



**Rolls-Royce**

## **ADVANCED RELEASE**

TO: Holders of RR300 Series Operations and Maintenance Manual, Publication CSP 21009.

Reason: Revised removal procedure.

Component: Compressor Assembly

Remarks: Contact Rolls-Royce

**72-30-00-000-802**

Jul 31/23





## COMPRESSOR ASSEMBLY DISASSEMBLY

TASK 72-30-00-000-802

### 1. Remove the Compressor Front Bearing and Seal

- CAUTION:** DO NOT TOUCH A BEARING WITH BARE HANDS. USE LINT-FREE GLOVES OR BARRIER CREAM WHEN YOU TOUCH OR MOVE A BEARING. DAMAGE OR CONTAMINATION CAN OCCUR.
- CAUTION:** DO NOT PUT BEARINGS OR BEARING COMPONENTS ON TOP OF OTHER BEARINGS OR BEARING COMPONENTS. DAMAGE CAN OCCUR.
- CAUTION:** DO NOT LET THE BEARING DROP ON A HARD SURFACE. DAMAGE CAN OCCUR.
- CAUTION:** DO NOT MIX THE BEARING COMPONENTS WITH THE OTHER BEARING COMPONENTS. MAKE SURE THAT YOU KEEP THE BEARING COMPONENTS OF THE SAME BEARING TOGETHER. BEARING FAILURE CAN OCCUR DURING ENGINE OPERATION.
- CAUTION:** DO NOT REMOVE THE ROLLERS FROM THE CAGE. BEARING FAILURE WILL OCCUR DURING ENGINE OPERATION.
- CAUTION:** DO NOT LET THE BEARING BE IN THE AIR FOR MORE THAN FOUR HOURS AFTER YOU CLEAN IT. IF THE BEARING ASSEMBLY PROCEDURE IS NOT COMPLETED BEFORE FOUR HOURS, YOU MUST PRESERVE THE BEARING IN OIL. BEARING CORROSION CAN OCCUR.

#### A. General

This task gives you the procedure to remove the compressor front bearing and seal.

#### B. Materials

None

#### C. Consumable Materials

None

#### D. Expendable Parts

None

#### E. Special Tools and Equipment

- (1) Adapter, engine turning, 6799790.
- (2) Puller, bearing and seal ring, front compressor, 23005023.

#### F. References

- (1) TASK 80-11-10-000-801, Remove the Starter Generator.
- (2) TASK 90-51-01-500-801, Do the Preservation and Storage of the Bearings, SPM.

#### G. Procedure

SUBTASK 72-30-00-050-001

FIG. 301/ 72-30-00-990-805

- (1) Remove the bearing housing.
  - (a) Remove the seal housing retainer (4) from the bearing housing (2).
  - (b) Remove the bearing housing (2). The bearing outer race (8) will stay with the bearing housing (2).
  - (c) Discard packing (1 and 5) on the OD of the bearing housing (2).

EFFECTIVITY: ALL

DISASSEMBLY- 802

# 72-30-00

Page 301



- (d) Remove the pin (3) and bearing outer race (8) from the bearing housing (2).
- (e) Discard packing (7 and 9) in the ID of the bearing housing.

## SUBTASK 72-30-00-050-002

REF. FIG. 301/TASK 72-30-00-990-805

**CAUTION:** DO NOT LET THE SOCKET WRENCH CONTACT THE ROLLER BEARINGS. DO NOT APPLY ANY FORCE TO THE ROLLERS. DAMAGE CAN OCCUR.

- (2) Remove the black nylon cap nut.
  - (a) Remove the starter generator (REF. TASK 80-11-10-000-801).
  - (b) Install the engine turning adapter (6799790) into the starter generator splines.
  - (c) Hold the engine turning adapter so the shaft (13) will not turn.
  - (d) Remove the black nylon cap nut (6) with a socket wrench (Snap-On SW 181 or equivalent). Make sure that the socket has a maximum of 7/16 in. (11 mm) broach depth.

## SUBTASK 72-30-00-050-003

REF. FIG. 301/TASK 72-30-00-990-805

- (3) Remove the front compressor roller bearing.
  - (a) Use the front compressor bearing and seal ring puller (23005023) to remove the front compressor roller bearing.

## SUBTASK 72-30-00-020-004

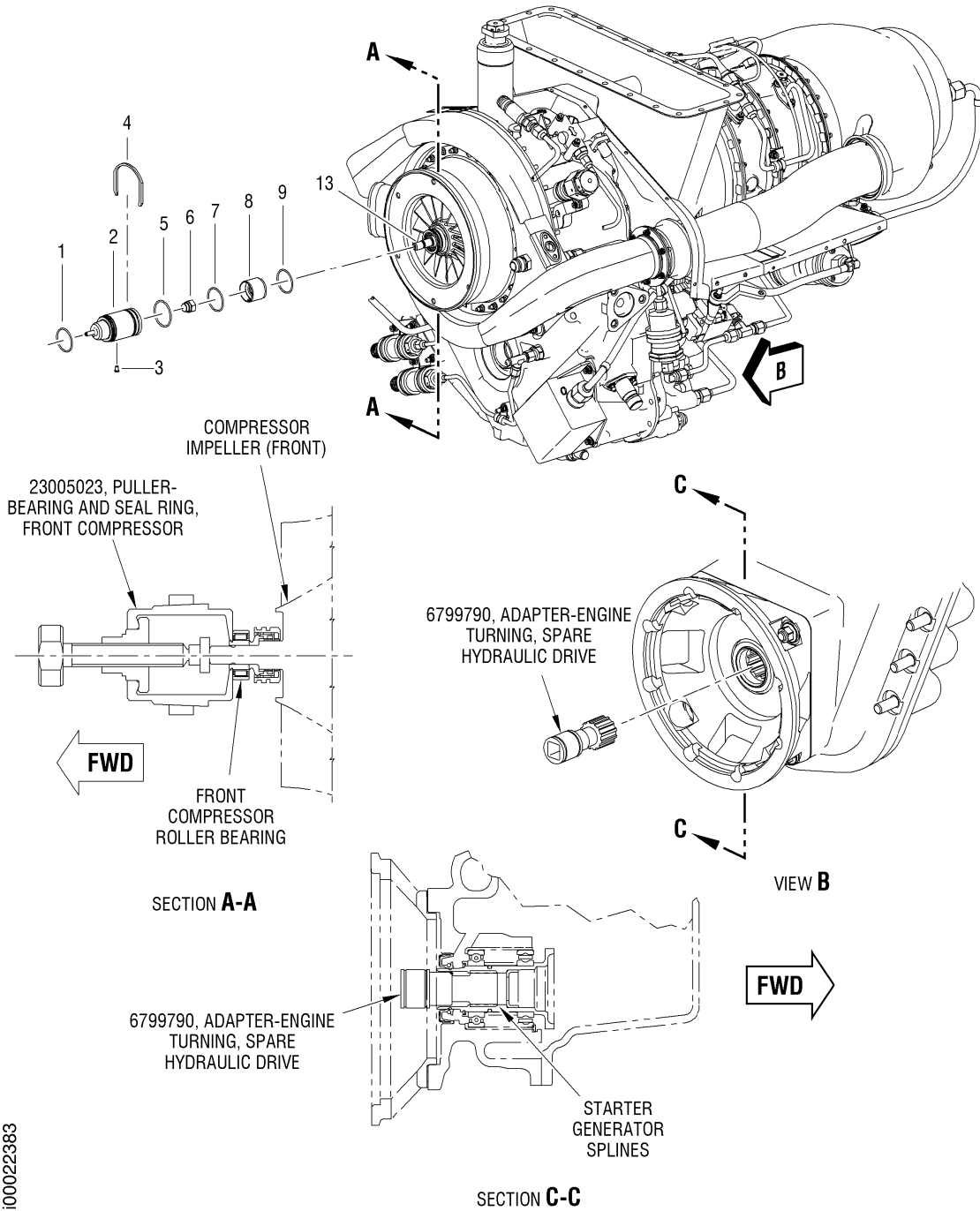
REF. FIG. 302/TASK 72-30-00-990-806

- (4) Remove the mating ring seal.
  - (a) Use the front compressor bearing and seal ring puller (23005023) to remove the mating ring seal (10).

## SUBTASK 72-30-00-050-005

REF. FIG. 302/TASK 72-30-00-990-806

- (5) Remove the encased seal.
  - (a) Remove the encased seal (12) from the shaft (13).
  - (b) Discard the packing (11).



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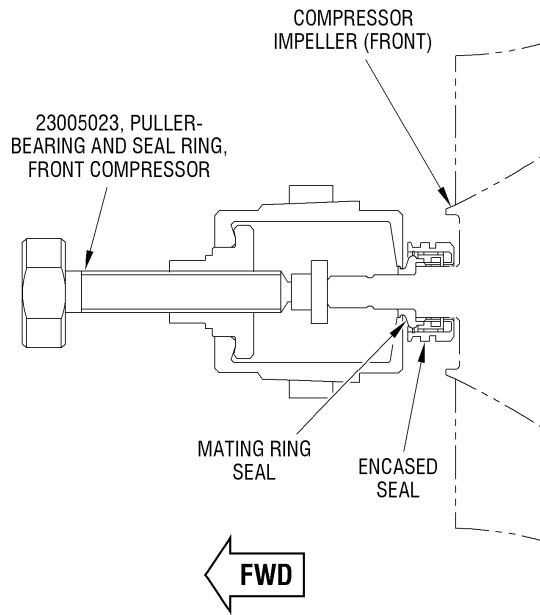
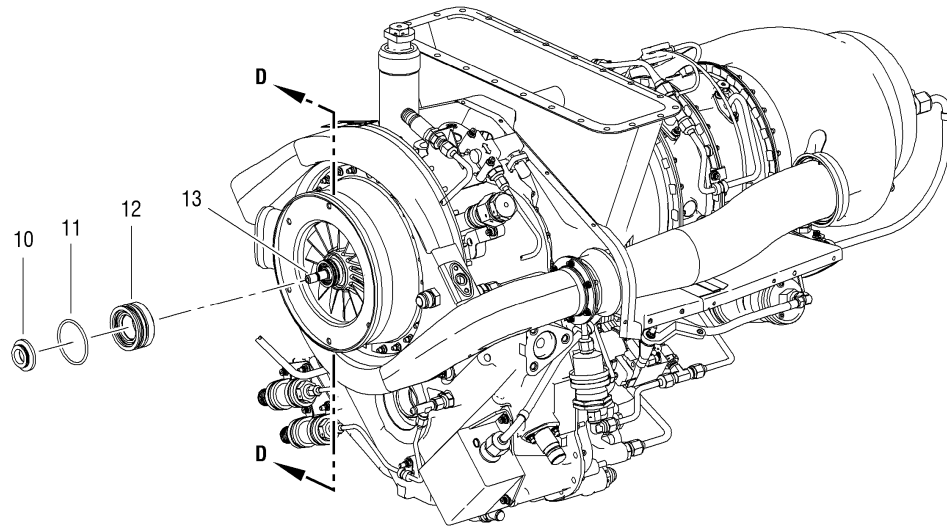
Compressor Front Bearing - Removal  
REF. FIG. 301/TASK 72-30-00-990-805

EFFECTIVITY: ALL

DISASSEMBLY- 802

## 72-30-00

Page 303



SECTION D-D

Compressor Front Seal- Removal  
REF. FIG. 302/TASK 72-30-00-990-806

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EFFECTIVITY: ALL

DISASSEMBLY- 802

## 72-30-00

Page 304

Jul 31/23