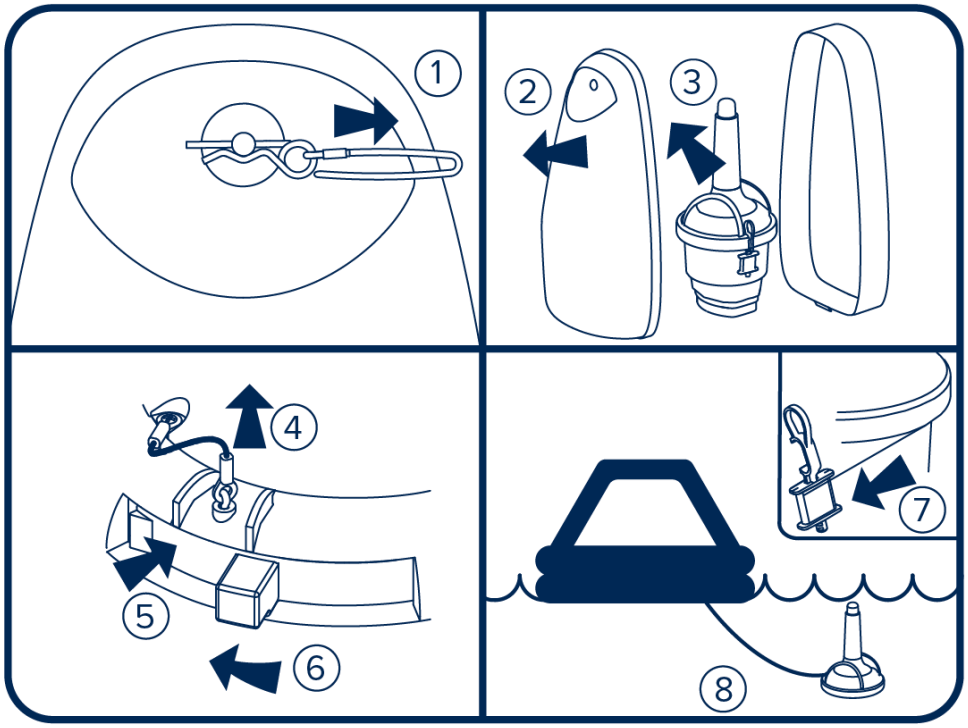
FB-42 and FBH-42 float-free brackets for Tron 40S MkII

User manual

Addition to the user manual
for Tron 40S MkII

JOTRON
Performance for Life

Manual operation and activation



It is not recommended to operate the EPIRB inside a life raft, or under a cover or canopy. Do NOT tie the lanyard to the ship in distress, as this will prevent the unit from functioning if the ship sinks.

1. Remove the locking pin from the front cover.
2. Remove the front cover.
3. Take the EPIRB out of the bracket.
4. Break the seal and pull the locking pin holding the main activator switch.
5. Push the switch to activate the EPIRB.
6. Ensure that the switch moves to ON position.
7. Unclip the lanyard coil and release the lanyard.
8. Tie the lanyard to yourself or to the survival craft.

The strobe light will start flashing indicating that the EPIRB is operating.

If possible, keep the EPIRB in an open area, away from any metal objects (ship construction etc.) that may limit the satellite coverage. Transmissions can be stopped by taking the EPIRB out of water and turning the switch to READY position.

WARNING

The EPIRB should only be used during situations of grave and imminent danger.

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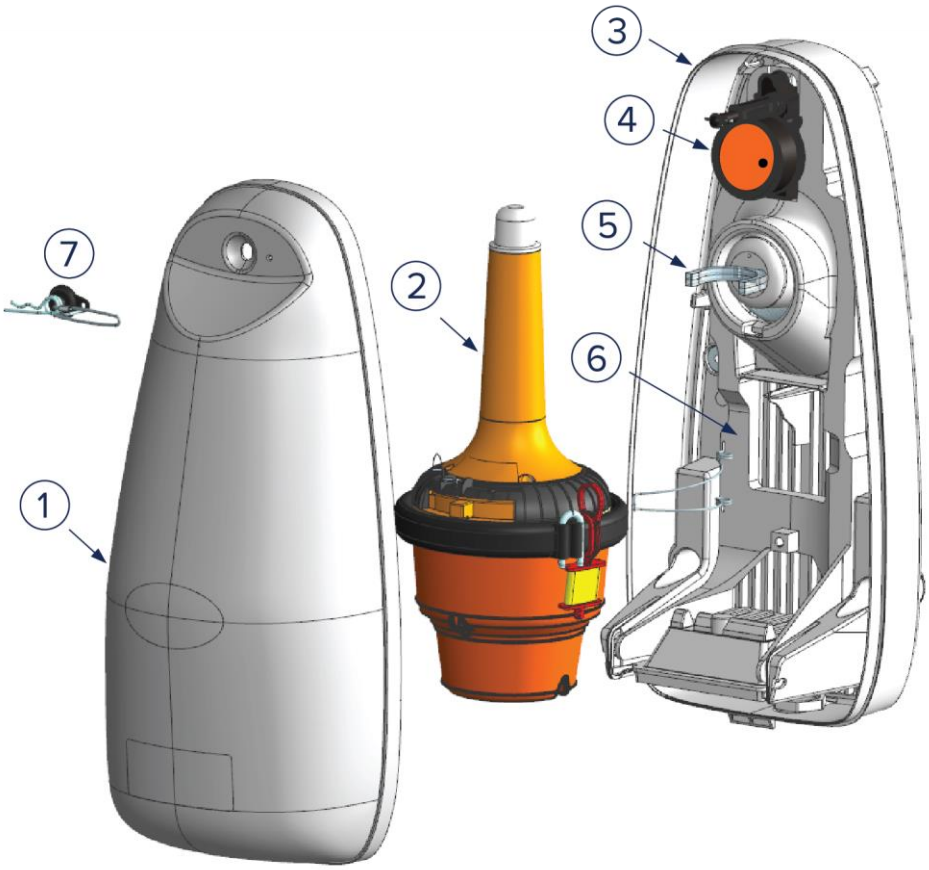
1 General description

The FB-42 and FBH-42 are float-free brackets made for the Tron 40S MkII EPIRB. Both are automatic brackets were a hydrostatic release mechanism (HRU) releases the EPIRB from the bracket when reaching 2-4 meters below sea level.

The HRU is type approved by Jotron and specially adjusted to function with the Jotron products. This module is supplied as an HRU-kit.

The Tron 40S MkII is equipped with a water sensor that will activate the EPIRB automatically when immersed into water. There is a safety switch which prevents the water sensor from activating the EPIRB while placed in the float-free bracket.

1.1 Parts in FB-42



1. Front Cover
2. Tron 40S MkII (EPIRB)
3. Bracket
4. Hydrostatic release
5. Stability clip
6. Catapult
7. Locking pin

2 Technical specifications

2.1 General specifications for FB-42 and FBH-42

Materials:	ASA / Glass reinforced ASA
Dimensions:	237 mm / 534 mm / 215 mm
Weight FB-42:	3.1 kg
Weight FBH-42:	4.0 kg
Release mechanism:	Jotron HRU kit (part. No. 86218)
Operating temperature:	-30°C to + 65°C (-22°F to 149°F)
Stowing temperature:	-30°C to + 65°C (-22°F to 149°F)

2.2 FBH-42 Heating Bracket

The FBH-42 is a variant of the standard FB-42 bracket with a build-in self-regulating heating cable. The bracket is intended for use in cold climatic environments.

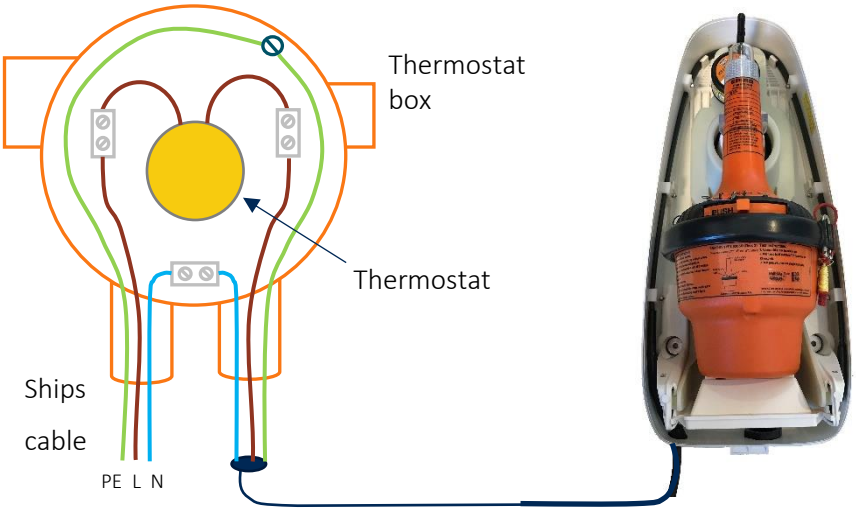
2.2.1 Features

- Self-regulating heating cable.
- External thermostat for disconnecting the power above a certain temperature.
- Same footprint and front cover as the regular FB-42 bracket.

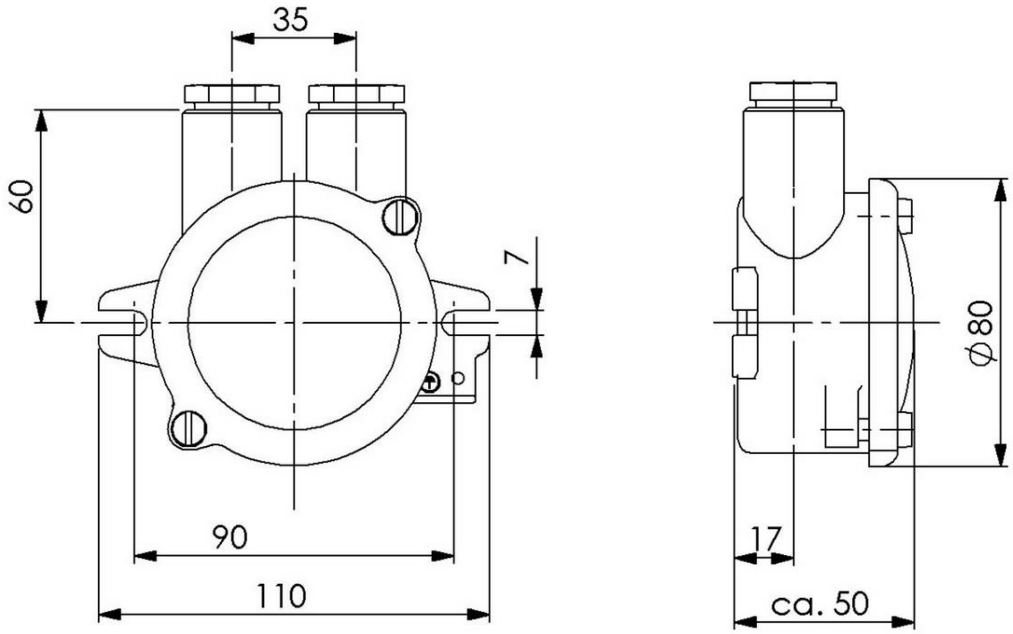
2.2.2 Electrical specifications

Compass safe distance:	1.5 m
Heating Cable Power supply:	220-240 V AC
Power Consumption:	≈ 60 W (typical at -30°C)
Current Consumption:	≈ 0.25 A
Recommended Fuse:	3 to 10 A
Thermostat cut-off:	5-10°C
Cable length to thermostat:	≈ 0.8 m
Termination	Screw terminals inside thermostat box

2.2.3 Electrical diagram



2.2.4 Junction box dimensions



3 Installation

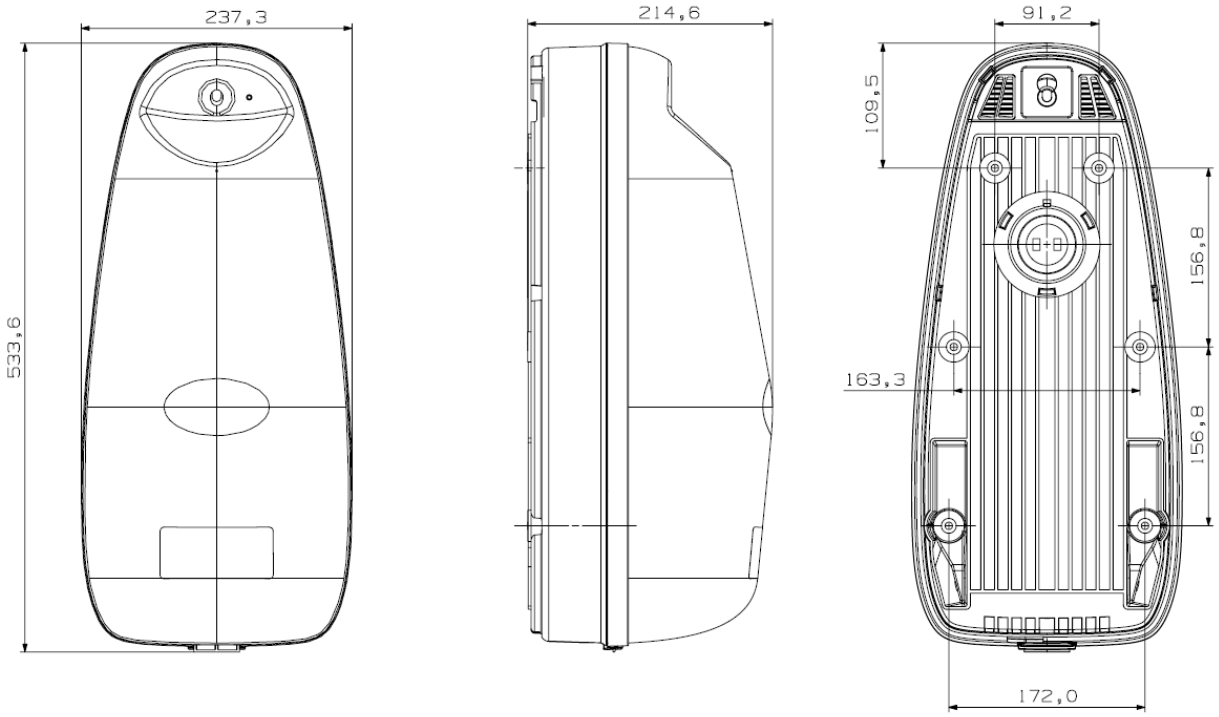
When the Tron 40S MkII is mounted in the float-free brackets, FB-42 or FBH-42, it will operate as an automatic float free unit. The satellite float-free EPIRB should be located/ installed so that the following requirements are met:

- The EPIRB should, with greatest possible probability, float-free and avoid being caught in railings, superstructure, etc., if the ship sinks.
- Do not install the bracket near strong magnetic fields that could activate the EPIRB.
- The EPIRB should be located so that it may be easily released manually and brought to the survival craft by one person. It should therefore not be located in a radar mast or any other places which can only be reached by a vertical ladder.
- The bracket should, if possible, be installed in a position that will provide as clear a view of the sky as is practical, orientated to facilitate satellite reception.
- Do not install or operate the EPIRB in a location subject to high intensity RF fields. (e.g Radar or communications antennas).

The location should be well protected from environmental conditions such as direct sea-spray, chemicals, oil, exhaust and vibrations. - see more detailed information in COMSAR/Circ.32" regarding "Harmonization of GMDSS requirements for radio installations onboard SOLAS ships".

3.1 Bracket dimensions and mounting holes

The mounting footprint is the same for both B-42 and FBH-42 and is shown in the figure below.



3.1.1 Installation screws

The bracket shall be installed on a flat metal surface with 6 pcs M6 screws with socket head with material quality of A4 (AISI 316). There shall not be used any washer under the screw heads. A washer can block the catapult from releasing. For the pre-mounted vibration dampers to work properly it is important that they are not misshaped by the tightening of the screws. If they are misshaped, the dampers will not work as designed.

4 Mounting the EPIRB in the bracket

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1. Make sure the bracket is not damaged.
2. Take the Tron 40S MkII and match the lower part correct on the bracket base and gently press the EPIRB into the stability clip.
3. Place the cover by fitting it from the bottom first. Mount the locking pin to securely hold the cover in place. See chapter 4.1 for details.

If the bracket is mounted correctly, on a flat surface, the EPIRB shall fit in the bracket without any gap in the stability clip. See the figure below.

4.1 Fitting the front cover

To place the front cover; the following steps should be followed:

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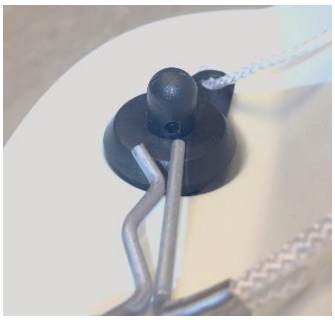

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1. Fit the groove on the front cover with the tab on the bracket.
2. There is a groove alongside the front cover that must be aligned and fit around the tongue in the bracket.
3. After aligning the tongue and the groove the front cover can be closed. If the tongue and groove does not align correctly, it can be helped by lightly pressing the front cover inwards on the long side.
4. Firmly press the front cover in place before fitting the locking pin through the hole in the hydrostatic release. If the hole is not visible, or you must use force to press down the front cover to see the hole, the tongue and groove is not aligned. Please take the front cover off and try again.
5. Make sure the locking pin is mounted the correct way.

5 Operating instructions

The EPIRB should only be used during situations of grave and imminent danger.

The Tron 40S MkII is designed to be operated either manually or automatically. The EPIRB will automatically start to transmit when deployed into water. The EPIRB has an internal safety switch which prevents inadvertent activation through moisture, sea spray, etc. while mounted in the bracket

5.1 Manual operation

It is not recommended to operate the EPIRB inside a life raft, or under a cover or canopy. Do not tie the lanyard to the ship in distress, as this will prevent the unit from functioning if the ship sinks.

If possible, keep the EPIRB in an open area, away from any metal objects (ship construction etc.) that may limit the satellite coverage. Transmissions can be stopped by taking the EPIRB out of the water and turning the switch to READY position.

1. Remove the locking pin from the front cover.
2. Remove the front cover.
3. Take the EPIRB out of the bracket.
4. Break the seal and pull the locking pin holding the main activator switch.
5. Push the switch to activate the EPIRB and ensure that the switch moves to ON position. The strobe light will start flashing indicating that the EPIRB is operating.
6. Unclip the lanyard coil, release the lanyard, and tie it to yourself or to the survival craft.

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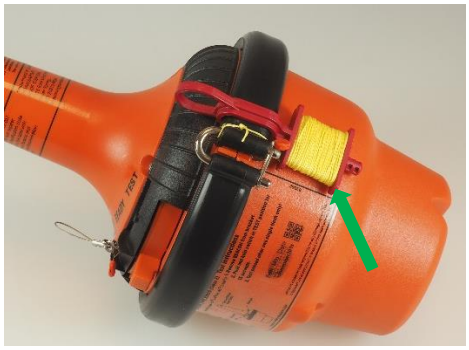

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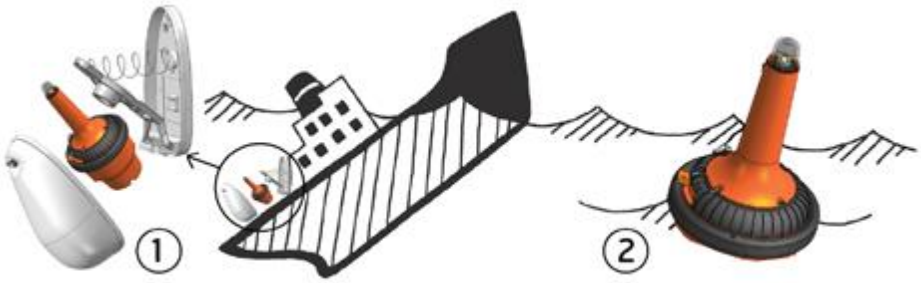
NOTE

To stop transmission, take the EPIRB out of the water and move the main switch to READY position.

5.2 Automatic operation



1. The Tron 40S MkII will automatically release from the bracket at a depth of 2-4 meters (6-13 feet) and start to transmit when reaching the surface.

2. Transmission will continue until the EPIRB is lifted out of the water and dried off.

WARNING

Replace the battery after the EPIRB is operated for any purpose other than a test.

6 Maintenance

6.1 Every month: Check the expiry dates on HRU

The hydraulic release unit expires at the end of the indicated month.

Expiry month location

Expiry year location

6.2 Every month: Visual inspection

- Make sure nothing prevents the release function of the EPIRB.
- Check for defects on both the EPIRB and the bracket.
- Make sure that the bracket is not covered by paint or any other chemicals.

6.3 Every 2nd year: Replacement of hydrostatic release

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1. Release and remove the bracket front cover.
2. Remove the EPIRB from the bracket.
3. Press down and hold in place the spring-loaded bracket plate and remove the hydrostatic unit by sliding it out of its locking slot.
4. Install the new hydrostatic unit while continuing holding down the spring-loaded bracket plate and sliding the unit into its locking slot.
5. Mount the EPIRB in the bracket. See chapter 4 for instructions.
6. Verify that there is no gap between the bracket and cover.

WARNING

Only Jotron HRU kit is acceptable for use. Any use of counterfeit spare parts will invalidate the product type approval certificates, and warranty will not apply.

6.4 Every 10th year: Replace bracket

Jotron strongly recommends replacing both the Tron 40S MkII EPIRB and the FB-42/FBH-42 Float-free brackets after 10 years.

7 Amendment records

Rev	Date	Description	By
A	09.10.2020	First release	EJ

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