

EXPORT CONTROLLED

**COMMERCIAL ENGINE
BULLETIN**



**ENGINE, FUEL AND CONTROL - HYDROMECHANICAL UNIT (HMU) -
ONE-TIME TORQUE OF METERING HEAD REGULATOR COVER
BOLTS**

1. PLANNING INFORMATION

A. Effectivity

(1) Engines

All Rolls-Royce Model 250-C30R/3, -C40B and -C47 series engines are affected by this bulletin.

(2) Spares - Affected.

B. Reason

To distribute Goodrich (GPECS) Service Bulletin EMC-35A HMU 73-31.

C. Description

This Goodrich (GPECS) Service Bulletin EMC-35A HMU 73-31 gives you the procedure to torque the metering head regulator cover bolts.

D. Approval

Technical aspects are FAA approved.

E. Compliance

Compliance Code 3: To be complied with the next time the HMU is sent to a Goodrich authorized repair/overhaul facility for any reason. To be complied within 150 operating hours.

F. Interchangeability - Not applicable

G. Material Availability - Not applicable

H. Tooling - Not applicable

I. Weight and Balance - Not affected

J. Electrical Load Data - Not affected

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250-C30R/3 Series
250-C40B
250-C47 Series

CEB-73-3128
CEB-73-5036
CEB-73-6054

ADDENDUM TO H-58-10-AMAM-13
HMU Metering Head Regulator Cover Bolts

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K. References

- (1) CSP 21003 Operation and Maintenance Manual, Turboshift Model 250-C30R/3 (OMM).
- (2) CSP 21006 Operation and Maintenance Manual, Turboshift Model 250-C30R/3M (OMM).
- (3) CSP 23003 Illustrated Parts Catalog, Turboshift Model 250-C30R/3, -C30R/3M (IPC).
- (4) CSP 21000 Operation and Maintenance Manual, Turboshift Model 250-C40B (OMM).
- (5) CSP 21001 Operation and Maintenance Manual, Turboshift Model 250-C47B (OMM).
- (6) CSP 21004 Operation and Maintenance Manual, Turboshift Model 250-C47M (OMM).
- (7) CSP 21001 Illustrated Parts Catalog, Turboshift Model 250-C40B, -C47B, -C47M (IPC).

L. Other Publications Affected

- (1) CSP 24009, 73-20-00, GPECS Model EMC-35A Component Maintenance Manual (CMM).

M. Prerequisites - None

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Torque the metering head regulator cover bolts (Ref. GPECS SB EMC-35A HMU 73-31).
- B. Record compliance with this commercial engine bulletin in the applicable section of the engine logbook, component accessory record card as complied with the following:

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250-C47 Series	CEB 73-6054

3. MATERIAL INFORMATION - Not applicable

4. For warranty and commercial considerations, contact:

Goodrich Pump & Engine Control Systems, Inc.
North American Operations
Charter Oak Blvd.
Box 330651
West Hartford, CT 06133-0651
Linda McKnight
Warranty Support
linda.mcknight@goodrich.com

CUSTOMER SUPPORT
ROLLS-ROYCE

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Pump & Engine Control Systems, Inc.

SERVICE BULLETIN

EMC-35A HMU
73-31

Goodrich Pump & Engine Control Systems, Inc. MODEL EMC-35A
Hydromechanical Unit Assembly
One-Time Re-Torque of Metering Head Regulator Cover Bolts

1. Planning Information:

A. Effectivity:

Applicable to all Goodrich Pump & Engine Control Systems, Inc. (GPECS) Model EMC-35A Hydromechanical Unit (HMU) assemblies installed on Rolls-Royce Model 250 engines, as well as any spare HMUs held in stores.

B. Reason:

A small number of HMUs have been found to exhibit weepage at the parting line of the Metering Head Regulator (MHR) cover to the HMU housing. In most cases no measurable leakage is found, but wetting at the parting line is observed. Investigation has revealed that a majority of returned HMUs are found to be insufficiently torqued at one or more of the four bolts securing the MHR cover to the housing. The allowable bolt torque limits on the MHR cover have been increased to prevent leakage.

C. Description:

This service bulletin provides accomplishment instructions to torque the metering head regulator cover bolts.

D. Compliance:

To be complied with within 150 operating hours. Until such time that compliance is accomplished, a visual leak check of the MHR cover parting line (see Figure 1) must be completed on a daily basis prior to each flight.

E. Approval:

Technical aspects are FAA approved.

F. Manpower:

All work can be performed by an owner/operator designated mechanic. Approximately 0.5 man hours are required to accomplish this service bulletin.

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G. Tooling:

The following tools and materials are required to accomplish this service bulletin. Substitutes may be used in place of the equipment and materials identified below, provided the functionality can be demonstrated equivalent and proven not to damage the part(s) on which they are used.

Nomenclature	Specification
Calibrated Torque Wrench	0 - 50 in/lbs.
Socket Adapter	Double Hex, 1/4 inch

H. Weight and Balance:

None.

I. Electrical Load Data:

Not changed.

J. Software Accomplishment Summary:

Not applicable.

K. References:

GPECS Model EMC-35A Component Maintenance Manual, 73-20-00, latest revision.

L. Other Publications Affected:

Not applicable.

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2. Accomplishment Instructions:

NOTE: This service bulletin may not be performed on a unit exhibiting fuel leakage at the MHR cover. Units with an existing leak at the MHR cover must be returned to an authorized repair facility.

A. Prepare the area around the HMU to allow access so that this work can be performed on an installed unit. This may require removal of the starter. Otherwise remove the HMU in accordance with the appropriate engine or aircraft manual instructions.

B. Locate the MHR cover on the HMU as shown in Figure 1. The cover is facing down if the HMU is installed.

NOTE: In the following step, it is important that the cover bolts are not backed out by any amount. Bolts must be rotated in the clockwise direction only, when facing the HMU.

C. Using a calibrated torque wrench and the bolt sequence shown in Figure 2, torque the MHR cover bolts to 34 - 38 in-lbs (3.85 - 4.30 N-m) in accordance with standard maintenance procedure.

D. Record service bulletin compliance on the appropriate component records.

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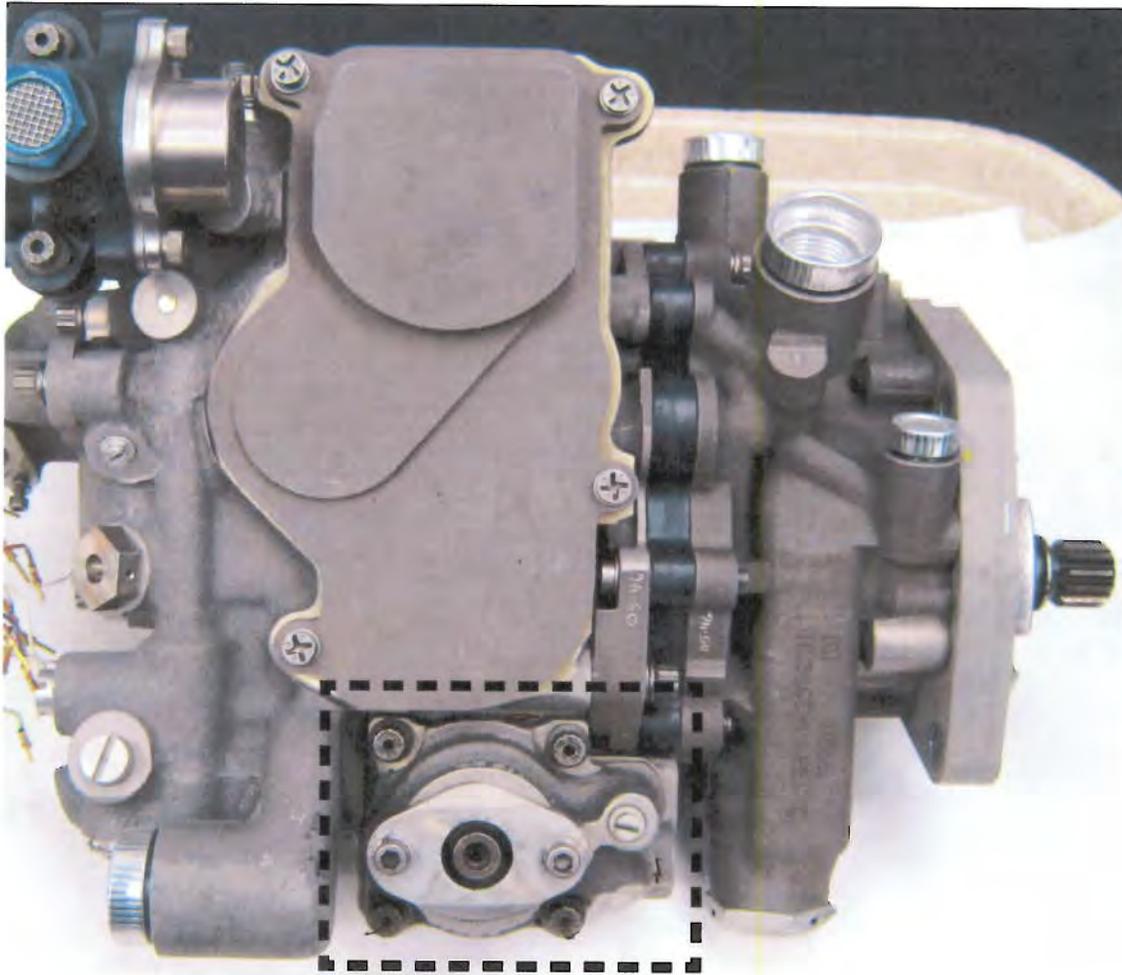
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HMU Housing
Figure 1

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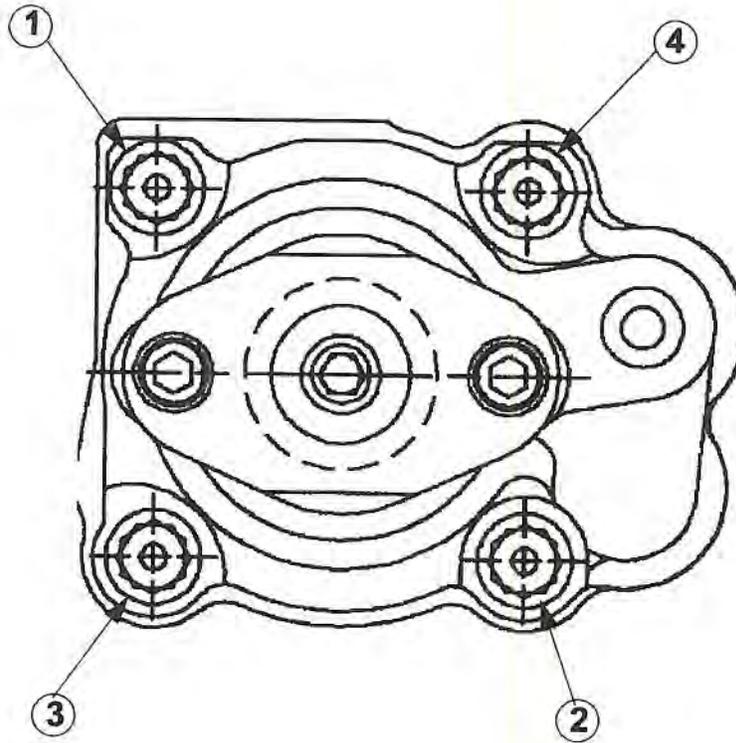
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TIGHTENING SEQUENCE
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Metering Head Regulator Cover - Torquing Sequence
Figure 2

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3. Material Information

None.

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