	Eng
Install Propeller Spring		
CAUTION: When the propeller spring (19) is compressed, it is potentially		

dangerous. Use extreme caution during assembly and disassembly.

Pay particular attention to screw torque on assembly fixture.

- (1) Liberally apply Aeroshell 5 grease to all spring (19) surfaces.
- (2) Pack thrust bearing (21) with Aeroshell 5 grease and apply grease to both sides of thrust bearing washers.
- (3) Slide thrust bearing assembly (21), and spring guide (20) onto piston rod (91).
- (4) Install assembly fixture, part number E-5011, on forward end of cylinder.
 - (a) Torque fixture screws to 80-100 inch-pounds. Install two guide pins, part number B-5075, finger tight in two of the four spring housing attachment holes in the front of the cylinder assembly.
 - (5) Install spring on piston rod with spring end located on spring guide

NOTE: If spring has paint on one end, that end must face forward. If there is no paint on the spring, the position is optional.

Set spring housing (18) on opposite end of spring.

- (a) Align attachment holes of spring housing with the guide pins and tighten spring compressor until spring housing bottoms against cylinder assembly.
- (b) Remove guide pins and install four screws (16) and washers (17).
- (c) Torque screws to the value listed in Table 701.
- (d) Remove assembly fixture, and lockwire screws to reverse stop screws with 0.025 diameter lockwire.

NOTE: Lockwire two spring housing screws with one reverse stop screw.

- (7) If used, install screws (28) and washers (26, 27) on forward end of cylinder.
- (8) Lockwire cylinder screws (29, 49) in pairs with 0.025 diameter lockwire. (Refer to Figure 710.)



**McCAULEY C750
PROPELLER WORKSHEETS
ASSEMBLE OUTSTATION**

W.O REF. :

P/N :

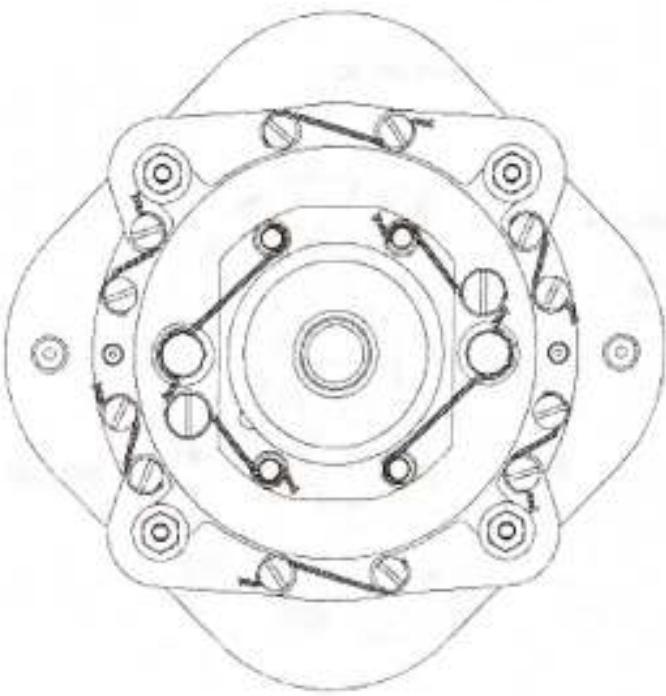
S/N :

DATE :

TYPE NO. :

REASON :

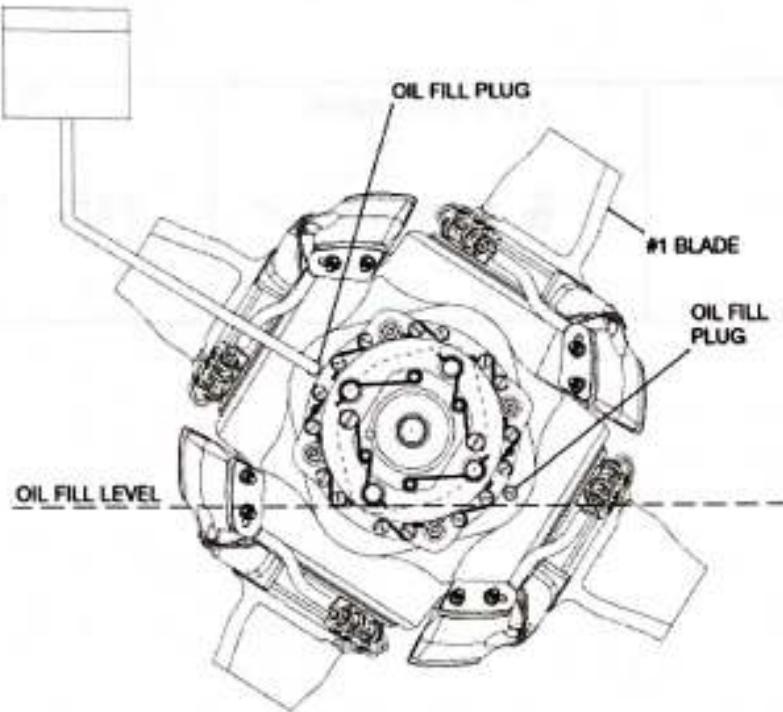
Form SCA-MTC 215

INSTALLED TO :	MANUAL :	Mech	Eng
DESCRIPTION			
			



**McCAULEY C750
PROPELLER WORKSHEETS
ASSEMBLE OUTSTATION**

W.O REF. :	
P/N :	
S/N :	

		DATE :
TYPE NO. :	REASON :	
INSTALLED TO :	MANUAL :	
DESCRIPTION	Mech	Eng
 <p>C754, C762, C763, C778</p>		
Propeller Final Assembly		
A. Oil Fill Propeller (Refer to Figure 711). (1) Fill the propeller with the required quantity of A-1637-18 red dyed oil Table 704.		
McCAULEY C750 PROPELLER WORKSHEETS ASSEMBLE OUTSTATION		
		W.O REF. :
		P/N :
		S/N :



		DATE :	
TYPE NO. :	REASON :		
INSTALLED TO :	MANUAL :		
DESCRIPTION		Mech	Eng
Propeller Model Oil Fill Quantity C754, C762, C763, C778 = 0.53 quarts (500 ml)			
Remarks : <i>GOOD</i>			
DATE :	PERFORMED BY :	CERTIFIED BY :	
<i>29 Aug 2023</i>	<i>Sampurna #</i>		

