

Temporary Maintenance Instruction TMI 139-565

Navigation - Direction finder (DF) system - Undressing -Dressing

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: March 13th 2024.

2023-03-13

Introduction

This TMI provides the instructions and requirements to perform the Navigation - Direction finder (DF) system - Undressing –Dressing.

Following procedure contained in this TMI is not included in any existing Data Module inside IETP:

ANNEX	DATA MODULE CODE	DATA MODULE TITLE
Annex 1	39-A-16-10-34-01A-521A-A	Navigation - Direction finder (DF) system - Return to basic configuration (Undressing)
Annex 2	39-A-16-10-34-01A-721A-A	Navigation - Direction finder (DF) system - Build up to usable configuration (Dressing)

The content of this TMI will be endorsed within the applicable Maintenance Manual at the earliest opportunity.

ANNEX 1

Navigation - Direction finder (DF) system - Return to basic configuration (Undressing)

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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-16-10-00-01A-028A-A	Role change procedures - General guidelines for removal and installation of components - General
39-A-20-00-00-00A-711A-A	Threaded fasteners - Tighten procedure
39-A-20-10-23-00A-010A-A	Connectors sealing - General data
39-A-34-55-01-00A-520A-K	DF controller - Remove procedure
39-A-34-55-02-00A-520A-K	DF antenna - Remove procedure
39-B-34-55-01-00A-520A-K	DF controller - Remove procedure

Table 1 References

Data Module	Title
39-B-34-55-02-00A-520A-K	DF antenna/receiver - Remove procedure
39-B-34-55-03-00A-520A-K	DF antenna/receiver - Remove procedure
39-C-34-55-01-00A-520A-K	DF controller - Remove procedure
39-C-34-55-02-00A-520A-K	DF Antenna - Remove procedure
39-D-34-55-01-00A-520A-K	DF controller - Remove procedure
39-D-34-55-02-00A-520A-K	DF announcer panel - Remove procedure
39-D-34-55-03-00A-520A-K	DF Antenna - Remove 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
No Support Equipment

Supplies

Table 6 Supplies

Nomenclature
No Supplies

Spares

Table 7 Spares

Nomenclature	Identification No.	Qty	Effectivity
DF closure panel	34-55-00-01 -017	AR	K0110
DF closure panel	34-55-00-02 -022	AR	K0433
DF closure panel	34-55-00-03 -013	AR	K0427
DF closure panel	34-55-00-04 -016	AR	K0437
Blank plate	999-0500-85-219	AR	
Protective cap	NAS813	AR	
Sleeve, nomex textile	A582A12	AR	
Sleeve, nomex textile	A582A32	AR	
Strap	91-01-03-03 -001	AR	

Safety Conditions

No Safety Condition

Procedure

Note

During this procedure, obey the general guidelines applicable to the removal and installation of components. Refer to [39-A-16-10-00-01A-028A-A](#).

- 1 Seal the electrical connectors and stow the related harness immediately after you disconnect each electrical connector. Refer to [39-A-20-10-23-00A-010A-A](#).
- 2 Open these circuit breakers on the auxiliary circuit breaker panel:
 - [K0110], [K0427], [K0437] the DF circuit breaker (CB177)
 - [K0433] the DF circuit breakers (CB233) and (CB234).

Safety the circuit breakers in the “open” position with an applicable lock clip.
- 3 [K0110] Undressing of the DF system.

Note

Do not discard the attaching parts. You must use these parts to install them correctly during the installation procedure.

- 3.1 Remove the DF controller (10, [Figure 1](#)). Refer to [39-A-34-55-01-00A-520A-K](#).
- 3.2 Put the [Protective cap \(NAS813\)](#) on the disconnected electrical connector (11).
- 3.3 Put the [Sleeve, nomex textile \(A582A12\)](#) on the electrical connector (11). Safety the sleeve with a [Strap \(91-01-03-03 -001\)](#) .
- 3.4 Install the [Blank plate \(999-0500-85-219\)](#) (9) on the interseat console instead of the DF controller (10). Tighten the four quick-release fasteners of the blank plate (9).
- 3.5 Remove the DF antenna (7). Refer to [39-A-34-55-02-00A-520A-K](#).
- 3.6 Put the [Protective cap \(NAS813\)](#) on the disconnected electrical connector (6).
- 3.7 Put the [Sleeve, nomex textile \(A582A12\)](#) on the the electrical connector (6). Safety the sleeve with a [Strap \(91-01-03-03 -001\)](#) .
- 3.8 Install the [DF closure panel \(34-55-00-01 -017 \) \(34-55-00-02 -022 \) \(34-55-00-03 -013 \) \(34-55-00-04 -016 \)](#) (8) on the antenna fairing (5) instead of the DF antenna (7).
- 3.9 Attach the closure panel (8) on the antenna fairing (5) with eight washers and eight screws.
- 3.10 Tighten the eight screws to the standard torque value. Refer to [39-A-20-00-00-00A-711A-A](#).
- 4 [K0427] Undressing of the DF system.

Note

Do not discard the attaching parts. You must use these parts to install them correctly during the installation procedure.

- 4.1 Remove the DF controller (10, [Figure 1](#)). Refer to [39-C-34-55-01-00A-520A-K](#).
- 4.2 Do the [step 3.2](#) thru [step 3.4](#) for the DF controller (10).
- 4.3 Remove the DF antenna (7). Refer to [39-C-34-55-02-00A-520A-K](#).
- 4.4 Do the [step 3.6](#) thru [step 3.10](#) for the DF antenna (7).
- 5 [K0433] Undressing of the twin DF system.

Note

Do not discard the attaching parts. You must use these parts to install them correctly during the installation procedure.

- 5.1 Remove the DF controller (10, [Figure 1](#)). Refer to [39-B-34-55-01-00A-520A-K](#).
- 5.2 Do the [step 3.2](#) thru [step 3.4](#) for the DF controller (10).
- 5.3 Remove the DF antenna/receiver (7). Refer to [39-B-34-55-02-00A-520A-K](#).
- 5.4 Do the [step 3.6](#) thru [step 3.10](#) for the DF antenna/receiver (7).
- 5.5 Remove the DF antenna/receiver (3). Refer to [39-B-34-55-03-00A-520A-K](#).
- 5.6 Put the [Protective cap \(NAS813\)](#) on the disconnected electrical connector (2).
- 5.7 Put the [Sleeve, nomex textile \(A582A12\)](#) on the the electrical connector (2). Safety the sleeve with a [Strap \(91-01-03-03 -001\)](#) .
- 5.8 Install the [DF closure panel \(34-55-00-01 -017 \) \(34-55-00-02 -022 \) \(34-55-00-03 -013 \) \(34-55-00-04 -016 \)](#) (4) on the antenna fairing (1) instead of the DF antenna/receiver (3).
- 5.9 Attach the closure panel (4) on the antenna fairing (1) with eight washers and eight screws.
- 5.10 Tighten the eight screws to the standard torque value. Refer to [39-A-20-00-00-00A-711A-A](#).
- 6 [K0437] Undressing of the DF system.

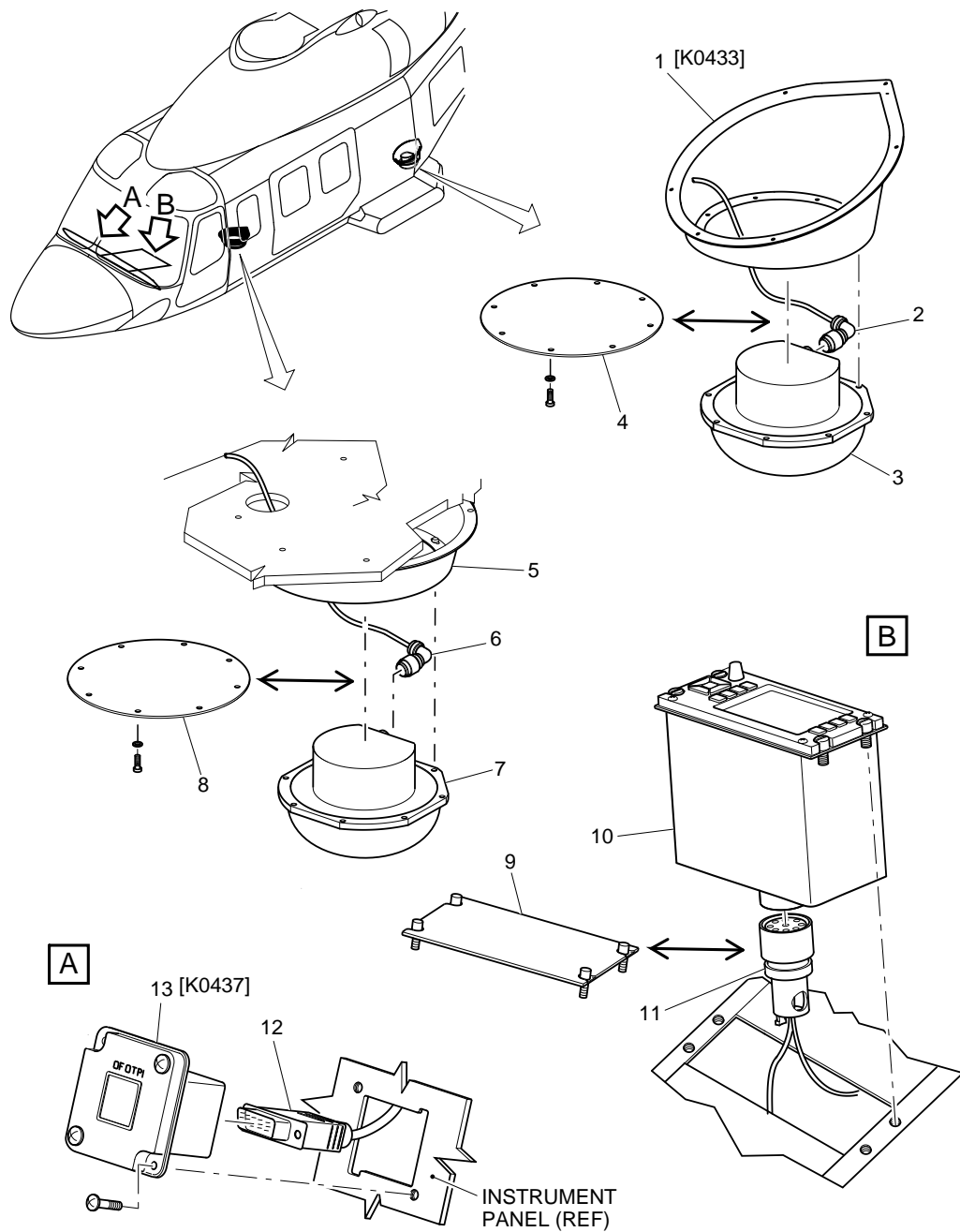
Note

Do not discard the attaching parts. You must use these parts to install them correctly during the installation procedure.

- 6.1 Remove the DF controller (10, [Figure 1](#)). Refer to [39-D-34-55-01-00A-520A-K](#).
- 6.2 Do the [step 3.2](#) thru [step 3.4](#) for the DF controller (10).
- 6.3 Remove the DF announcer panel (13). Refer to [39-D-34-55-02-00A-520A-K](#).
- 6.4 Put the applicable protective cap on the disconnected electrical connector (12).
- 6.5 Put the [Sleeve, nomex textile \(A582A32\)](#) on the electrical connector (12). Safety the sleeve with a [Strap \(91-01-03-03 -001\)](#) .
- 6.6 Remove the DF antenna (7). Refer to [39-D-34-55-03-00A-520A-K](#).
- 6.7 Do the [step 3.6](#) thru [step 3.10](#) for the DF antenna (7).

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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Figure 1 Navigation - Direction finder (DF) system - Return to basic configuration (Undressing)

End of Data Module

ANNEX 2

Navigation - Direction finder (DF) system - Build up to usable configuration (Dressing)

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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-16-10-00-01A-028A-A	Role change procedures - General guidelines for removal and installation of components - General
39-A-34-55-00-00A-340A-K	DF system - Function test
39-A-34-55-01-00A-720A-K	DF controller - Install procedure
39-A-34-55-02-00A-720A-K	DF antenna - Install procedure
39-B-34-55-00-00A-340A-K	Twin DF system - Function test
39-B-34-55-01-00A-720A-K	DF controller - Install procedure

Table 1 References

Data Module	Title
39-B-34-55-02-00A-720A-K	DF antenna/receiver - Install procedure
39-B-34-55-03-00A-720A-K	DF antenna/receiver - Install procedure
39-C-34-55-00-00A-340A-K	DF system - Function test
39-C-34-55-01-00A-720A-K	DF controller - Install procedure
39-C-34-55-02-00A-720A-K	DF Antenna - Install procedure
39-D-34-55-00-00A-340A-K	DF system - Function test
39-D-34-55-01-00A-720A-K	DF controller - Install procedure
39-D-34-55-02-00A-720A-K	DF announcer panel - Install procedure
39-D-34-55-03-00A-720A-K	DF Antenna - 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
No Support Equipment

Supplies

Table 6 Supplies

Nomenclature
No Supplies

Spares

Table 7 Spares

Nomenclature
No Spares

Safety Conditions

Note

1. Do not discard the protective caps. You must use these parts during the “undressing procedure”.
2. Do not discard the attaching parts of the dummy items. You must use these parts to install them during the “undressing procedure”.

Procedure

Note

During this procedure, obey the general guidelines applicable to the removal and installation of components. Refer to [39-A-16-10-00-01A-028A-A](#).

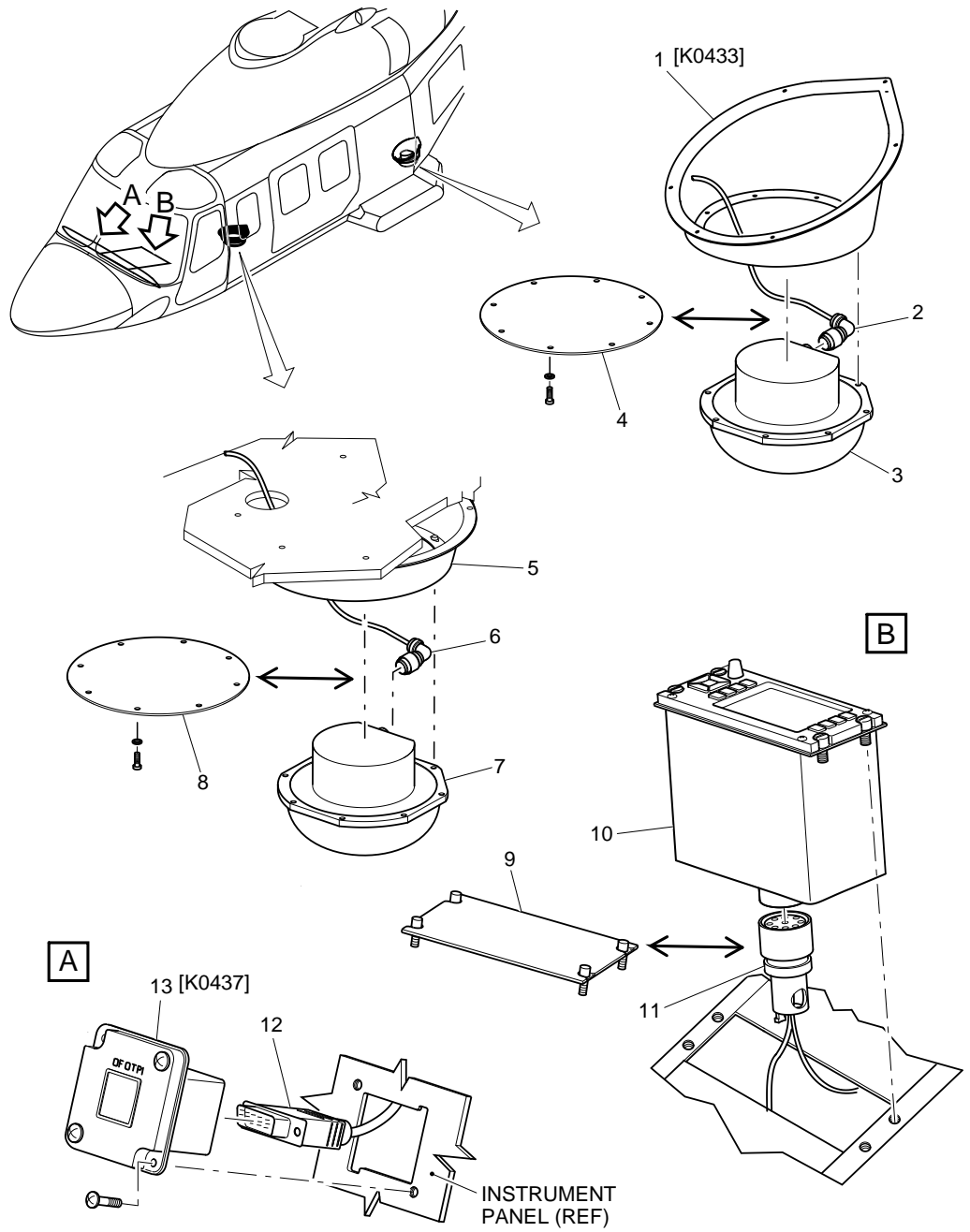
- 1 During this procedure, you must remove the caps from the electrical connectors. Do this immediately before you connect the electrical connectors.
- 2 Make sure that the circuit breakers that follow, on the auxiliary circuit breaker panel, are open:
 - [K0110], [K0427], [K0437] the DF circuit breaker (CB177)
 - [K0433] the DF circuit breakers (CB233) and (CB234).
- 3 [K0110] Dressing of the DF system.

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- 3.1 Release the four quick-release fasteners of the blank plate (9, [Figure 1](#)).
 - 3.2 Remove the blank plate (9) from the interseat console.
 - 3.3 Put the blank plate (9) in the storage condition to use it again.
 - 3.4 Cut and remove the strap from the sleeve of the stowed electrical connector (11). Remove the sleeve from the electrical connector (11).
 - 3.5 Remove the protective cap from the electrical connector (11).
 - 3.6 Install the DF controller (10). Refer to [39-A-34-55-01-00A-720A-K](#).
 - 3.7 Remove the eight screws and the eight washers that attach the closure panel (8) to the antenna fairing (5).
 - 3.8 Remove the closure panel (8) from the antenna fairing (5).
 - 3.9 Put the closure panel (8) complete with its attach parts in the storage condition to use them again.
 - 3.10 Cut and remove the strap from the sleeve of the stowed electrical connector (6). Remove the sleeve from the electrical connector (6).
 - 3.11 Remove the protective cap from the electrical connector (6).
 - 3.12 Install the DF antenna (7). Refer to [39-A-34-55-02-00A-720A-K](#).
 - 3.13 Close the DF circuit breaker (CB177) on the auxiliary circuit breaker panel.
 - 3.14 Do the function test of the DF system. Refer to [39-A-34-55-00-00A-340A-K](#).
 - 4 [K0427] Dressing of the DF system.
 - 4.1 Do the [step 3.1](#) thru [step 3.5](#) for the DF controller (10, [Figure 1](#)).
 - 4.2 Install the DF controller (10). Refer to [39-C-34-55-01-00A-720A-K](#).
 - 4.3 Do the [step 3.7](#) thru [step 3.11](#) for the DF antenna (7).
 - 4.4 Install the DF antenna (7). Refer to [39-C-34-55-02-00A-720A-K](#).
 - 4.5 Close the DF circuit breaker (CB177) on the auxiliary circuit breaker panel.
 - 4.6 Do the function test of the DF system. Refer to [39-C-34-55-00-00A-340A-K](#).
 - 5 [K0433] Dressing of the twin DF system.
 - 5.1 Do the [step 3.1](#) thru [step 3.5](#) for the DF controller (10, [Figure 1](#)).
-

- 5.2 Install the DF controller (10). Refer to [39-B-34-55-01-00A-720A-K](#).
- 5.3 Do the [step 3.7](#) thru [step 3.11](#) for the DF antenna (7).
- 5.4 Install the DF antenna/receiver (7). Refer to [39-B-34-55-02-00A-720A-K](#).
- 5.5 Remove the eight screws and the eight washers that attach the closure panel (4) to the antenna fairing (1).
- 5.6 Remove the closure panel (4) from the antenna fairing (1).
- 5.7 Put the closure panel (4) complete with its attach parts in the storage condition to use them again.
- 5.8 Cut and remove the strap from the sleeve of the stowed electrical connector (2). Remove the sleeve from the electrical connector (2).
- 5.9 Remove the protective cap from the electrical connector (2).
- 5.10 Install the DF antenna/receiver (3). Refer to [39-B-34-55-03-00A-720A-K](#).
- 5.11 Close the DF circuit breakers (CB233) and (CB234) on the auxiliary circuit breaker panel.
- 5.12 Do the function test of the twin DF system. Refer to [39-B-34-55-00-00A-340A-K](#).
- 6 [K0437] Dressing of the DF system.
 - 6.1 Do the [step 3.1](#) thru [step 3.5](#) for the DF controller (10, [Figure 1](#)).
 - 6.2 Install the DF controller (10). Refer to [39-D-34-55-01-00A-720A-K](#).
 - 6.3 Cut and remove the strap from the sleeve of the stowed electrical connector (12). Remove the sleeve from the electrical connector (12).
 - 6.4 Remove the protective cap from the electrical connector (12).
 - 6.5 Install the DF announcer panel (13). Refer to [39-D-34-55-02-00A-720A-K](#).
 - 6.6 Do the [step 3.7](#) thru [step 3.11](#) for the DF antenna (7).
 - 6.7 Install the DF antenna (7). Refer to [39-D-34-55-03-00A-720A-K](#).
 - 6.8 Close the DF circuit breaker (CB177) on the auxiliary circuit breaker panel.
 - 6.9 Do the function test of the DF system. Refer to [39-D-34-55-00-00A-340A-K](#).

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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Figure 1 Navigation - Direction finder (DF) system - Build up to usable configuration (Dressing)

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