

# TOOL CHANGE BULLETIN N° E99 001 23 TM0357G004

Engine(s) Variant(s) (Configuration)	ARRIEL 1 & 2 all variants
Tool applicability	Mandatory
Maintenance level	Maintenance level 1
Provisioning Mode	Tool to be modified
Original issue or version n°	Version N°2
Date of issue: January 10, 2023	Lead time (months): 1
Technical publication date	June 30, 2023

Old P/N	New P/N	Alternative P/N	Designation	Periodicity Check*	Supply Code
TM0357G004 (D)	TM0357G004 (E)	N/A	Magnetic seal removal / installation tool	N/A	N/A

<sup>\*</sup> For the handling tools, a specific periodicity check may be required by the local authorities.

#### 1. MAIN FUNCTION

The tool P/N TM0357G004 is used to install and remove the output shaft magnetic seal.

#### 2. JUSTIFICATION

As part of the improvement plan to reduce magnetic seal oil leakage, it has been highlighted the importance to prevent any contact between the magnetic seal and a magnetic material.

During a process review with the Supplier, MAGSEAL, it has been identified that the pressure tooling tightening screw is made from a magnetic material, which is prompt to come in contact against the magnetic seal surfaces.

The modification therefore introduces a new tightening screw (Item 12 replaces the item 7) made with a non-magnetic material (Bronze, Grade UE9P or equivalent). This will help to prevent metal-to-metal contact with the magnetic seal functional faces.

#### 3. ASSOCIATED TASK(S)

ARRIEL 1A1 / 1B Maintenance Manuals - Task 72-61-20-900-801-A02 "Transmission shaft magnetic seal - Removal / installation"

ARRIEL 1 All variants Maintenance Manuals - Task 72-61-20-900-801-B02 "Transmission shaft magnetic seal - Removal / installation"



ARRIEL 1B Maintenance Manual - Task 72-61-20-900-801-C02 "Transmission shaft magnetic seal - Removal / installation"

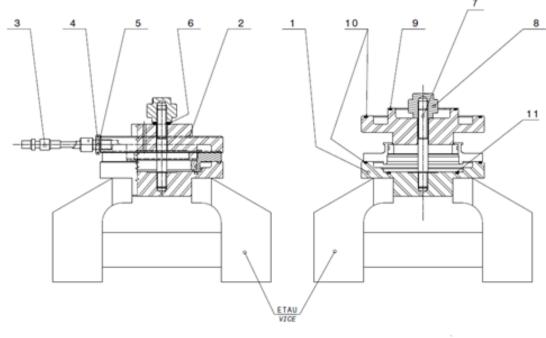
ARRIEL 2 All variants (except ARRIEL 2E) Maintenance Manuals - Task 72-61-20-900-801-B02 "Transmission shaft magnetic seal - Removal / installation"

ARRIEL 2E Maintenance Manual - Task 72-61-20-900-801-B03 "Transmission shaft magnetic seal - Removal / installation"

# 4. DESCRIPTION OF THE TOOL MODIFICATION TO BE DONE BY THE USER OR BY SAFRANHE TOOLING

#### 4.1. REMOVAL OF THE STUD (REFER TO PICTURE 1)

- Loosen the knurled nut (8)
- Remove the washer (6) from the stud (7),
- Remove the body assembly (2, 3, 4 & 5) from the base (1) fitted with the stud (7),
- Loosen and discard the stud (7) from the base (1).



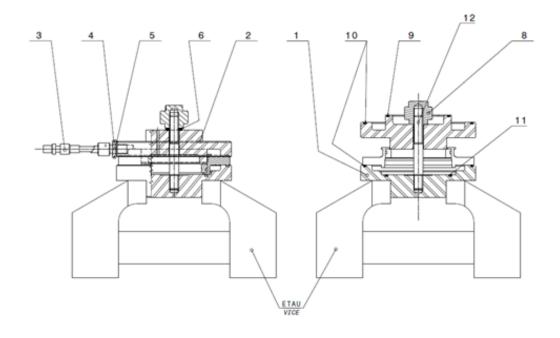
#### Picture 1

#### 4.2. INSTALLATION OF THE STUD (REFER TO PICTURE 2)

- Tight the stud (12) in the base (1) until its stops,
- Install the body assembly (2, 3, 4 & 5) on the base (1) fitted with the stud (12),
- Install the washer (6) on the stud (12)
- Tight the knurled nut (8).



#### **HELICOPTER ENGINES**



Picture 2

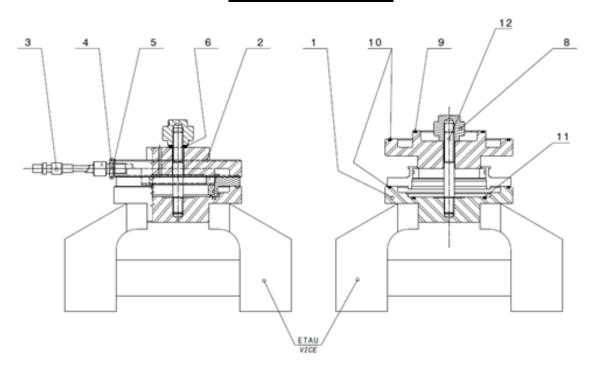
## 5. BILL OF MATERIAL

Item	Quantity	Description	Supplier	Part Number
1	1	Base	Safran H.E.	TM0357P015
2	1	Flange	Safran H.E.	TM0357P016
3	1	End piece	Safran H.E.	8815099331
4	1	Double nipple M10x100	Safran H.E.	9770060034
5	1	Aluminium seal Ø10	Safran H.E.	9752010044
6	1	Washer M10	STD	
8	1	Knurled nut M10	Safran H.E.	TM0357P012
9	1	O'ring	LJF	143203
10	2	O'ring	LJF	157200
11	1	O'ring	Safran H.E.	9682506601
12	1	Stud	Safran H.E.	TM0357P017





## **TOOL ILLUSTRATION**



## **DIMENSION AND WEIGHT**

HEIGHT: 8 CMS	LENGTH: 12 CMS
WIDTH: 12 CMS	WEIGHT: 1.5 KG



# **APPENDIX 1 – General Service Letter n° 3062/21**





	REQUEST FOR INFORMATION FOR THE REPAIR OF TOOLING AND/OR SPARE PARTS
You	
•	Contact:
•	Company:
•	Address:
•	Telephone:
•	Email:
Your t	ooling
•	Your tooling P/N (if any):
•	Description of this tooling:
•	Your use:
•	Used variant:
•	Serial number (if any):
Your r	equirement
•	If damaged, description of the damaged part:
•	If missing, description of the missing part:
•	Damaged or missing part P/N:
•	Remarks / photo:
Applic	ation issued by:
•	Name: Signature:
•	Company:
•	Date: