EO 15-30-9

ROYAL CANADIAN AIR FORCE

INSTRUCTIONS FOR THE PRESERVATION AND STORAGE OF PROPELLERS AND GOVERNORS

"REVISION" NOTICE

LATEST REVISED PAGES SUPERSEDE THE SAME PAGES OF PREVIOUS DATE

Insert revised pages into basic publication. Destroy superseded pages.

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

5 APR 56

Revised 3 Nov 60

LIST OF RCAF REVISIONS

DATE	PAGE NO	DATE	PAGE NO
11 Apr 57	6		
14 Nov 57	3		
14 Nov 57	5		
14 Nov 57	6		
14 Nov 57	7		
26 Feb 58	1		
16 Jul 59	1		
3 Nov 60	1		

TABLE OF CONTENTS

PART 1

GENERAL

1 To prevent corrosion and deterioration of new, newly overhauled and repairable propellers and governors, installed on aircraft or removed. The preparations for storage is detailed by types in this EO.

2 Propellers and governors which are to remain on the aircraft during storage need only to be desludged, cleaned and flushed with inhibiting mixture, along with the required exterior treatment.

3 If removed from the aircraft, propellers and governors are to be prepared for storage as detailed by types in this EO and retained with the aircraft.

4 Propellers and governors are not to be removed from protective packaging for examination or inspection

5 Corrosion preventive lubricating oil mixture (called inhibiting mixture in these orders) used for propeller and governor application, shall consist of one part compound conforming to Spec. MIL-C-5545A and one part lubricating oil to Spec. 3-GP-100A.

NOTE

Until existing stocks of MIL-C-6529A are depleted and MIL-C-5545A becomes available, MIL-C-6529A corrosion preventive oil is to be used for propeller and governor inhibiting run. The mixture is to consist of one part compound Spec. MIL-C-6529A and one part lubricating oil Spec. 3-GP-100A. Spray application is to be carried out using MIL-C-6929A undiluted.

6 Latest information on cleaners, inhibiting mixtures, greases, etc., used in preparing propellers and governors for storage is listed in EO 45-1-4; US, British and NATO Equivalents of RCAF Petroleum and Associated Products.

DEPRESERVATION

7 Since the inhibiting mixture is soluble in aero-engine oil, it has no adverse effects on either the engine or engine accessories. There is no need to flush either the propeller or governors when removing from storage. However, it may be desirable to remove the inhibiting mixture from external surfaces to facilitate handling.

8 Propeller blade root packing on hydromatic type propellers is to be loosened by working a small quantity of SAE #10 oil or its equivalent between the blade packing and the blade shank. To facilitate this operation hold back the blade packing with a .010" feeler gauge and then work in the oil.

9 Governors - Determine the freedom of movement of the governor by turning it by the drive gear shaft coupling.

PART 2

PROPELLERS

Item No.	12D40	3D40	22D30	23E50	23EX	24D50	43D50	43D60	24260	A644FN-C2		
1	X	X	X	X	X	X	X	X	X	X		Thoroughly clean the propeller with clean rags and cleaner fluid Ref. 33C/182.
2	X	X	X	X	X	X	X	X	X	X		Inspect the exterior finish and touch up if defective.
3	X	X	X	X	X	X	X	X				Clean the interior of the hub dome and distributor valve by spraying with cleaner fluid, making sure all carbon and sludge deposits are removed.
4			X	X	X	X	X	X	X	X		To prevent the inhibiting mixture coming in contact with the rubber parts, mask all de-icer fluid shoes, fairings, etc.
5	X	X	X	X	X	X	X	X	X	X		Brush or spray the blades and external surfaces of the hub and dome with inhibiting mixture.
6	X	X										The counterweight assemblies are to be thoroughly cleaned. Remove any corrosion with crocus cloth, and pack with grease anti-corrosive Ref. 34A/86.
7	X	X	X	X	X	X	X	X	X	X		Spray interior of hub with inhibiting mixture.
8			X	X	X	X	X	X	X			Thoroughly flush the interior of the dome and distributor valve with inhibiting mixture.
9	X	X										The hub section of the propeller including the counter-weights are to be wrapped in accordance with JSPS1 Method 1

PROPELLERS (Cont'd)

Item No.	12D40	3D40	22D30	23E50	23EX	24D50	43D50	43D60	24260	A644FN-C2		
10	X	X	X	X	X	X	X	X	X	X		All component parts, retaining nut, centering cones etc., are to be dipped in inhibiting mixture and individually wrapped.
11			X	X	X	X	X	X	X			The gear preload shims are to remain on the locating dowels.
12	X	X	X	X	X	X	X	X	X	X		Blank off both sides of the hub with a suitable plywood or cardboard disc, and secure with tape moisture resistant.
13										X		Seal oil transfer port of accumulator and solenoid assembly with a suitable cardboard disc and masking tape. Place the accumulator and solenoid assembly in hole provided in the original wooden shipping box.
14										X		Place transfer tube assemblies, adapter stop, rear cone and accessory items in moisture resistant containers. Place all in small wooden box and secure in opposite corner to accumulator.
15										X		Securely wrap the torque cylinder and hub sockets with a moisture resistant wrapping. Seal the three oil transfer ports and feed back shaft seal retainer. Place hub in the wooden shipping container. NOTE Use sling on hub sockets to left hub. Do not use sling on torque cylinder.
16										X		Place solenoid cover assembly in one corner of the box with the hub.

PROPELLERS (Cont'd)

Item No.	12D40	3D40	22D30	23E50	23EX	24D50	43D50	43D60	24260	A644FN-C2		
17										X		Wrap blade root and retention assemblies with heavy moisture resistant wrapping. Place blades end for en in wooden shipping case and brace.
18	X	X	X	X	X	X	X	X	X	X		Place the propeller in wooden case and secure.
19			X	X	X	X	X	X	X			After cleaning and inhibiting the dome is to be wrappe in accordance with JSPS1 Method 1 NOTE Due to the difference in gear preload, domes are not interchangeable, therefore dome and preload shims are to remain with the propeller from which they are removed.
20	X	X	X	X	X	X	X	X	X	X		Any attaching parts such as nuts, cones, snap ring, e will be treated in the same manner as the dome and al will be packed in the propeller case.
21			X	X	X	X	X	X	X			After cleaning and inhibiting the distributor valve is tc be wrapped in accordance with JSPS1 Method 1 sealed in a cardboard container and placed in the appropriate section of the propeller case.

PROPELLERS (Cont'd)

Item No.	12D40	3D40	22D30	23E50	23EX	24D50	43D50	43D60	24260	A644FN-C2		
22	X	X	X	X	X	X	X	X	X	X		Make suitable entry in the Component History Form (L14-8) of the propeller concerned, "Propeller prepared for storage in accordance with EO - 15 - 30 - 9" Date Signature
23	X	X	X	X	X	X	X	X	X	X		The propeller maintenance records are to be wrapped in moisture resistant paper, enclosed in an envelope which is also wrapped in moisture resistant paper. The envelope is then stapled to the outside of the propeller case in a protected location.
24	X	X	X	X	X	X	X	X	X	X		After propeller, dome and distributor valve are installed in propeller case, seal and tag case with the following information:- 1 Propeller type 2 RCAF Section and Reference 3 Serial Number 4 Details of treatment given propeller 5 Date of treatment 6 Date of last overhaul 7 Unit

PART 3

GOVERNORS

Item No.	1A2	1M12	4B2	4G8	4G10	5U18	Integral Oil Control Regulator(Aeroproducts)			
1	X	X	X	X	X	X				Clean the governor externally and internally with cleaner fluid Ref. 33C/182. The cleaner fluid is to be flushed through the inlet opening with the shaft rotated until the fluid is discharged from the outlet opening.
2	X	X	X	X	X	X				Remove the governor head and clean with cleaner fluid. Make sure all carbon and sludge deposits are removed.
3	X	X	X	X	X	X				Remove any corrosion with crocus cloth.
4						X	X			Electric type governor heads are to be removed as an assembly and extreme care is to be taken to prevent the entry of cleaner fluids, oil and grease into the head
5	X	X	X	X	X	X				All working parts of the governor head rack bore, speeder rack and spring are to be coated with rust preventative compound soft film Ref. 40D/587.
6							X			The integral oil control shall be flushed by a mixture o equal parts RCAF Spec. 3-GP-100a engine oil and MIL-L-6081A jet engine oil.
7	X	X	X	X	X	X				Replace the head and flush the governor with inhibiting mixture through the oil inlet opening. At the same time rotate the shaft until the mixture flows from the outlet.

GOVERNORS (Cont'd)

Item No.	1A2	1M12	4B2	4G8	4G10	5U18	Integral Oil Control	Regulator(Aeroproducts)		
8	X	X	X	X	X	X				Coat the drive with inhibiting mixture and then cover with tape water resistant.
9	X	X	X	X	X	X				Brush or spray the exterior of the governor with inhibiting mixture.
10	X	X	X	X	X	X	X	X		Blank off pressure cutout switch and all openings with suitable caps or tape, water resistant.
11	X	X	X	X	X	X	X	X		Pad and package in accordance with Pack 2-1 Method 2D and place package in metal container.
12								X		Blank off all openings of the regulator with suitable caps or tape water resistant.
13								X		Install brush block retaining tool assemblies on the regulator brush block.
14	X	X	X	X	X	X	X	X		The governor containers to be tagged with the following information:- 1 Governor type 2 RCAF Section and Reference 3 Serial Number 4 Details of treatment given governor 5 Date of treatment 6 Date of last overhaul 7 Unit