

Temporary Maintenance Instruction TMI 139-546

Rescue hoist system Installation and Rated load operation test

**All AW139 Helicopters with Rescue
hoist (Breeze) system kit P/N
3G2591F00111, 3G2591F00112,
3G2591F00113**

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: August 2nd 2022.

2021-08-02

Introduction

This TMI provides the instructions and requirements to perform the Install and Rated Load Test of Rescue Hoist (Breeze) kits.

All the information reported in the subsequent pages update and supersede the contents of the following Data Modules:

ANNEX	DATA MODULE CODE	DATA MODULE TITLE
Annex 1	39-A-25-91-00-01A-320A-K	Rescue hoist system - Rated load - Operation test
Annex 2	39-A-25-91-01-00A-720A-K	Rescue hoist - Install procedure

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

Annex 1

Rescue hoist system - Rated load - Operation test

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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-25-91-00-00A-320A-K	Rescue hoist system - Limit switches and cable foul assembly - Operation test

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
The limit switches must be tested.	39-A-25-91-00-00A-320A-K

Support Equipment

Table 5 Support Equipment

Nomenclature	Identification No.	Qty
Dummy load (136 kg (300 lb))	ZZ-00-00	1
Dummy load (272 kg (600 lb))	ZZ-00-00	1
Belt	ZZ-00-00	1

Supplies

Table 6 Supplies

Nomenclature
No Supplies

Spares

Table 7 Spares

Nomenclature
No Spares

Safety Conditions

WARNING

Be careful when you do the operational check procedure of the rescue hoist system. Injury to the persons can occur if you do not obey the safety precautions that follow:

- Keep your hands, cloths and body away from the components that are in movement.
- Always wear protective goggles and gloves when you work on the hoist.
- Only approved persons can stay near the helicopter during the operations on the rescue hoist.

Do not touch the electric motor during the operation. This can cause injuries to persons.

CAUTION

The cable contamination by dirt or sand will cause damage or incorrect operation of the rescue hoist.

Procedure

Note

1. The rated load test of the rescue hoist must be done with the rescue hoist gearbox at ambient temperature.
2. One pilot is necessary to do the rated load test in flight and one approved person is necessary as responsible of the operation of the rescue hoist. One other person is necessary to do the ground operations.
3. You must lift the dummy load with the rescue hoist during hover flight.

1 To do the rated load test, go to:

- [K0067] and [K0068] [step 2](#)
- [K0069] [step 3](#).

2 **[K0067] and [K0068] Rated load test (in-flight)**

2.1 Put the [Dummy load \(136 kg \(300 lb\)\) \(ZZ-00-00\)](#) in a free, open and safe area.

2.2 Tell the pilot to flight and hover the helicopter at approximately 15.24 m (50 ft) above the dummy load. Refer to the Rotorcraft Flight Manual.

- 2.3 Tell the pilot to close the following circuit breaker on the circuit breaker panel (6, [Figure 1](#)):
- HOIST CONTR
 - HOIST PWR.
- 2.4 Tell the pilot to set the PWR switch (10) on the hoist control panel (9) to ON.
- 2.5 Unwind the hoist cable (3) of the hoist (1).
- 2.6 Connect the hook (2) of the hoist (1) to the dummy load with a [Belt \(ZZ-00-00\)](#) of the appropriate load rating.
- 2.7 Tell the pilot to increase hover altitude to approximately 77.72 m (255 ft) above ground level. Refer to the Rotorcraft Flight Manual.
- 2.8 Tell the pilot or the hoist operator to unwind the hoist cable (3) of the hoist (1), with the dummy load connected, setting the direction/speed control thumb-wheel (5) to DOWN position on the control pendant (4).
- 2.9 Make the hoist cool down for 30 seconds.

Note

Make sure that the minimum speed of the cable is 1.07 m/s (210 fpm) when using the hoist operator pendant at full deflection and the cable is on the top layer.

- 2.10 Tell the pilot or the hoist operator to wind up the hoist cable (3) of the hoist (1) until 3.048 m (10 ft) of cable is left out, the dummy load connected by setting the direction/speed control thumb-wheel (5) to UP position on the control pendant (4).

- 2.11 Tell the pilot or the hoist operator to set the direction/speed control thumb-wheel (5) to OFF position on the control pendant (4).

- 2.12 Make the hoist cool down for 30 seconds.

Note

Make sure that the maximum speed of the cable is 1.52 m/s (300 fpm) when using the hoist operator pendant at full deflection and the cable is on the top layer.

- 2.13 Tell the pilot or the hoist operator to unwind the hoist cable (3) of the hoist (1), with the dummy load connected, setting the direction/speed control thumb-wheel (5) to DOWN position on the control pendant (4) until the cable stops.

- 2.14 Tell the pilot or the hoist operator to set the direction/speed control thumb-wheel (5) to OFF position on the control pendant (4).

- 2.15 Make the hoist cool down for 30 seconds.

- 2.16 Do again the [step 2.10](#) thru [step 2.15](#).

Note

Make sure that the minimum speed of the cable is 1.07 m/s (210 fpm).

- 2.17 Tell the pilot or the hoist operator to wind up the hoist cable (3) of the hoist (1) until 3.048 m (10 ft) of cable is left out, with the dummy load connected by setting the direction/speed control thumb-wheel (5) to UP position on the control pendant (4).
- 2.18 Tell the pilot or the hoist operator to set the direction/speed control thumb-wheel (5) to OFF position on the control pendant (4).
- 2.19 Make the hoist cool down for 30 seconds.

Note

Current values must not exceed 155 amps for the motor and 5 amps for the control circuit at 25 VDC minimum.

- 2.20 If the speed requirements of the hoist cable (3) are not in the limits, repeat [step 2.8](#) thru [step 2.19](#) checking that current and voltage values.
- 2.21 Tell the pilot or the hoist operator to unwind the hoist cable (3) of the hoist (1), with the dummy load connected, for approximately 15.24 m (50 ft).
- 2.22 Tell the pilot to decrease hover altitude until the dummy load touches the ground.
- 2.23 Disconnect the hook (2) of the hoist (1) from the dummy load.
- 2.24 Put the [Dummy load \(272 kg \(600 lb\)\) \(ZZ-00-00\)](#) in a free, open and safe area.
- 2.25 Tell the pilot to flight and hover the helicopter above the dummy load. Refer to the Rotorcraft Flight Manual.
- 2.26 Connect the hook (2) of the hoist (1) to the dummy load with a [Belt \(ZZ-00-00\)](#) of the appropriate load rating.
- 2.27 Tell the pilot to increase hover altitude to approximately 77.72 m (255 ft) above ground level. Refer to the Rotorcraft Flight Manual.
- 2.28 Tell the pilot or the hoist operator to unwind the hoist cable (3) of the hoist (1), with the dummy load connected by setting the direction/speed control thumb-wheel (5) to DOWN position on the control pendant (4).
- 2.29 Make the hoist cool down for 30 seconds.

Note

Make sure that the minimum speed of the cable is 0.66 m/s (130 fpm) when using the hoist operator pendant at full deflection and the cable is on the top layer.

- 2.30 Tell the pilot or the hoist operator to wind up the hoist cable (3) of the hoist (1) until 3.048 m (10 ft) of cable is left out, with the dummy load connected, setting the direction/speed control thumb-wheel (5) to UP position on the control pendant (4).
- 2.31 Tell the pilot or the hoist operator to set the direction/speed control thumb-wheel (5) to OFF position on the control pendant (4).

2.32 Make the hoist cool down for 30 seconds.

Note

Make sure that the maximum speed of the cable is 1.52 m/s (300 fpm).

2.33 Tell the pilot or the hoist operator to unwind the hoist cable (3) of the hoist (1), with the dummy load connected, setting the direction/speed control thumb-wheel (5) to DOWN position on the control pendant (4) until the cable stops.

2.34 Tell the pilot or the hoist operator to set the direction/speed control thumb-wheel (5) to OFF position on the control pendant (4).

2.35 Make the hoist cool down for 30 seconds.

2.36 Do again the [step 2.30](#) thru [step 2.35](#).

Note

Make sure that the minimum speed of the cable is 0.66 m/s (130 fpm) when using the hoist operator pendant at full deflection and the cable is on the top layer.

2.37 Tell the pilot or the hoist operator to wind up the hoist cable (3) of the hoist (1) until 3.048 m (10 ft) of cable is left out, with the dummy load connected by setting the direction/speed control thumb-wheel (5) to UP position on the control pendant (4).

2.38 Tell the pilot or the hoist operator to set the direction/speed control thumb-wheel (5) to OFF position on the control pendant (4).

2.39 Make the hoist cool down for 30 seconds.

Note

Current values must not exceed 155 amps for the motor and 5 amps for the control circuit at 25 VDC minimum.

2.40 If the speed requirements of the hoist cable (3) are not in the limits, repeat [step 2.28](#) thru [step 2.39](#) checking that current and voltage values.

2.41 Tell the pilot or the hoist operator to unwind the hoist cable (3) of the hoist (1), with the dummy load connected, for approximately 15.24 m (50 ft).

2.42 Tell the pilot to decrease hover altitude until the dummy load touches the ground.

2.43 Disconnect the hook (2) of the hoist (1) from the dummy load.

2.44 Fully wind up the hoist cable (3) of the hoist (1).

2.45 Tell the pilot to land and stop the engines. Refer to the Rotorcraft Flight Manual.

2.46 If the current values in [step 2.40](#) are in the correct limits, check the temperature of external surface of the large drum flange. It must not exceed 94 °C (200 °F).

2.47 Make the helicopter safe for maintenance. Refer to [39-A-00-20-00-00A-120A-A](#).

3 **[K0069] Rated load test (in-flight)**

Note

The tolerance of the dummy load is ± 27 kg (50 lbf).

3.1 Put the [Dummy load \(136 kg \(300 lb\)\) \(ZZ-00-00\)](#) in a free, open and safe area.

3.2 Tell the pilot to flight and hover the helicopter at approximately 15.24 m (50 ft) above the dummy load. Refer to the Rotorcraft Flight Manual.

3.3 Tell the pilot to close the following circuit breaker on the circuit breaker panel (6, [Figure 1](#)):

- HOIST CONTR
- HOIST PWR.

3.4 Tell the pilot to set the PWR switch (10) on the hoist control panel (9) to ON.

3.5 Unwind the hoist cable (3) of the hoist (1).

3.6 Connect the hook (2) of the hoist (1) to the dummy load with a [Belt \(ZZ-00-00\)](#) of the appropriate load rating.

3.7 Tell the pilot to increase hover altitude to approximately 92.96 m (305 ft) above ground level. Refer to the Rotorcraft Flight Manual.

3.8 Tell the pilot to unwind the hoist cable (3) of the hoist (1), with the dummy load connected, setting the hoist control switch (8) to DN position on the collective stick (7).

3.9 Make the hoist cool down for 30 seconds.

3.10 Tell the pilot to wind up the hoist cable (3) of the hoist (1) until 3.048 m (10 ft) of cable is left out, with the dummy load connected, setting the hoist control switch (8) to UP position on the collective stick (7).

3.11 Make the hoist cool down for 30 seconds.

3.12 Tell the hoist operator to unwind the hoist cable (3) of the hoist (1), with the dummy load connected, setting the direction/speed control thumb-wheel (5) to DOWN position (full speed) on the control pendant (4) until the cable stops.

3.13 Tell the hoist operator to set the direction/speed control thumb-wheel (5) to OFF position on the control pendant (4).

3.14 Make the hoist cool down for 30 seconds.

3.15 Tell the hoist operator to wind up the hoist cable (3) of the hoist (1) until 3.048 m (10 ft) of cable is left out, with the dummy load connected, setting the direction/speed control thumb-wheel (5) to UP position (full speed) on the control pendant (4).

- 3.16 Tell the hoist operator to set the direction/speed control thumb-wheel (5) to OFF position on the control pendant (4).
- 3.17 Make the hoist cool down for 30 seconds.
- 3.18 Tell the pilot or the hoist operator to unwind the hoist cable (3) of the hoist (1), with the dummy load connected, for approximately 15.24 m (50 ft).
- 3.19 Tell the pilot to decrease hover altitude until the dummy load touches the ground.
- 3.20 Disconnect the hook (2) of the hoist (1) from the dummy load.

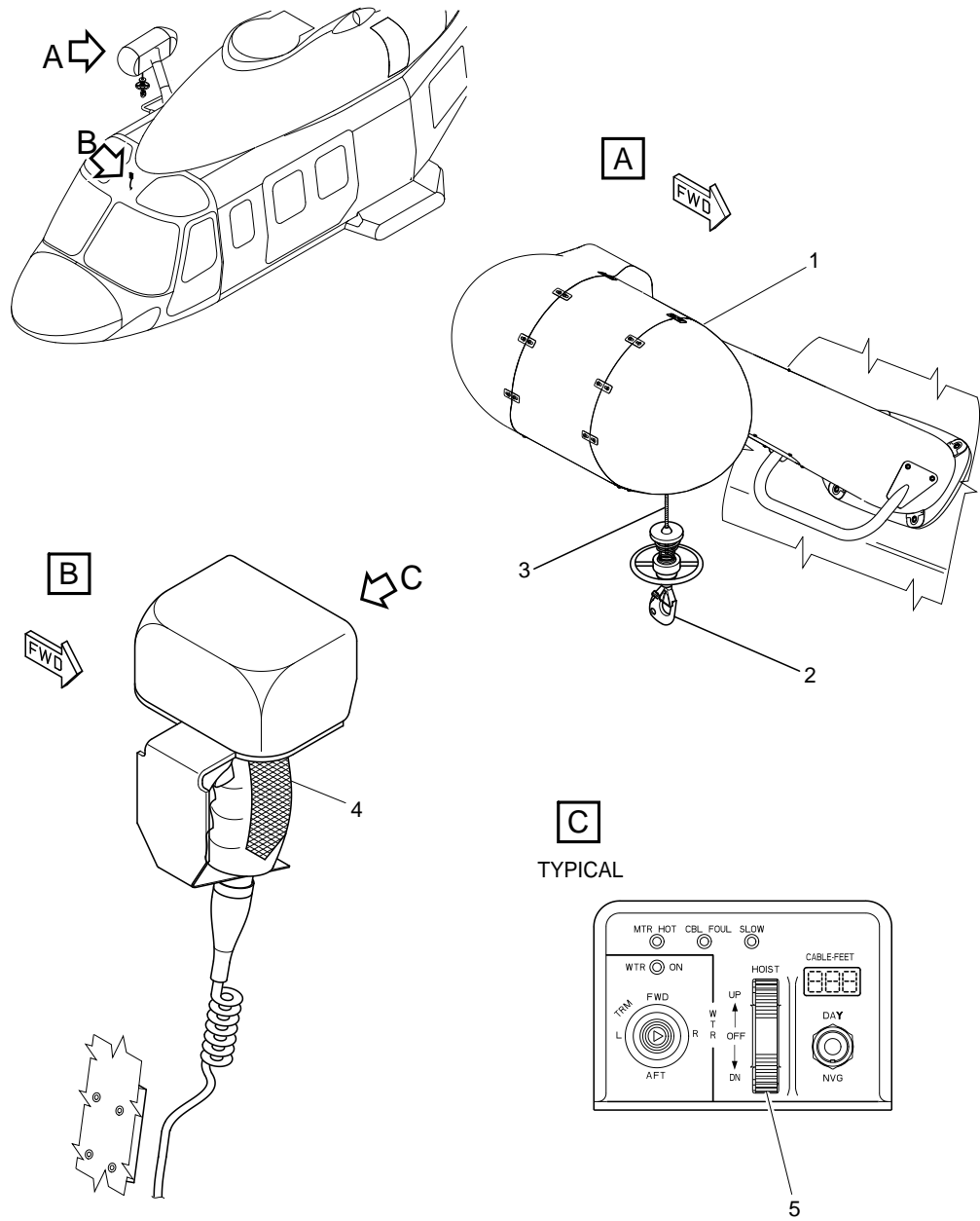
Note

The tolerance of the dummy load is ± 27 kg (50 lb).

- 3.21 Put the [Dummy load \(272 kg \(600 lb\)\) \(ZZ-00-00\)](#) in a free, open and safe area.
- 3.22 Do again [step 3.2](#) thru [step 3.7](#) and [step 3.12](#) thru [step 3.20](#).
- 3.23 Fully wind up the hoist cable (3) of the hoist (1).
- 3.24 Tell the pilot to land and stop the engines. Refer to the Rotorcraft Flight Manual.
- 3.25 Make the helicopter safe for maintenance. Refer to [39-A-00-20-00-00A-120A-A](#).

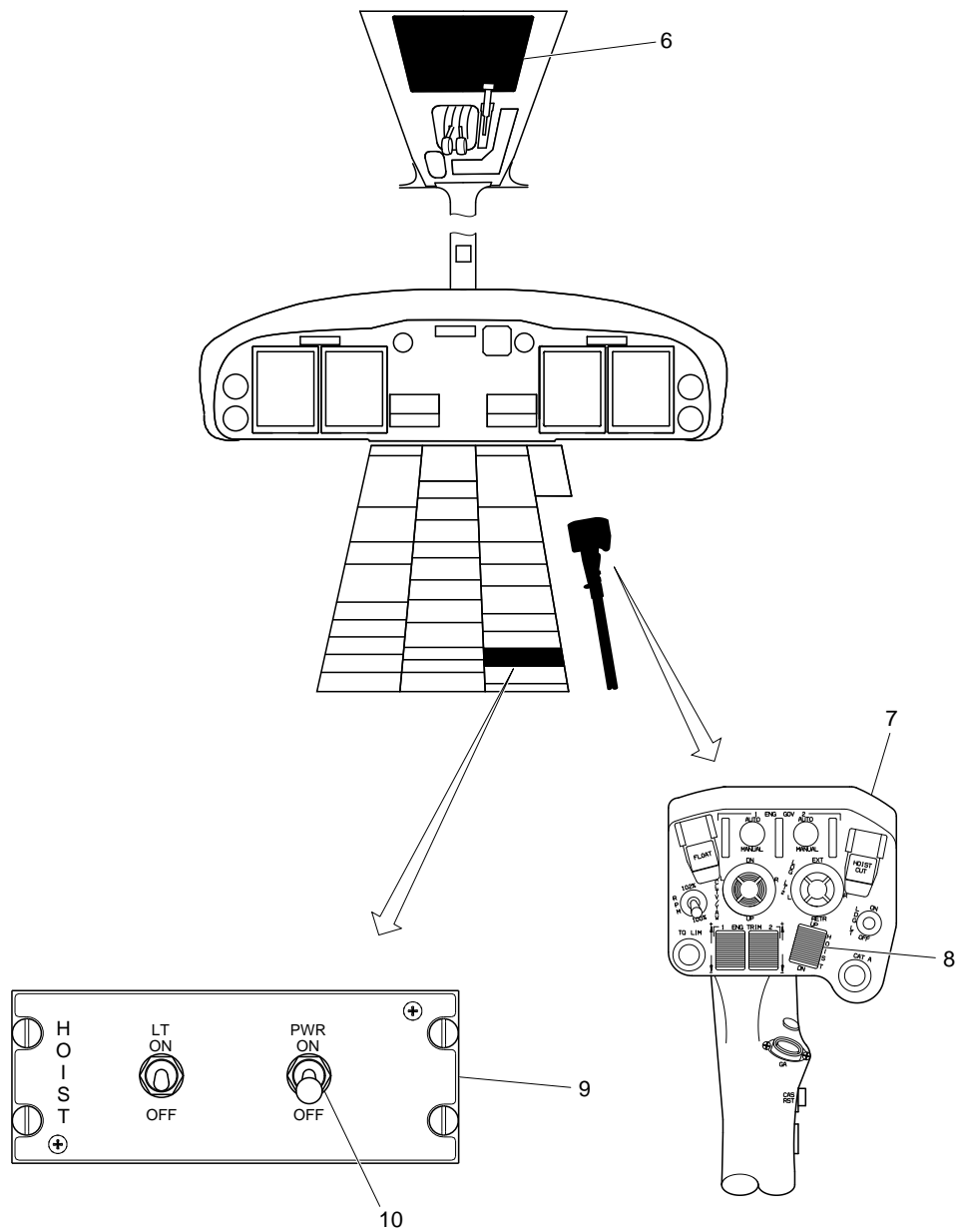
Requirements After Job Completion

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



ICN-39-A-259100-G-00001-33345-A-001-01

Figure 1 (Sheet 1 of 2) Rescue hoist system - Rated load - Operation test



ICN-39-A-259100-G-00001-33346-A-001-01

Figure 1 (Sheet 2 of 2) Rescue hoist system - Rated load - Operation test

Annex 2

Rescue hoist - 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-12-30-02-00A-212A-K	Rescue hoist - Fill with oil
39-A-25-91-00-01A-320A-K	Rescue hoist system - Rated load - Operation test

Table 1 References

Data Module	Title
39-A-25-91-01-03A-720A-K	Cable cutter cartridge (rescue hoist) - Install procedure
39-A-25-91-08-00A-720A-K	Rescue hoist forward frame - Install procedure
39-A-25-91-09-00A-720A-K	Rescue hoist aft frame - 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
Sling	ZZ-00-00	1
Lifting device	ZZ-00-00	1
Marking pen	ZZ-00-00	1
Feeler gauge	ZZ-00-00	1

Supplies

Table 6 Supplies

Nomenclature	Identification No.	Qty
Safety wire	C014	AR
Corrosion inhibitor	C002	AR
Lint-free cloth	C011	AR
Cleaning solvent	C010	AR

Spares

Table 7 Spares

Nomenclature	Identification No.	Qty
Rescue hoist	25-91-01-01 -002	AR
Cotter pin	25-91-01-01 -013	2
Cotter pin	25-91-01-01 -016	2
Shim	25-91-01-01 -017	3
Shim	25-91-01-01 -018	3
Washer	25-91-01-01 -009	AR
Washer	25-91-01-01 -010	AR

Safety Conditions

WARNINGS

- - **Make sure that the electrical power to the EIED is disconnected**
- **Safety the EIED with the shorting cap supplied with the device**
- **Do not remove the EIED from its container until it is necessary**
- **Put the EIED in the correct container immediately after you remove it**
- **Store the EIED in the correct container**
- **Do not touch the terminals or the contacts of the EIED**
- **Make sure that there are no radio or radar transmissions in the helicopter safety distance when you do work on an EIED. Refer to the local regulations for more data.**
- **The cable cut cartridge of the rescue hoist contains an Electrically-Initiated Explosive-Device (EIED). Be careful when you remove or disconnect an EIED:**

- If you do not obey these instructions, you can cause an explosion and possibly cause an injury to persons.
- 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 \(C002\)](#)
 - [Cleaning solvent \(C010\)](#) .
- In this procedure, get a second person to help you install the rescue hoist.

CAUTION

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](#).

Procedure

CAUTION

If the rescue hoist has been kept in storage for more than 10 years, the Rescue Hoist must be returned to Breeze-Eastern, or one of its certified repair facilities for overhaul.

- 1 During this procedure, you must remove the caps from the electrical connectors. Do this immediately before you connect each electrical connector.
- 2 Do a check of the oil level in the rescue hoist (2, [Figure 1](#)) before you install it on the helicopter. If necessary, fill the rescue hoist with oil. Refer to [39-A-12-30-02-00A-212A-K](#).
- 3 Clean the parts that attach the rescue hoist (2) to the mount (1) with the [Lint-free cloth \(C011\)](#) and the [Cleaning solvent \(C010\)](#) .

WARNING

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

- 4 Dry the cleaned parts with the compressed air until you remove all the solvent.
- 5 Apply the [Corrosion inhibitor \(C002\)](#) on the parts that attach the rescue hoist (2) to the mount (1).
- 6 Lift the rescue hoist (2) with the [Sling \(ZZ-00-00\)](#) and the [Lifting device \(ZZ-00-00\)](#) .
- 7 **To do the installation of the removed rescue hoist, obey the instructions that follow:**
 - 7.1 Put the rescue hoist (2) on the mount (1). Make sure that the attach holes are aligned.
 - 7.2 Move the rescue hoist (2) in the forward direction until you make sure that the inner aft surface of the fork (35M) is against the fitting (30M). Make sure also that the inner aft surface of the fork (27M) is against the fitting (23M).

- 7.3 Put the shims (5) and (6) in their correct position between the fitting (5M) and the fork (9M). Make sure that you put the shims in the positions you identified at the removal.
- 7.4 Install these parts in the fork (9M) and the fitting (5M):
- The washer (9), the countersunk washer (8) and the bolt (7)
 - The two washers (10)
 - The nut (11).
- Make sure that the countersunk side of the washer (8) is adjacent to the head of the bolt (7).
- 7.5 Do not torque the nut (11) at this time.
- 7.6 Put the shim (23H) in its position between the fitting (23S) and the fork (27M).
- 7.7 Install these parts in the fork (27M) and the fitting (23S):
- The washer (23), the countersunk washer (22) and the bolt (21)
 - The washers (27) and (26)
 - The nut (24).
- Make sure that the countersunk side of the washer (22) is adjacent to the head of the bolt (21).
- 7.8 Do not torque the nut (24) at this time.
- 7.9 Put the shims (13) and (14) in their correct position between the fitting (13M) and the fork (17M). Make sure that you put the shims in the positions you identified at the removal.
- 7.10 Install these parts in the fork (17M) and the fitting (13M):
- The washer (17), the countersunk washer (16) and the bolt (15)
 - The washers (18) and (19)
 - The nut (20).
- Make sure that the countersunk side of the washer (16) is adjacent to the head of the bolt (15).
- 7.11 Do not torque the nut (20) at this time.
- 7.12 Put the shim (30H) in its position between the fitting (30S) and the fork (35M).
- 7.13 Install these parts in the fork (35M) and the fitting (30S):
- The washer (30), the countersunk washer (29) and the bolt (28)
 - The washer (35)
 - The lightning conductor cable (31)
 - The two washers (34)
 - The nut (32).
- 7.14 Do not torque the nut (32) at this time.

- 7.15 Torque the nuts (11) and (24) to 5.0 thru 6.0 N m (44 thru 53 lbf in).
- 7.16 Safety the nuts (11) and (24) with the new [Cotter pin \(25-91-01-01 -013\)](#) (4) and (25).
- 7.17 Torque the nuts (20) and (32) to 5.0 thru 6.0 N m (44 thru 53 lbf in).
- 7.18 Safety the nuts (20) and (32) with the new [Cotter pin \(25-91-01-01 -016\)](#) (12) and (33).
- 8 To do the installation of a new rescue hoist, obey the instructions that follow:**
- 8.1 Put the new [Rescue hoist \(25-91-01-01 -002\)](#) (2) on the mount (1). Make sure that the attach holes are aligned.
- 8.2 Move the rescue hoist (2) in the forward direction until you make sure that the inner aft surface of the fork (35M) is against the fitting (30M). Make sure also that the inner aft surface of the fork (27M) is against the fitting (23M).
- 8.3 Do the [step 7.4](#) thru [step 7.8](#).
- 8.4 Do the [step 7.10](#) thru [step 7.14](#).
- 8.5 Measure the distance between these components with the [Feeler gauge \(ZZ-00-00\)](#) :
- The fitting (5M) and the fork (9M) at the mating points (36) and (39)
 - The fitting (13M) and the fork (17M) at the mating points (37) and (38)
 - The fitting (23S) and the fork (27M) at the mating points (41) and (40)
 - The fitting (30M) and the fork (35M) at the mating points (42) and (43).
- Note**
The thickness of the shims (5) and (6) must be equal to the clearance between the fitting (5M) and the fork (9M). A maximum gap of 0.7 mm (0.027 in) is permitted.
- 8.6 If necessary, adjust the thickness of the new [Shim \(25-91-01-01 -017\)](#) (5) and (6) to get the correct value.
- Note**
The thickness of the shims (13) and (14) must be equal to the clearance between the fitting (13M) and the fork (17M). A maximum gap of 0.7 mm (0.027 in) is permitted.
- 8.7 If necessary, adjust the thickness of the new [Shim \(25-91-01-01 -018\)](#) (13) and (14) to get the correct value.
- Note**
The maximum play between the shim (23H), the fork (27M) and the fitting (23S) is 0.1 thru 0.30 mm (0.004 thru 0.012 in).
- 8.8 If necessary, adjust the thickness of the new [Shim \(25-91-01-01 -017\)](#) (23H) to get the correct value.
- Note**
The maximum play between the shim (30H), the fork (35M) and the fitting (30S) is 0.1 thru 0.30 mm (0.004 thru 0.012 in).

- 8.9 If necessary, adjust the thickness of the new [Shim \(25-91-01-01 -018 \)](#) (30H) to get the correct value.
- 8.10 Remove these parts from the fork (17M) and the fitting (13M):
- The nut (20)
 - The washers (19) and (18)
 - The bolt (15)
 - The washer (17)
 - The countersunk washer (16).
- 8.11 Remove these parts from the fork (9M) and the fitting (5M):
- The nut (11)
 - The two washers (10)
 - The bolt (7)
 - The washer (9)
 - The countersunk washer (8).
- 8.12 Remove these parts from the fork (27M) and the fitting (23S):
- The nut (24)
 - The washers (26) and (27)
 - The bolt (21)
 - The washer (23)
 - The countersunk washer (22).
- 8.13 Remove these parts from the fork (35M) and the fitting (30S):
- The nut (32)
 - The two washers (34)
 - The lightning conductor cable (31)
 - The washer (35)
 - The bolt (28)
 - The washer (30)
 - The countersunk washer (29).
- 8.14 Put the adjusted shim (23H) in its correct position between the fitting (23S) and the fork (27M).
- 8.15 Install these parts in the fork (27M) and the fitting (23S):
- The washer (23), the countersunk washer (22) and the bolt (21)
 - The washers (27) and (26)
 - The nut (24).

Make sure that the countersunk side of the washer (22) is adjacent to the head of the bolt (21).

8.16 Do not torque the nut (24) at this time.

8.17 Put the adjusted shims (5) and (6) in their correct position between the fitting (5M) and the fork (9M).

8.18 Install these parts in the fork (9M) and the fitting (5M):

- The washer (9), the countersunk washer (8) and the bolt (7)
- The two washers (10)
- The nut (11).

Make sure that the countersunk side of the washer (8) is adjacent to the head of the bolt (7).

8.19 Do not torque the nut (11) at this time.

8.20 Put the adjusted shims (13) and (14) in their correct position between the fitting (13M) and the fork (17M).

8.21 Install these parts in the fork (17M) and the fitting (13M):

- The washer (17), the countersunk washer (16) and the bolt (15)
- The washers (18) and (19)
- The nut (20).

Make sure that the countersunk side of the washer (16) is adjacent to the head of the bolt (15).

8.22 Do not torque the nut (20) at this time.

8.23 Put the adjusted shim (30H) in its correct position between the fitting (30S) and the fork (35M).

8.24 Install these parts in the fork (35M) and the fitting (30S):

- The washer (30), the countersunk washer (29) and the bolt (28)
- The washer (35)
- The lightning conductor cable (31)
- The two washers (34)
- The nut (32).

Make sure that the countersunk side of the washer (29) is adjacent to the head of the bolt (28).

8.25 Do not torque the nut (32) at this time.

8.26 Torque the nuts (11) and (24) to 5.0 thru 6.0 N m (44 thru 53 lbf in).

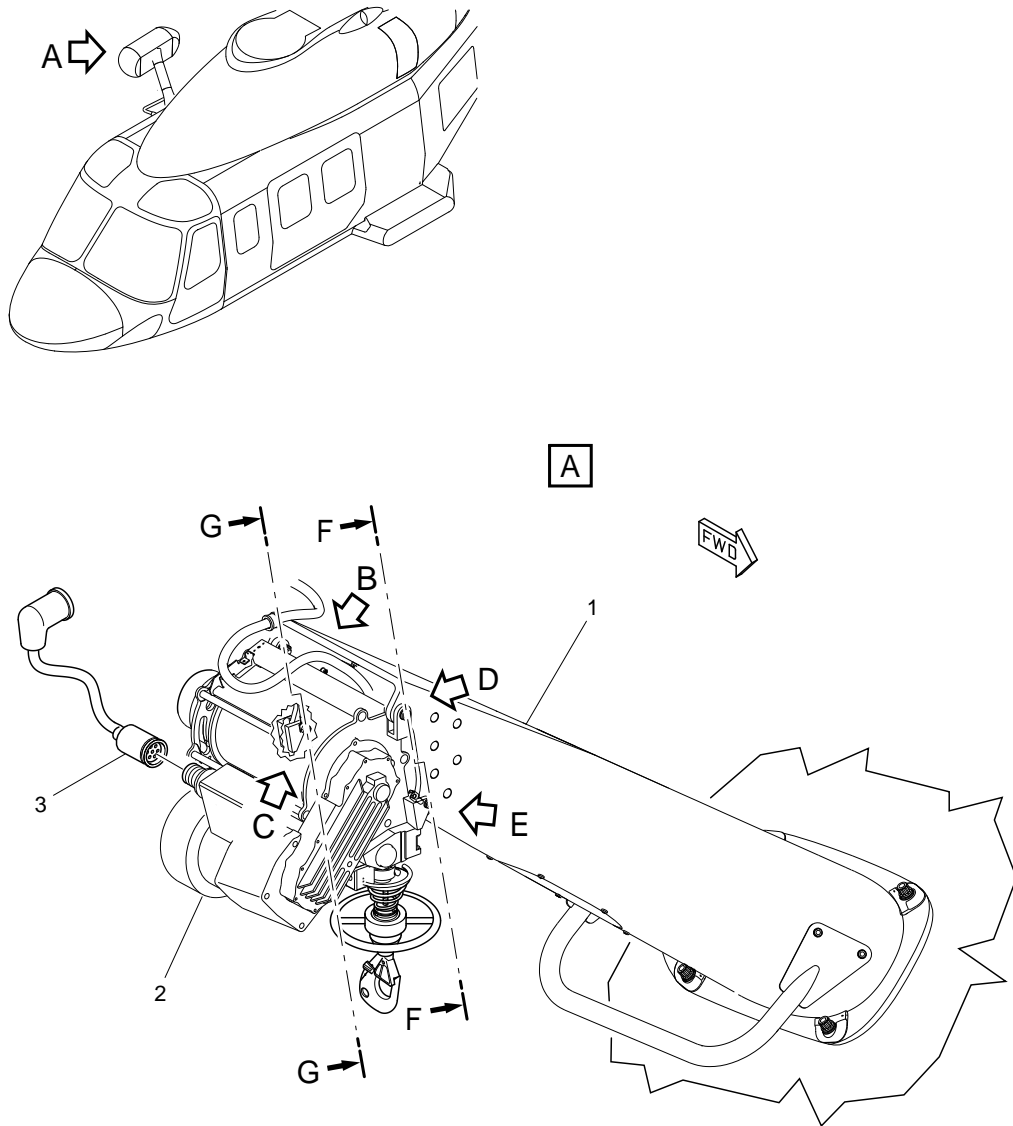
8.27 If necessary, add maximum two new [Washer \(25-91-01-01 -009 \)](#) below the nuts (11) and (24) to get the correct grip length.

8.28 Safety the nuts (11) and (24) with the new [Cotter pin \(25-91-01-01 -013 \)](#) (4) and (25).

- 8.29 Torque the nuts (20) and (32) to 5.0 thru 6.0 N m (44 thru 53 lbf in).
 - 8.30 If necessary, add maximum two new [Washer \(25-91-01-01 -010 \)](#) below the nuts (20) and (32) to get the correct grip length.
 - 8.31 Safety the nuts (20) and (32) with the new [Cotter pin \(25-91-01-01 -016 \)](#) (12) and (33).
 - 9 Disconnect the sling from the lifting device.
 - 10 Move the lifting device away from the helicopter.
 - 11 Remove the sling from the rescue hoist (2).
 - 12 Apply the [Corrosion inhibitor \(C002\)](#) on the surfaces of the parts that attach the rescue hoist (2) that are in view.
 - 13 Connect the connector B17P8 (3) to the connector of the rescue hoist B17 (2).
 - 14 Safety the electrical connector (3) to the rescue hoist (2) with the new [Safety wire \(C014\)](#) .
 - 15 Do the procedure that follows only if a new rescue hoist (2) is installed on the helicopter:
 - 15.1 Get access to the oil level sight of the rescue hoist (2).
 - 15.2 Do a check of the oil level of the rescue hoist (2) on its oil level glass.
- Note**
The sign shows the maximum oil level of the rescue hoist (2) when it is installed on the helicopter.
- 15.3 Make a related oil level mark on a side of the oil level sight. Use the [Marking pen \(ZZ-00-00\)](#) . Refer to this sign when you must fill with oil the rescue hoist (2).

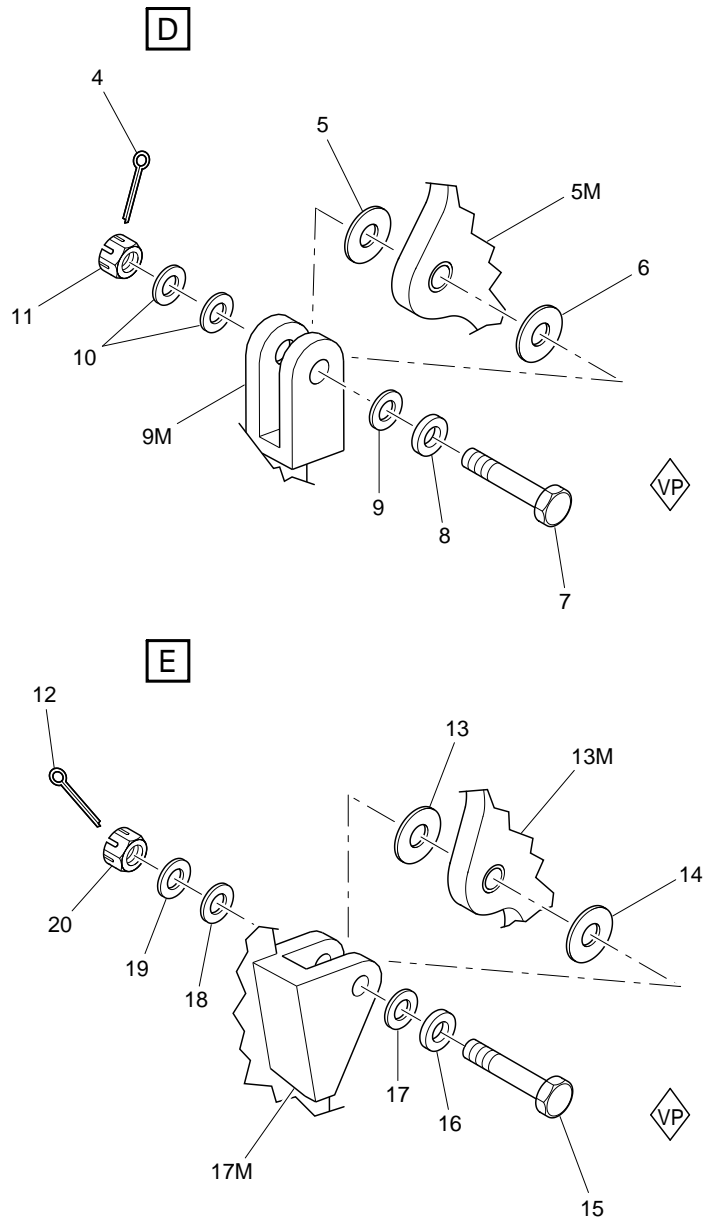
Requirements After Job Completion

- 1 Remove all the tools and the other items from the work area. Make sure that the work area is clean.
- 2 Remove the platform from the right side of the helicopter.
- 3 Install the rescue hoist aft frame. Refer to [39-A-25-91-09-00A-720A-K](#)
- 4 Install the rescue hoist forward frame. Refer to [39-A-25-91-08-00A-720A-K](#)
- 5 Install the cable cutter cartridge. Refer to [39-A-25-91-01-03A-720A-K](#)
- 6 Do the rated load test if the rescue hoist has been kept in storage for more than one year. Refer to [39-A-25-91-00-01A-320A-K](#) (See Annex 1 of this TMI)



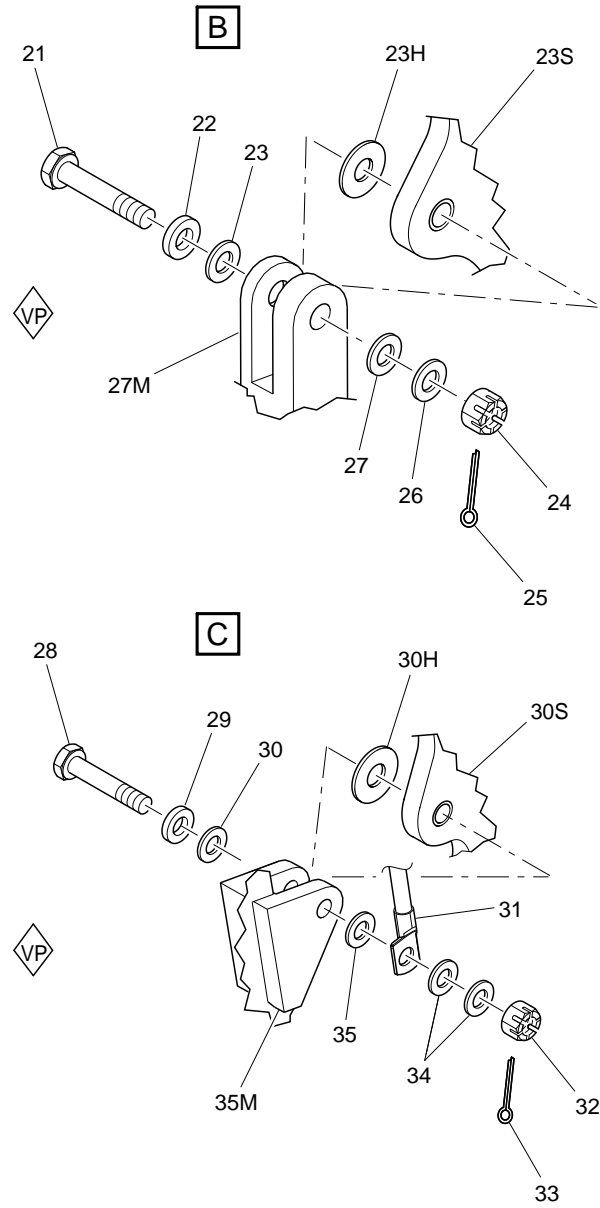
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Figure 1 (Sheet 1 of 4) Rescue hoist - Install procedures



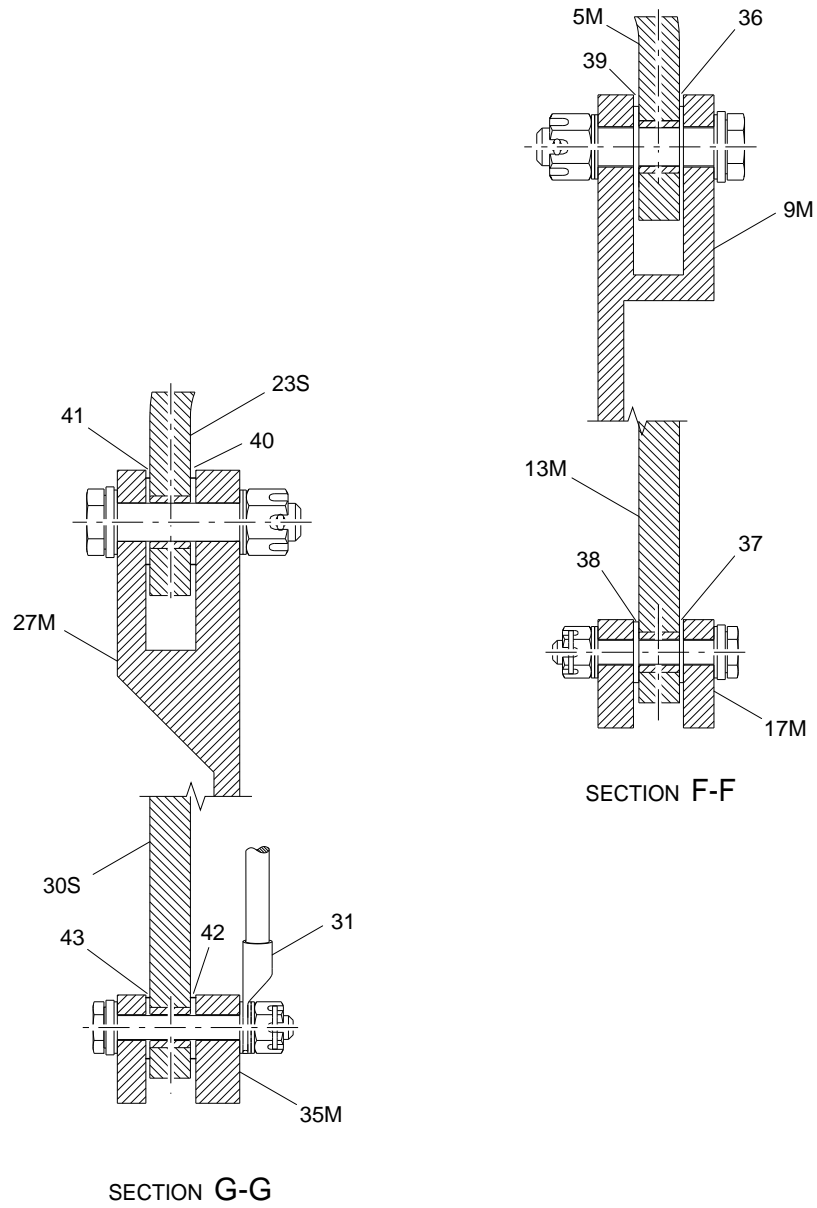
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Figure 1 (Sheet 2 of 4) Rescue hoist - Install procedures



ICN-39-A-259101-G-00001-04625-A-003-01

Figure 1 (Sheet 3 of 4) Rescue hoist - Install procedures



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Figure 1 (Sheet 4 of 4) Rescue hoist - Install procedures

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