

Temporary Maintenance Instruction TMI 139-562

Slider bushing - Install procedure

All AW139 Helicopters

The technical content of this document is approved under the authority of DOA nr. EASA.21J.005.

The present TMI will be evaluated for its introduction in the standard set of Technical Publication.

If no further notice is received, the present document expires on: November 7th 2023.



Introduction

This TMI provides the instructions and requirements to perform replacement of Sliding bushing.

The following procedures contained in this TMI update and supersede the contents of the following Data Modules:

| ANNEX | DATA MODULE CODE | DATA MODULE TITLE |
|---------|--------------------------|------------------------------------|
| Annex 1 | 39-A-64-31-06-00A-720A-A | Slider bushing - Install procedure |



Slider bushing - Install procedure

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References

Table 1 References

| Data Module | Title |
|--------------------------|--|
| 39-A-00-20-00-00A-120A-A | Helicopter safety - Pre-operation (make helicopter safe for maintenance) |
| 39-A-00-60-00-00A-010A-A | Critical parts - General data |
| 39-A-64-21-03-00A-720A-A | Top conical ring - Install procedure |
| 39-A-64-31-04-00A-720A-A | Sliding control assembly - Install procedure |
| 39-A-64-31-07-00A-720A-A | Boot - Install procedure |
| 39-A-67-32-01-00A-720A-A | Tail rotor servoactuator - Install procedure |



Table 1 References

| Data Module | Title |
|--------------------------|--------------------------------------|
| 39-B-64-21-03-00A-720A-A | Top conical ring - Install procedure |

Table 2 Access points

| Access Panel / Door Id | Data Module |
|------------------------|-------------|
| No Access Point | |

Table 3 Zones

| Access Panel / Door Id | Data Module | |
|------------------------|-------------|--|
| No Zones | | |

Preliminary Requirements

Required Conditions

Table 4 Required Conditions

| Conditions | Data Module/Technical Publication |
|---|-----------------------------------|
| The helicopter must be safe for maintenance | 39-A-00-20-00-00A-120A-A |

Support Equipment

Table 5 Support Equipment

| Nomenclature | Identification No. | Qty |
|--|--------------------|-----|
| Platform, right | GG-02-00 | 1 |
| Heat gun | ZZ-00-00 | 1 |
| Rem/inst tool, slider bushing | GF-87-00 | 1 |
| Rem/inst tool, slider bushing installation | GF-87-02 | 1 |
| Rem/inst tool, slider bushing | GJ-62-00 | 1 |
| Rem/inst tool, slider bushing installation | GJ-62-02 | 1 |



Supplies

Table 6 Supplies

| Nomenclature | Identification No. | Qty |
|-------------------------------|--------------------|-----|
| Lint-free cloth | C011 | AR |
| Corrosion inhibitor remover | C273 | AR |
| Corrosion preventive compound | C075 | |

Spares

Table 7 Spares

| Nomenclature | Identification No. | Qty |
|----------------|--------------------|-----|
| Slider bushing | 64-31-00-01 -031 | AR |

Safety Conditions

WARNING

The materials that follow are dangerous. Before you do this procedure, make sure that you know all the safety precautions and first aid instructions for these materials:

- Corrosion inhibitor remover (C273)
- Corrosion preventive compound (C075)

CAUTIONS

- This component is a critical part. Examine the component for signs of structural damage before you install it on the helicopter. Refer to 39-A-00-60-00-00A-010A-A.
- During this procedure, do not touch the components made of metal with your bare hands. Put on applicable cotton gloves before you touch the components. Contamination from your bare hands will cause corrosion of the metals.

Procedure

1 Put the Platform, right (GG-02-00) adjacent to the right side of the tail rotor.

CAUTION

Always wear clean and dry gloves during the subsequent operations.

Clean the housing of the slider bushing (3, Figure 1) in the shaft (2) and all the external surface of the slider bushing (3) with the Lint-free cloth (C011) and the Corrosion inhibitor remover (C273).

WARNING

Be careful when you use the compressed air. Dust and particles can cause injury to your eyes. Always use applicable protective goggles.



3 Dry the cleaned parts with the compressed air until you remove all the solvent.

Note

Apply the corrosion preventive compound with a clean brush.

Apply the Corrosion preventive compound (C075) on all the external surface of the slider bushing (3). Make sure that you apply the corrosion preventive compound also on the surface of the flange that touches the shaft (2).

CAUTION

Do not freeze the slider bushing (3).

Increase the temperature of the shaft (2) in the area where you will install the slider bushing (3) with the Heat gun (ZZ-00-00). Do not increase the temperature more than 100 °C.

Note

When you do step 6 thru step 9 that follow, refer also to Figure 2.

- Install the components of the Rem/inst tool, slider bushing installation (GJ-62-02) (part of the Rem/inst tool, slider bushing (GJ-62-00)) into the slider bushing (3).
- 7 Assemble the guide of the removal tool in the slider bushing (3) with the parts that follow:
 - The pusher
 - The two half holders
 - The two guides
 - The locking bushing.
- Apply the corrosion preventive compound on the surface of the shaft (2) that touches the slider bushing (3).

CAUTION

Do not use tools (hammers or other shock tools) to install the slider bushing (3). Static load or shock loads applied on the shaft (2) by tools cause damage to the duplex bearing in the inner side of the tail gearbox. Make sure that you use only your hands to apply force on the pusher.

- Push the slider bushing (3) fully against its seat in the shaft (2). Make sure that the slots of the slider bushing (3) are aligned with the related slots on its seat of the shaft (2).
- Install the locking flange (4, Figure 1) in its correct position on the slider bushing (3) and the lock nut (1) as given in the applicable steps of data modules 39-A-64-21-03-00A-720A-A or 39-B-64-21-03-00A-720A-A.

Requirements After Job Completion

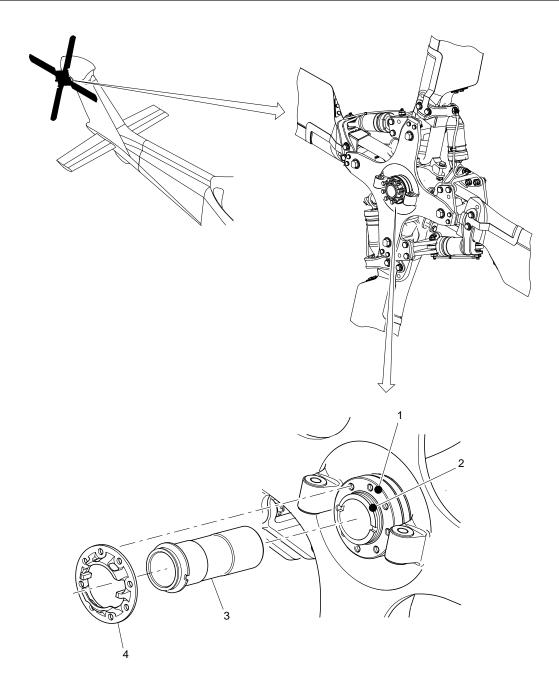
1 Remove all the tools and the other items from the work area. Make sure that the work area is clean.

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- 2 Remove the platform from the right side of the tail rotor.
- 3 Install the tail rotor servoactuator. Refer to 39-A-67-32-01-00A-720A-A
- 4 Install the boot. Refer to 39-A-64-31-07-00A-720A-A
- 5 Install the spider and slider assembly. Refer to 39-A-64-31-04-00A-720A-A

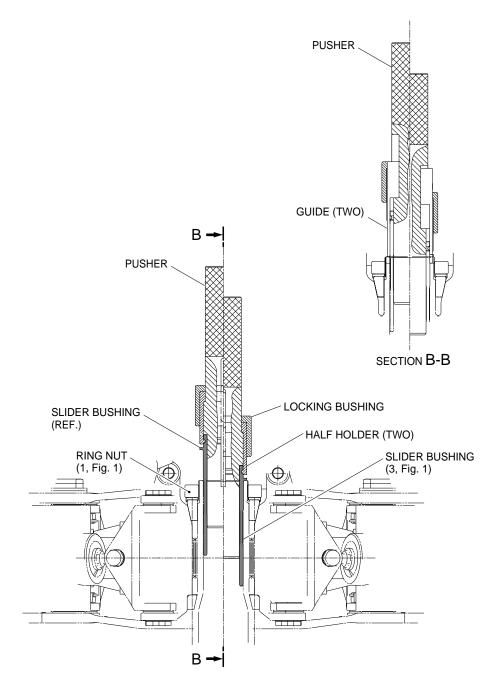




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Figure 1 Slider bushing - Install procedure





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Figure 2 Use of slider bushing installation tool



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