

A I R C R A F T

SERVICE BULLETIN

SB-AG-82

Initial Release: 08/31/2023

H80 PROPELLER SHAFT CARE

Affected Aircraft Models	Serial Number Range
S2R-H80	ALL

Levan Tabidze
Vice President of Engineering

LOG OF REVISIONS

NOTE: Reformatting and correction of typographical errors is not considered revision.

True revisions are indicated by a dark vertical line at the right margin of the lines revised.

Rev.	Page	Description of Revision	By:
IR	All	New Document Initial Release.	B. Tobin 08/31/2023

1. PURPOSE/REASON FOR PUBLICATION:

The reason for this Service Bulletin is to inform operators about the risk of damaging the propeller shaft during installation or removal as described in General Electric Service Bulletin SB-000447/00 (attached).

2. SCOPE/COMPLIANCE

Universal.

Attachment A:
General Electric
Service Bulletin
SB-000447/00



SERVICE BULLETIN

SERVICE BULLETIN NO./REV.

SB-000447/00

SUBJECT

ENGINE – PROPELLER SHAFT – (72-10-00) – Importance of careful handling of propeller shaft during propeller's installation and removal

COMPLIANCE CATEGORY

CATEGORY 9 *Note 1*

RECORD OF REVISIONS

Revision No.	Page	Description of Changes
00	All	Initial release of the Service Bulletin

Note 1: Refer to Chapter 1.2 – Compliance for more details

This document was approved and issued via the GE Aviation Turboprop Document Workflow Process.

The technical content of this document is approved under the authority of the DOA ref. EASA.21J.300.

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GE Non-Public



1 PLANNING INFORMATION

1.1 EFFECTIVITY

All M601 and H80 series engines are affected by this Service Bulletin.

1.2 COMPLIANCE

Information only. (Category 9)

1.3 REASON

1) Objective

The reason for this Service Bulletin is to inform operators about potential damage to Propeller Shaft Complete (refer to Airworthiness Limitations Section of applicable Engine Maintenance Manual for specific part numbers) during propeller installation and/or removal and cost of ownership related to the replacement of the damaged Propeller Shaft Complete.

2) Condition

A propeller shaft is a critical part of the engine and must be handled carefully during propeller's installation or removal.

3) Cause

On some engines received for overhaul dents and scratches are found on the propeller shaft in the propeller flange area close to the bolts/nuts, which fix the propeller to the shaft. Investigation indicates that damage may be caused by using unsuitable tooling or improper handling of the tooling.

This Service Bulletin is to inform, how to act and use proper equipment, in accordance with maintenance manuals issued by the engine and propeller manufacturers.

4) Improvement

Implementation of this Service Bulletin will avoid potential engine operational issues and reduce an incurred costs to the operators connected with the replacement of damaged propeller shafts.

1.4 SAFETY INTENT

N/A

1.5 CONFIGURATION DESCRIPTION

No changes in configuration.

1.6 DESCRIPTION

CAUTION: THE PROPELLER SHAFT IS A CRITICAL PART. USE EXTREME CARE DURING PROPELLER INSTALLATION AND REMOVAL OR DAMAGE MAY OCCUR TO THE PROPELLER SHAFT.

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This Non-Modification Service Bulletin informs and provides recommendation for careful handling of the propeller shaft during installation or removal of the propeller. Below drawings show, how to properly use the tooling and avoid damages to the flange area of the propeller shaft.

NOTE: PICTURES INCLUDED IN THIS SERVICE BULLETIN ARE FOR ILLUSTRATION ONLY.

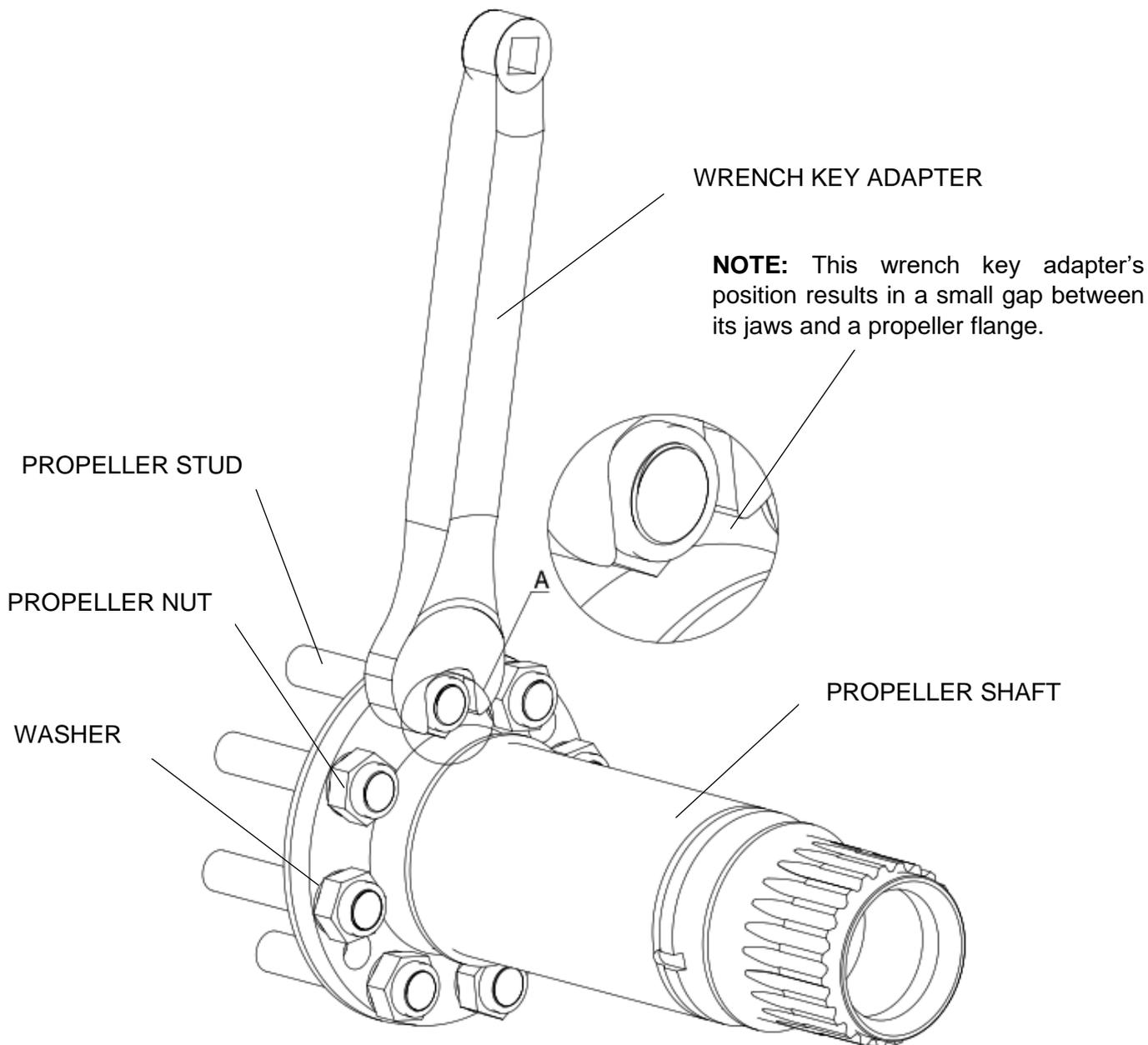


Fig. 1. Correct wrench position – no contact between wrench key and flange

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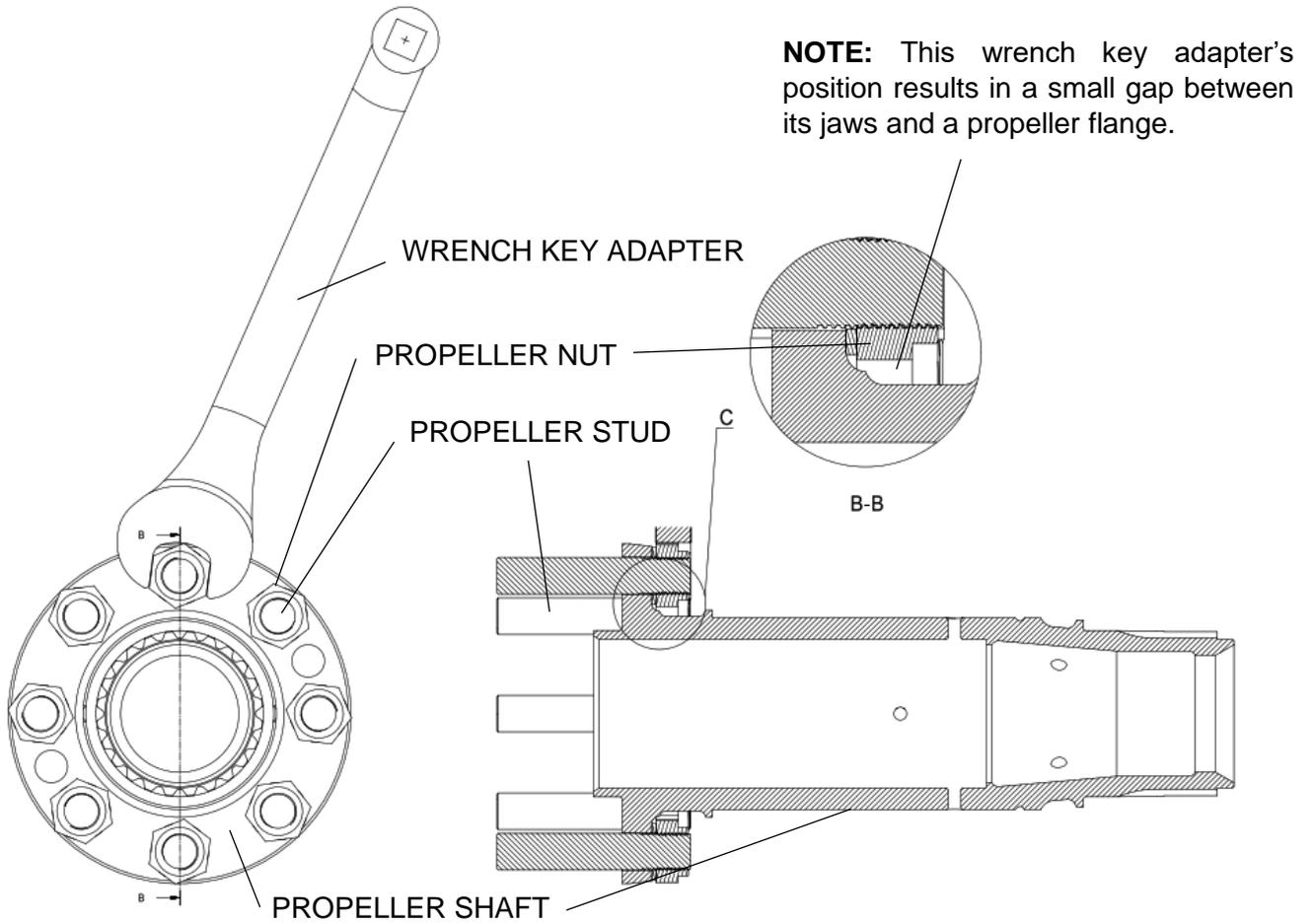


Fig. 2. Correct wrench position – alternate view.

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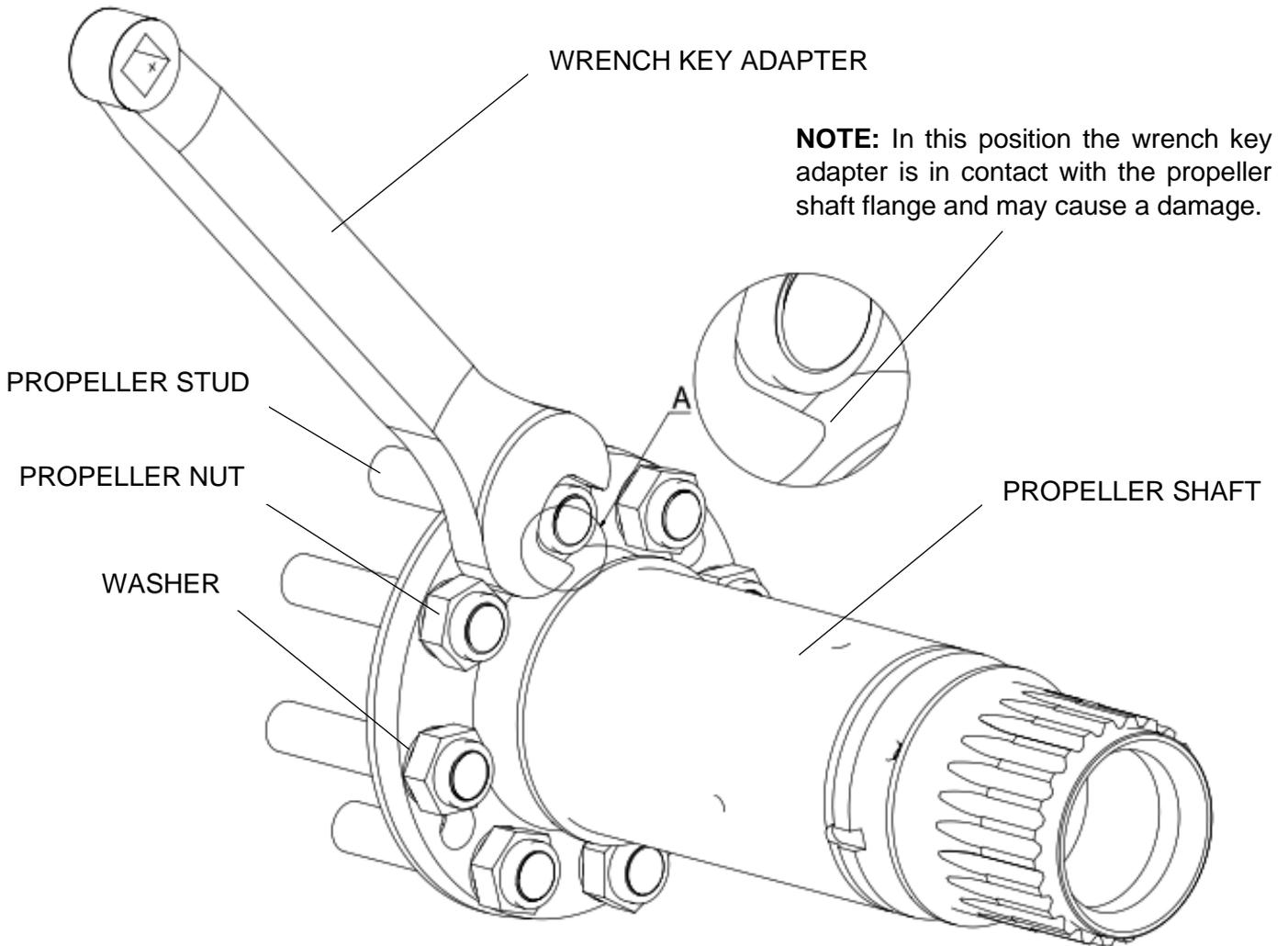


Fig. 3. Incorrect wrench position – contact between wrench key and flange

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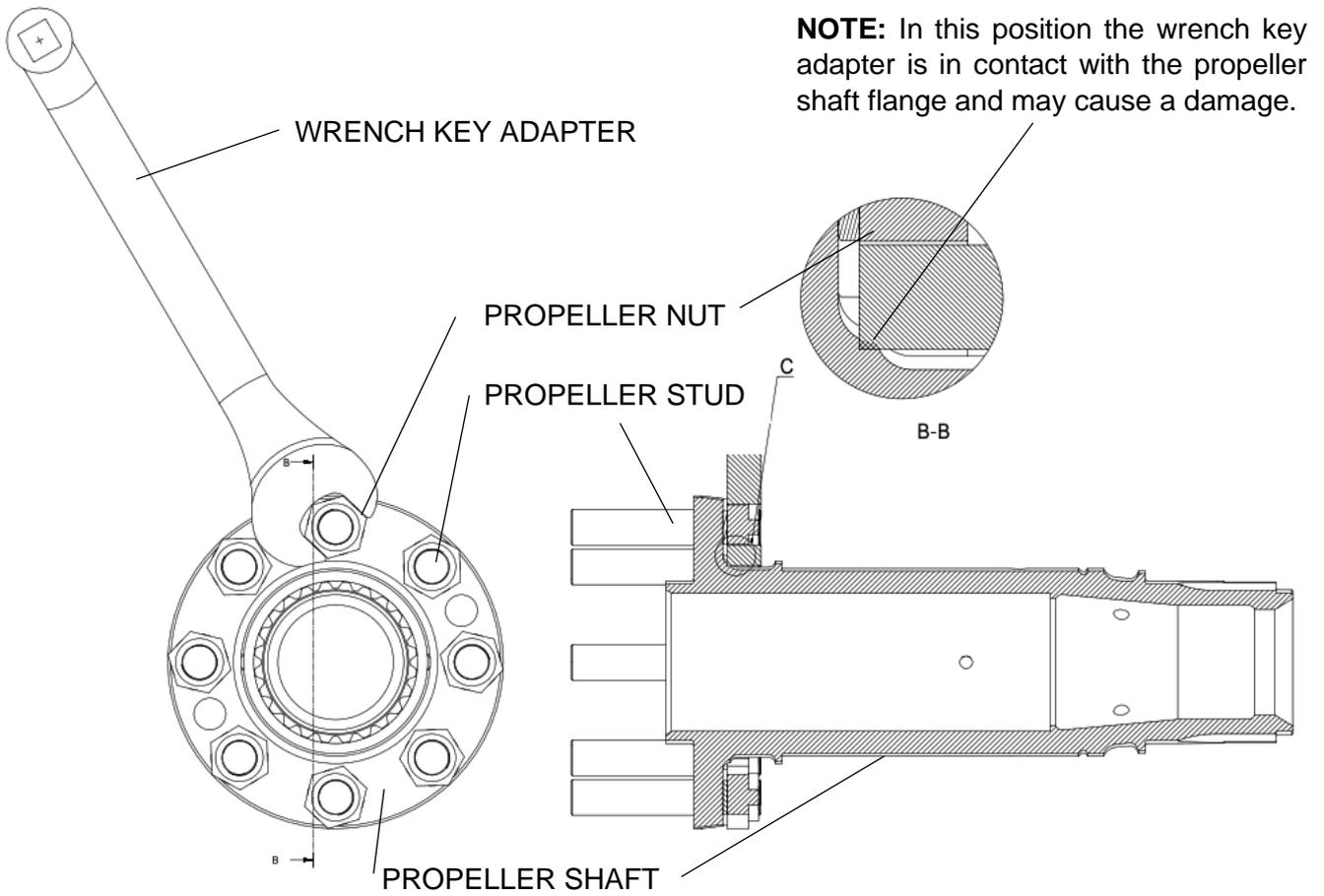


Fig. 4. Incorrect wrench position – alternate view.

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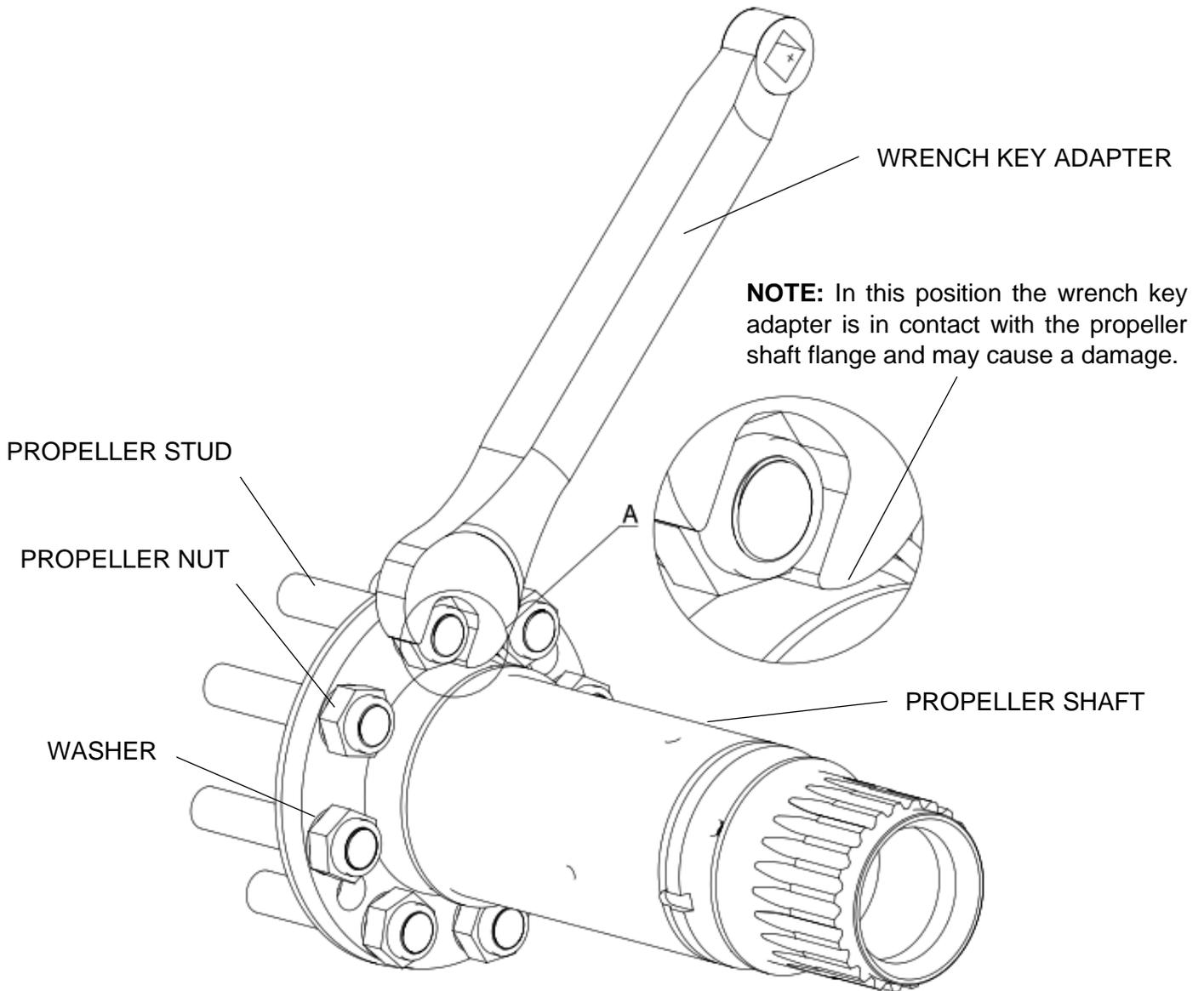


Fig. 5. Incorrect wrench position – contact between wrench key and flange

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NOTE: In this position the wrench key adapter is in contact with the propeller shaft flange and may cause a damage.

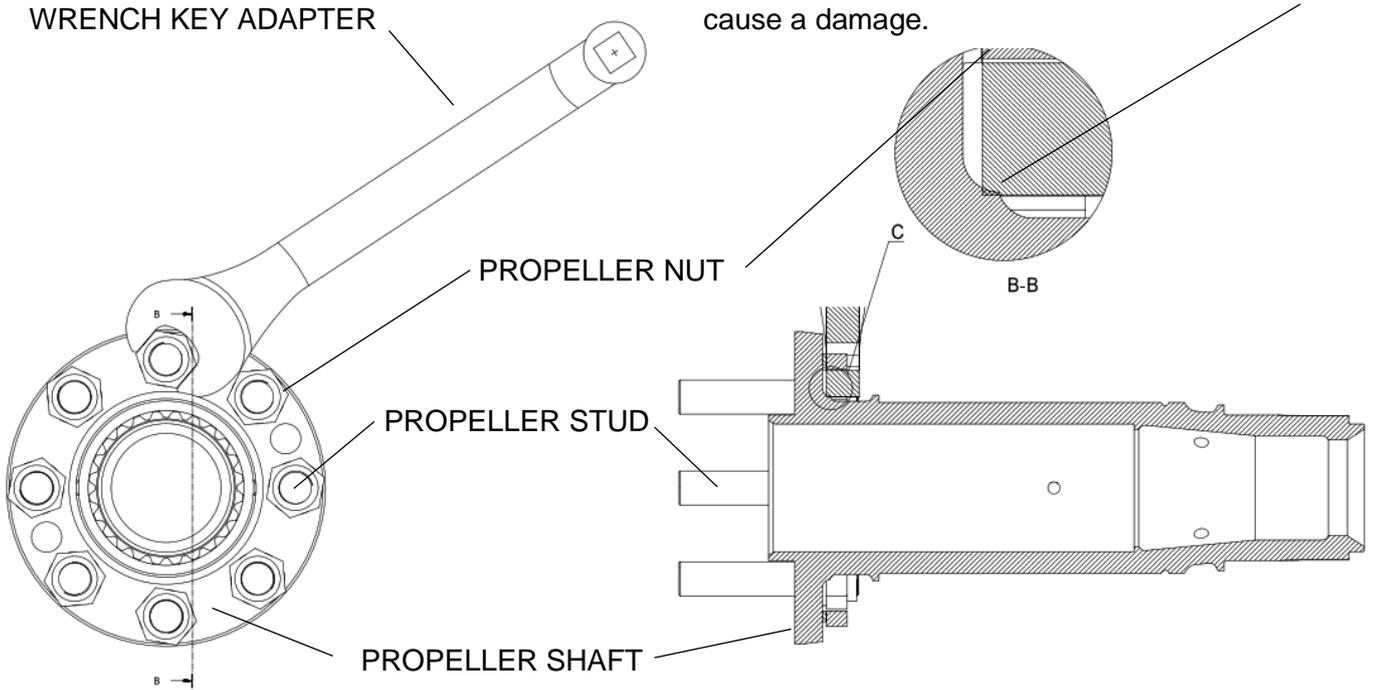


Fig. 6. Incorrect wrench position – alternate view.

Inappropriate tools or handling may cause damage shown in the following pictures.

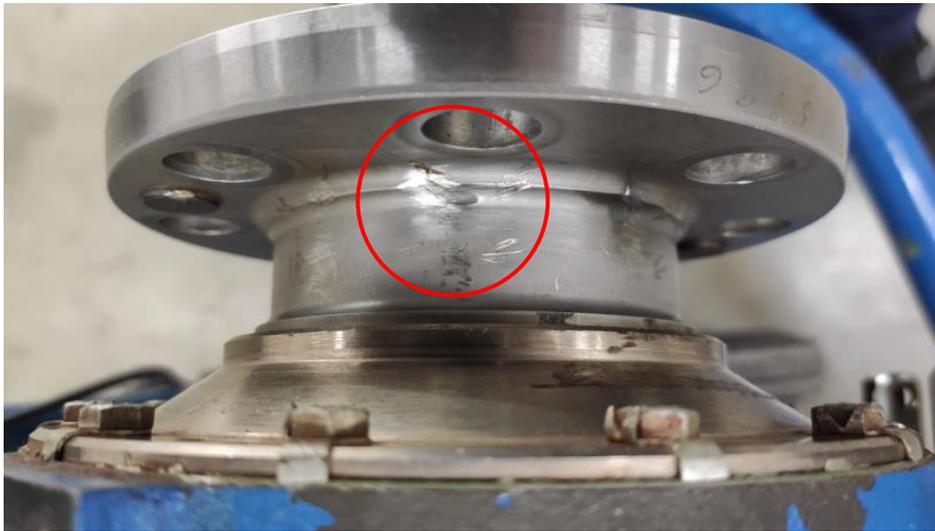


Fig. 7. Possible damage to the propeller shaft, when using tooling improperly.

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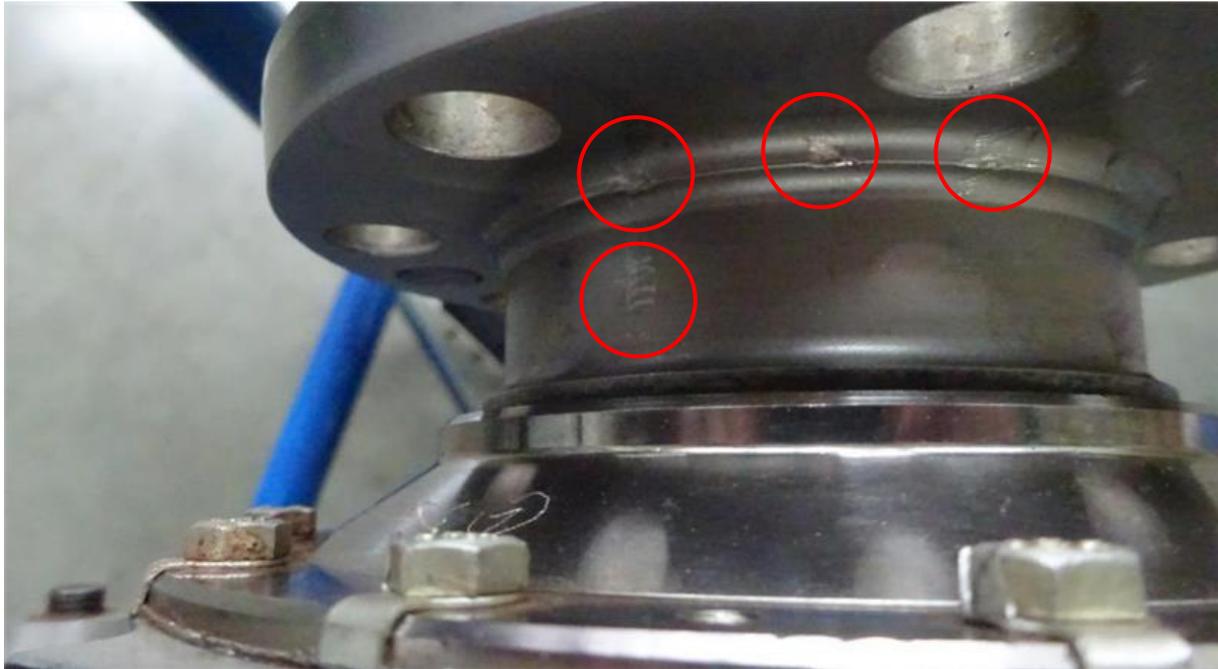


Fig. 8. Possible damage to the propeller shaft, when using tooling improperly.

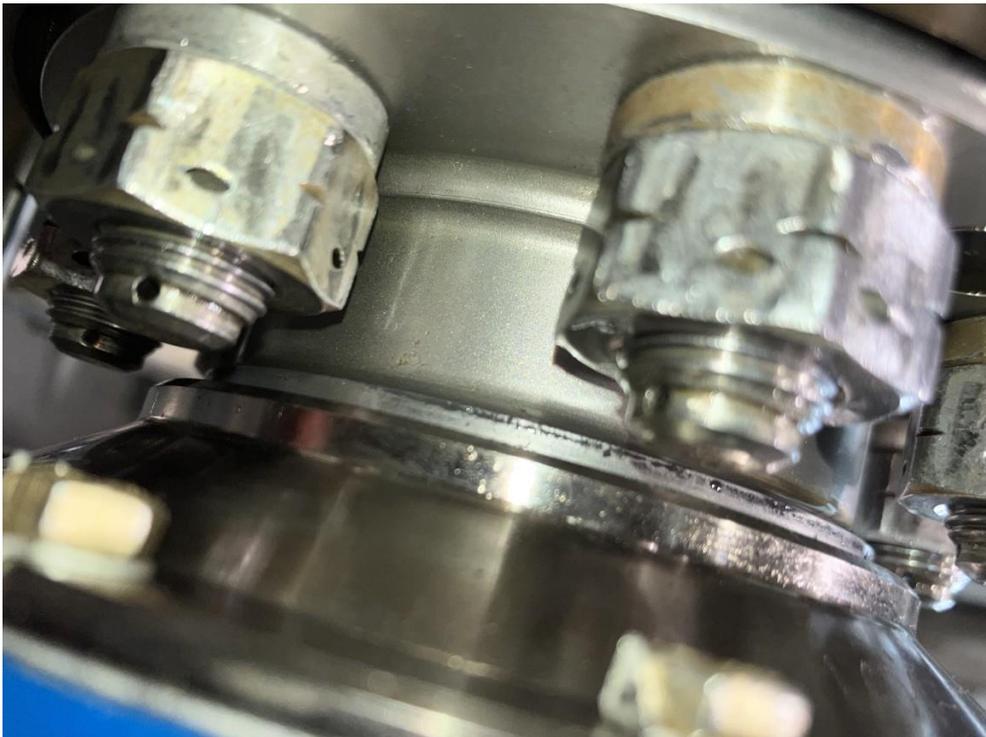


Fig. 9. View of Propeller Shaft flange with propeller nuts and washers installed.

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It is important to use adequate tooling. Note for an appropriate length of the wrench key adapter and shape of its jaws.

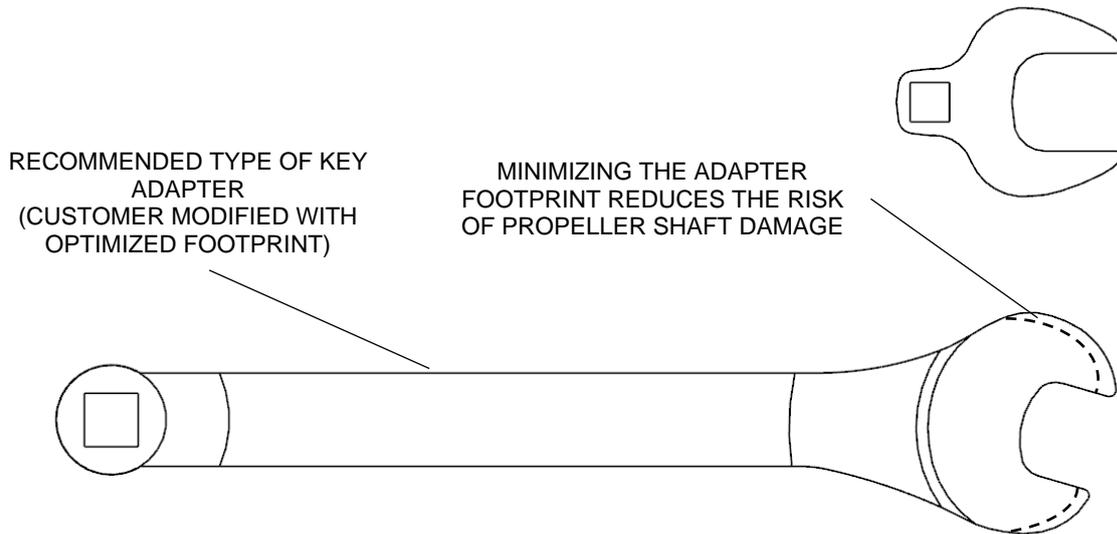


Fig. 10. Comparison of different type of key adapters used for installing and removal of the propeller.

1.7 MANPOWER

N/A

1.8 EXPENSES

N/A

1.9 SUPPLEMENTAL INFORMATION

For more information, contact Customer Support: tp.ops@ge.com

2 ACCOMPLISHMENT INSTRUCTIONS

N/A

3 MATERIAL INFORMATION

3.1 REQUIRED MATERIAL

N/A

3.2 TOOLING

Refer to propeller manufacturer’s manual for a list of the recommended tools.

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**REFERENCES**

- [1] Engine Maintenance Manual No. 0983402 for H-series engines
- [2] Engine Maintenance Manual No. 0982051 for M601D engines
- [3] Engine Maintenance Manual No. 0982055 for M601E, M601E-21 engines
- [4] Engine Maintenance Manual No. 0982309 for M601D-1, M601D-2, M601D-11, M601D-11NZ, M601Z engines
- [5] Engine Maintenance Manual No. 0982302 for M601E-11, M601E-11S, M601E-11A, M601E-11AS, M601F, M601FS engines

OTHER PUBLICATIONS AFFECTED

None

ATTACHMENTS

None

Approved by

Nicolardi, Luca

Head of Design Organization

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