



Rolls-Royce

ADVANCED RELEASE

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

Reason: Revised installation procedure.

Component: Compressor Assembly

Remarks: Contact Rolls-Royce

72-30-00-400-801

Jul 31/23



COMPRESSOR ASSEMBLY ASSEMBLY

TASK 72-30-00-400-801

1. Install the Compressor Front Support

CAUTION: DO NOT TOUCH TITANIUM PARTS, BEARING, OR MATING RING WITH BARE HANDS. WEAR LATEX GLOVES OR CLEAN, LINT FREE, WHITE COTTON GLOVES OR USE PROTECTIVE ANTI-PERSPIRANT HAND CREAM. THE PARTS MUST BE KEPT IN A PROTECTIVE MATERIAL. IF YOU TOUCH TITANIUM PARTS WITH BARE HANDS CORROSION TO THE PARTS CAN OCCUR.

A. General

This task gives you the procedure to install the compressor front support.

B. Materials

None

C. Consumable Materials

- (1) Oil, engine, AS5780.

D. Expendable Parts

EM		NAME	LIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
1001	1	Packing	72-30-00	01	40
1001	3	Packing	72-30-00	01	45

E. Special Tools and Equipment

- (1) Holder, carbon seal, 23089389.
- (2) Pliers, O-ring, 23089390.
- (3) T-handle, 23089391.

F. References

- (1) TASK 72-30-00-000-801, Remove the Compressor Front Support.
- (2) TASK 72-30-05-400-801, Install the Oil Pressure Reducer.
- (3) TASK 75-11-00-400-801, Install the Anti-icing System Tubes.
- (4) TASK 79-00-00-400-801, SUBTASK 79-00-00-420-001, Install the Gearbox-to-front Support Pressure Oil Tube.
- (5) TASK 79-00-00-400-801, SUBTASK 79-00-00-420-002, Install the Front Support-to-gearbox Oil Scavenge Tube.
- (6) TASK 70-01-04-900-801, Standard Torque Procedures, SPM.

EFFECTIVITY: ALL



G. Procedure

SUBTASK 72-30-00-420-001

REF. FIG. 1001/TASK 72-30-00-990-801

REF. FIG. 1002/TASK 72-30-00-990-802

(1) Install the compressor front support (support).

WARNING: DO NOT BREATHE THE FUMES FROM SYNTHETIC LUBRICATING OIL. IT CAN CONTAIN TRICRESYL PHOSPHATE. USE IN AN AREA WITH CONTINUOUS AIRFLOW. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAMES. DO NOT GET IT ON YOUR SKIN OR IN YOUR EYES. WEAR GOGGLES, CHEMICAL-RESISTANT GLOVES, AND SAFETY CLOTHING. IF YOU GET IT ON YOUR SKIN, CLEAN WITH SOAP AND WATER. IF YOU GET IT IN YOUR EYES, FLUSH WITH WATER. GET MEDICAL AID.

- (a) Use engine oil (AS5780) to lubricate the O-rings (1 and 3).
- (b) Install the O-ring (1) and the O-ring (3) on the compressor front bearing housing (housing)(2).
- (c) Install the carbon seal holder (23089389) between the carbon seal and the compressor impeller.
- (d) Use the installation tool (23089390) to install the housing (2) on the front compressor shaft (7).

CAUTION: DO NOT LET THE SEAL HOUSING RETAINER TOUCH THE CARBON FACE OF THE SEAL DURING INSTALLATION. DAMAGE TO THE SEAL CAN OCCUR.

- (e) Align the slots in the housing (2) with the groove in the carbon seal and install the seal housing retainer (4).
- (f) Align the locating pin on the housing with the guide pin hole in the support (8) and install the support on the housing (2).

CAUTION: DO NOT LET THE T-HANDLE TOOL TOUCH THE COMPRESSOR FRONT SUPPORT. DAMAGE TO THE PART CAN OCCUR.

- (g) Install the T-handle tool (23089391) on the housing stud.
- (h) Pull the T-handle tool (23089391) forward to seat the housing O-rings (1 and 3) and engage the locating pin.
- (i) Remove the T-handle tool (23089391).
- (j) Install the nut (10) on the support stud.
- (k) Use a torque wrench to torque the nut (10) to 35-40 in-lb. (4.0-4.5 Nm) (Ref. TASK 70-01-04-900-801).
- (l) Remove the carbon seal holder (23089389).
- (m) Make sure that the oil scavenge port is located at the bottom of the support (8).
- (n) Install the six bolts (9) on the support (8).
- (o) Use a torque wrench to torque the six bolts (9) to 12-15 in-lb. (1.4-1.7 Nm) (Ref. TASK 70-00-00-910-801).
- (p) Turn the impeller and make sure that there is no unusual noise and that the impeller turns freely.
- (q) If you have to use more than usual force to turn the compressor, or if you hear unusual noises, then remove the support (Ref. TASK 72-30-00-000-801) and examine for indications of the malfunction.

EFFECTIVITY: ALL

ASSEMBLY- 801

72-30-00

Page 1002



SUBTASK 72-30-00-420-002

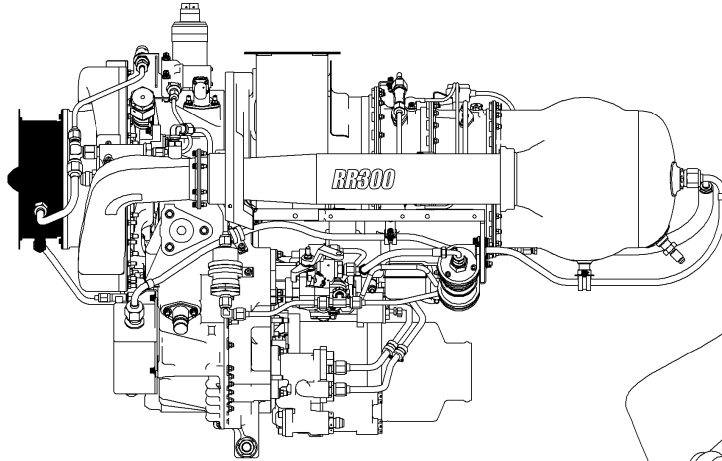
- (2) Install the oil pressure reducer.
 - (a) Install the oil pressure reducer (Ref. TASK 72-30-05-400-801).

SUBTASK 72-30-00-420-003

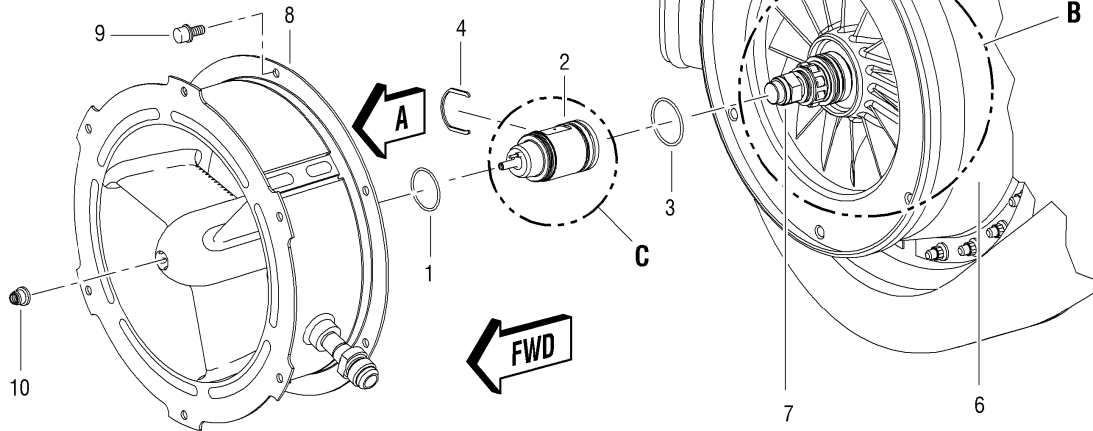
- (3) Install the oil tubes.
 - (a) Install the gearbox-to-front support pressure oil tube (Ref. SUBTASK 79-00-00-420-001).
 - (b) Install the front support-to-gearbox oil scavenge tube (Ref. SUBTASK 79-00-00-420-002).

SUBTASK 72-30-00-420-004

- (4) Install the anti-ice tube.
 - (a) Install the anti-icing valve to front support tube (Ref. TASK 75-11-00-400-801).



LEFT SIDE VIEW



GUIDE PIN HOLE

OIL SCAVENGE PORT

VIEW A

Compressor Front Support - Installation
FIG. 1001/TASK 72-30-00-990-801

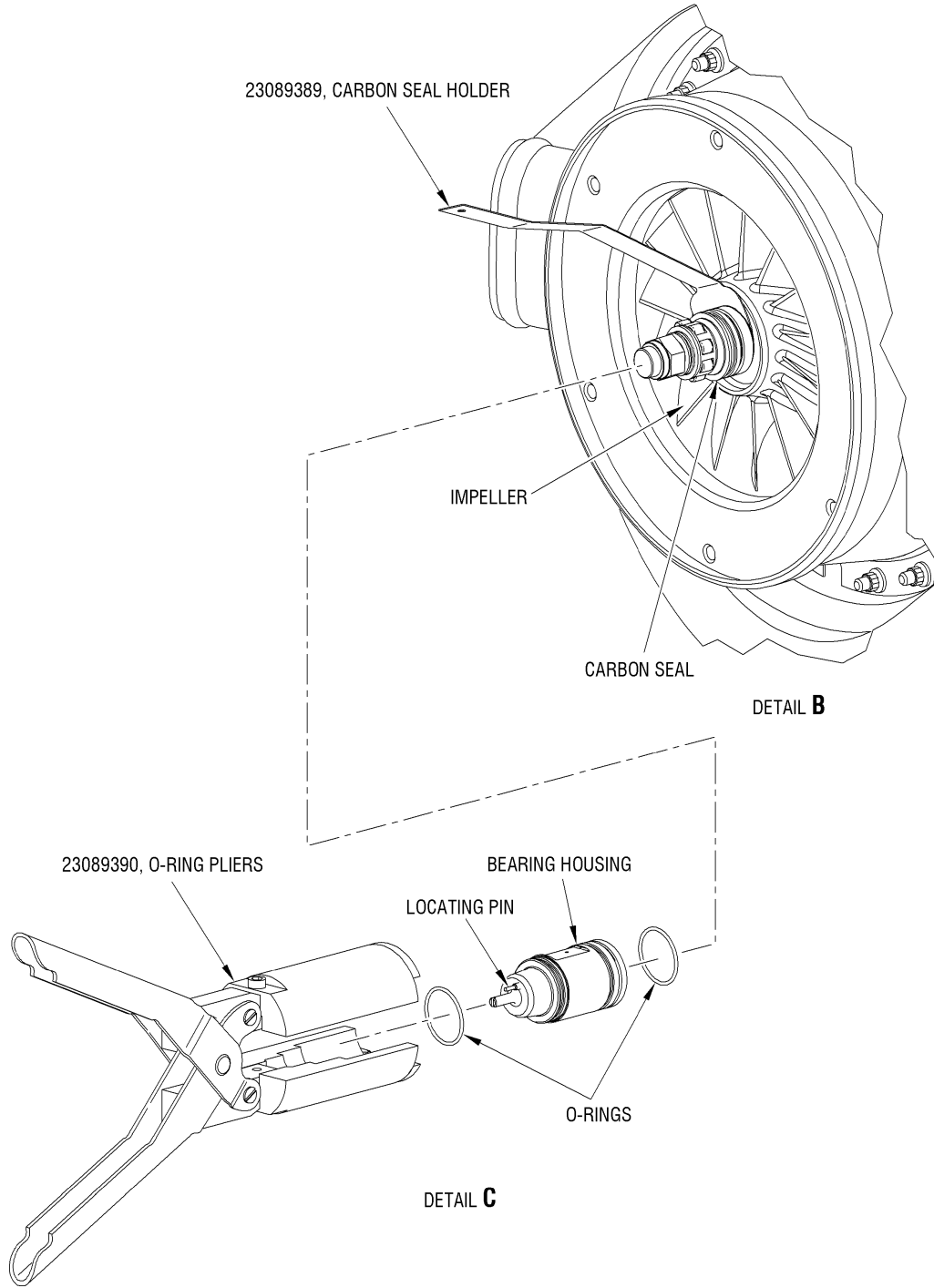
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EFFECTIVITY: ALL

ASSEMBLY- 801

72-30-00

Page 1004



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Compressor Front Support - Installation
FIG. 1002/TASK 72-30-00-990-802

EFFECTIVITY: ALL

72-30-00

ASSEMBLY- 801
Page 1005
Jul 31/23

