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EO 20-20-6A

LIST OF REVISIONS

**ROYAL CANADIAN AIR FORCE**



**RESCINDED**

*Auth. See last June 7.2*

**LIST OF  
FIELD MODIFICATIONS**

**GYROSCOPIC FLIGHT INDICATORS**

(This EO replaces EO 20-20-6A dated 30 Nov 53)

**ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF**

**27 MAR 56**



# LIST OF RCAF REVISIONS

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LIST OF  
FIELD MODIFICATIONS

CYROSCOPIC FLIGHT INDICATORS

(This EO replaces EO 20-20-6A dated 30 Nov 53)

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

27 MAR 58



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<b>LATEST DATE</b>	<b>EO NUMBER</b>	<b>TITLE</b>
	20-20-6A/1	(Rescinded)
*	/2	(Replaced by EO 05-1-6A/9)
13 Dec 50	/3	Removal of Air Filter Body Cover

\*Asterisk appearing opposite entry denotes change since last issue







13 Dec 50

**MODIFICATION**

**REMOVAL OF AIR FILTER BODY COVER**

**RESCINDED**  
 AUTH *Acc last June 72*

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(This EO <sup>3</sup> replaces AFTEO E3/10/10 dated 31 Jan 44 listed on EO 20-20-6/1)

EQUIPMENT AFFECTED: Gyro Flight Instruments with central air filter connection at rear centre of case

BY WHOM WORK WILL BE PERFORMED: Operating Units

WHEN WORK WILL BE PERFORMED: Upon installation when required

RCAF FORM ENTRIES: L14

MODIFICATION OF SPARES IN STOCK: N.A.

**PURPOSE**

1 This modification is to permit conversion of central air filter type instruments to individual air filter types, in the event that the latter are not available.

**MODIFICATION DATA**

2 This modification is to be embodied as follows:

(a) Directional Gyros of Sperry or Ternstedt Manufacture

- (1) Remove the four screws to remove the air filter body cover, Sperry Pt. 187663, Ref. 506JA/1385 and the gasket, Sperry Pt. 187664, Ref. 506JA/1420.
- (2) Replace the four attaching screws, placing flat washers or spacers behind the lock-washers. It is desired to retain the long screws as they will be required if the instruments are later used in a central air filter system and the adaptor cover has to be replaced.
- (3) Two lugs, manufactured locally, as per Fig. 1 are to be installed under two attaching screws 180 deg. apart, if a filter snap ring is installed. These lugs will prevent the air filter snap ring from coming out due to vibration of the aircraft. If the snap ring has been omitted from the installation a retaining lug shall be installed under each of the four attaching screws to hold the air filter assembly, Sperry Pt. 149828, in place.
- (4) Touch up the exposed metal surfaces with black lacquer.

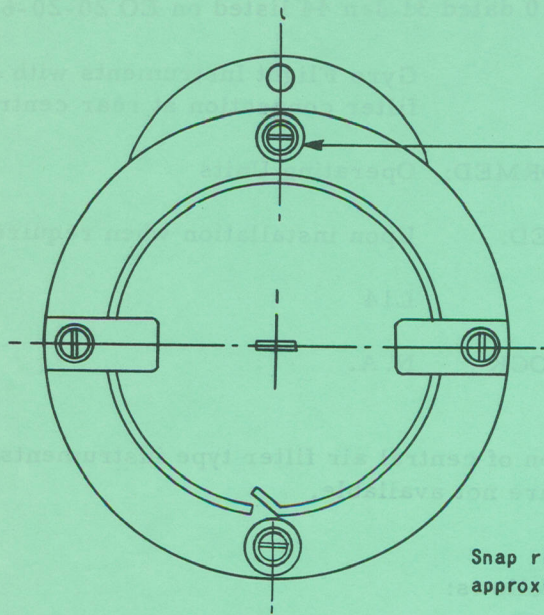
(b) Artificial Horizons of Sperry or Ternstedt Manufacture

- (1) Take out the four attaching screws and remove the air filter body cover, Sperry Pt. 187663, Ref. 506JA/1385 and the gasket, Sperry Pt. 187664, Ref. 506JA/1420.
- (2) Reassemble as in Para. 2 (a) (2) to (4).

(c) Jack and Heintz Artificial Horizons and Directional Gyros

- (1) Remove the four attaching screws and lift off the cover, rear case, Jack and Heintz Pt. JH 10-66, Ref. 506JC/359.

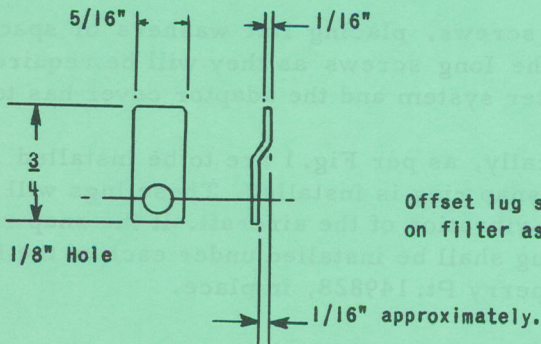




Spacer Washer (s) installed as required to permit use of long screws.

NOTE: If snap ring not installed, 4 lugs are used.

Snap ring installed so ends are approximately 90° from lugs.



Offset lug sufficiently to bear on filter assembly

MATERIAL: Aluminum or Brass

Figure 1



(2) Two lugs, manufactured locally, as per Fig. 1, are to be installed under two attaching screws 180 deg. apart, if a filter snap ring is installed. These lugs will prevent the air filter snapping from being shaken out by vibration of the aircraft. If the snap ring has been omitted from the installation, a retaining lug shall be installed under each of the four attaching screws to hold the air filter assembly, Jack and Heintz Pt. JH 10-79 in place.

(3) The four flat head attaching screws are to be replaced with Ref. 28/15222, AN 501-8-5, Screws, Fil. Hd. It will be noted that these screws are necessary to seal the holes in the case as well as to attach the snap ring retaining lugs.

(4) Touch up the exposed metal surfaces with black lacquer.

PARTS REQUIRED

3 The following parts are required and are to be demanded from Supply Depot stocks:

RCAF REF	PART	DESCRIPTION	QTY PER AIRCRAFT
28C/15222	AN 501-8-5	Screw, Fil. Hd.	4 per J and H inst.
30B/21	2 SH	.064 in. Sheet, Alum. Alloy	As req'd
or			
suitable substitute			

PARTS RENDERED SURPLUS OR OBSOLETE

4 The following parts which have been removed from instruments are to be returned to the appropriate Supply Depot to be held available in stock against the future use of these instruments in central air filter systems or instrument overhaul contractors' requirements.

RCAF REF	PART	DESCRIPTION	QTY PER AIRCRAFT
506JA/1385	187663	Air Filter Body Cover	1) Sperry or
506JA/1420	187664	Gasket	1) Ternstedt
506JC/359	JH 10-66	Cover, Rear Case	1) Jack and
506JC/360	JH 3-27	Screw, Flat Head, 8-36 x 1/2 in. SS	4) Heintz

WEIGHT, LOADING, AND BALANCE DATA

5 N.A.

ADDITIONAL DATA

6 Some of the newest Directional Gyros manufactured by Ternstedt and Sperry have a 1/4 in. I.P.T. outlet at the level of the bottom of the instrument instead of at the back center of the instrument. The housing of this new filter arrangement has an irregular hexagonal outline. The cover is NOT to be removed from these filters as they are designed to make use of the full filter area in their present form.

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

400

Prepared By:  
AMC/SAESO/E2



