

Sealing kit manual

For sealing of conventional mast sections C156-C304 and furling mast sections F176-F305.
Comes with sealing kit 312-322-10



1. General information

This sealing kit is intended for keel stepped masts with leakage at deck level. All keel stepped aluminium yacht masts from Seldén are sealed at deck level when leaving the factory. However, a 100% water proof seal cannot always be guaranteed. Minor leakage may occur and may increase over time. Before using the epoxy compound, intended for internal sealing, it is recommended to check that the leakage is not external. External leakage may be caused by insufficient sealing between the mast coat and the mast wall or by holes in the mast coat itself. Careful attention to these instructions will increase the overall results.

2. Preparations

It is recommended that the sealing procedure is performed under dry weather conditions. Mask the deck, mast, mast collar and the inside of the boat at the keelson with protective plastic sheeting or similar since the sealing compound has a tendency to flow out. Divert all halyards and lines from the mast and deck ring before sealing.

Carefully read the attached “*SAFETY DATA SHEET*” before starting to work with the epoxy compound.

The following necessary items are **not** included in the sealing kit (art. No. 312-322-10). Make sure these items are at hand before proceeding.

- Methylated spirits (ethanol)
- A scale
- Ø8-10 mm drill bit
- Ø25 mm hole saw
- Knife
- Cleaning cloth
- Heavy steel wire (for internal cleaning of the mast)
- Small torch
- Hair drier
- Masking material
- Measuring tape
- Transparent adhesive tape
- Containers for mixing
- Stirring pins
- Acetone (for cleaning)

Warning!

If the leakage is severe, or if the extent of the leakage is not known, the sealing compound may flow right thru the mast and out into the boat at the keelson. If this would happen, clean up the sealing compound immediately. Be careful when using acetone on lacquered surfaces.

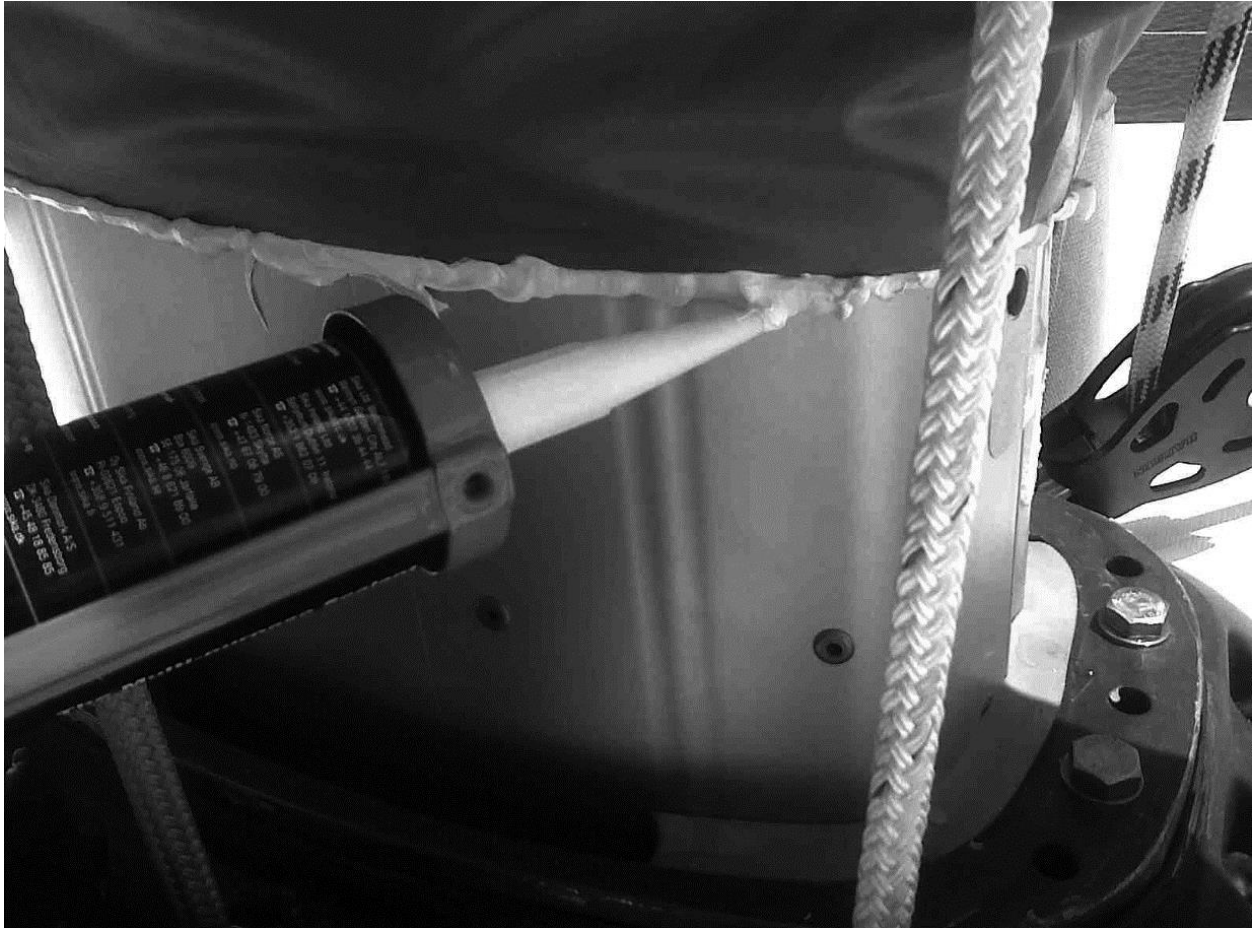
It is recommended to start with mixing and pouring a small amount (<100 ml) of compound into the mast and carefully monitor the inside of the mast to see if the compound leaks through or not. Also check below deck to make sure the compound does not leak out at the mast heel.

If compound leaks through, then a number of small amounts of compound must be mixed, poured and allowed to set before the next small amount of compound is poured. This is then to be repeated until no further compound leaks through.

When using drying the mast after cleaning, the mast must not be heated to more than 100°C. Overheating can reduce the masts structural integrity!

3. Sealing of mast coat

Leakage between mast coat and mast is sealed using the enclosed SIKAFLEX sealing compound. The easiest way to do this is to remove the lower hose clamp (that clamps around the deck ring) and turn the collar inside out by lifting the collar up. With the collar in this position (with the upper hose clamp or tape still in place), clean the mast surface with ethanol and add a string of SIKAFLEX between mast and collar. Then carefully pull the collar down and refit the lower hose clamp over the collar and deck ring.



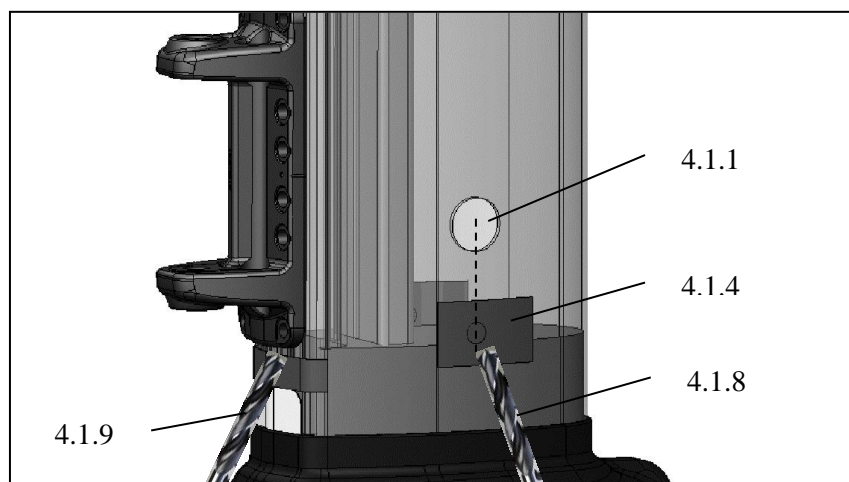
4. Internal sealing

The sealing procedure differs somewhat depending on if you have a conventional mast or a furling mast. Masts produced between 2002 and 2014 have a different setup of drainage holes and different hole pattern, however the same procedures (as described below) can usually be applied as long as the original drain holes can be identified. For masts produced before 2002, please refer to instruction 595-814-E.

4.1 Conventional masts

Conventional masts has two internal compartments; one main (forward) compartment and a much smaller aft sail slide compartment. One or both of these compartments may need to be sealed depending on the extent of the leakage.

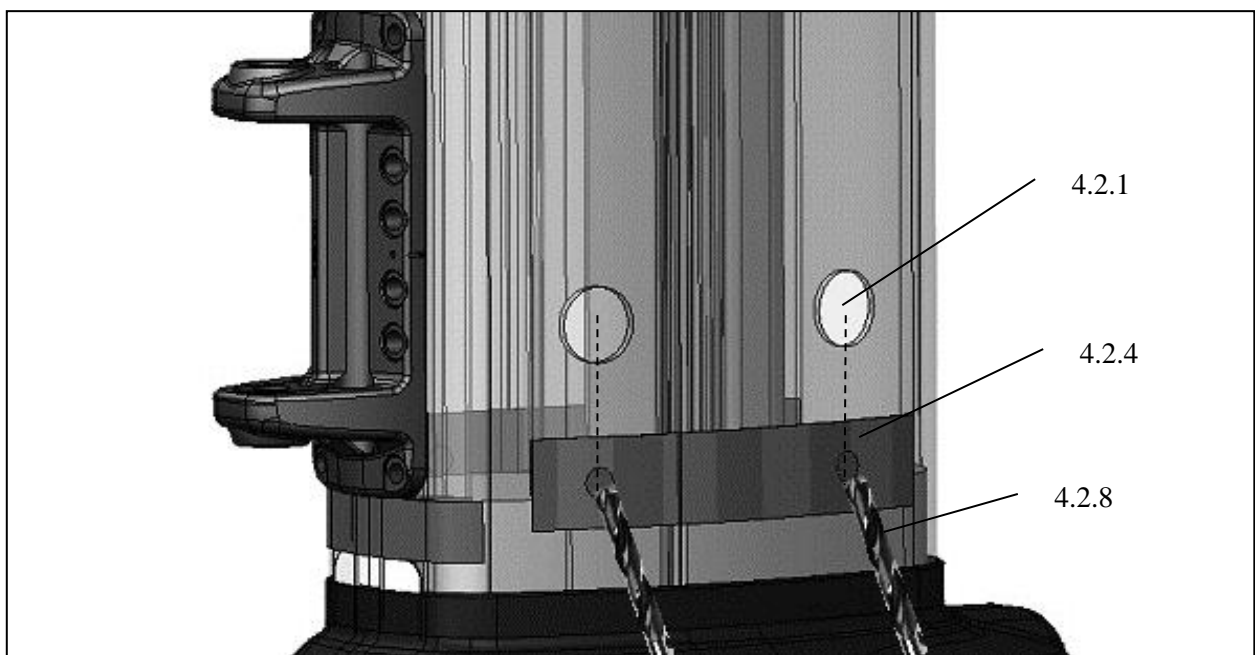
- 4.1.1 Drill one (1) Ø25 mm hole approximately 50 mm directly above the existing drain hole on one side of the mast.
- 4.1.2 Use the steel wire and a piece of cloth to clean the inside of the mast with ethanol.
- 4.1.3 Use a hair drier to dry out the inside of the mast after cleaning. Do not over heat the mast, see warning, section 2.
- 4.1.4 Cover all drain holes with transparent tape. If the sail slide compartment needs to be sealed, it has to be cleaned and dried as well. Then cover the sail groove between the mast collar and the kicker fitting with transparent tape but leave a small gap (~5 mm) for pouring. Plug the lower rivets in the kicker fitting with the enclosed plastic plugs if necessary to prevent compound from leaking through.
- 4.1.5 Pour sealing compound into the Ø25 mm hole (a little at a time, see warning, section 2). The sail slide compartment is filled through the gap between the kicker bracket and the tape.
- 4.1.6 Fill up a little at a time to a total of 5-10 mm.
- 4.1.7 When the sealing compound is semi-set, the tape can be removed and the mast cleaned with acetone. **Do not wait until the compound is fully cured as this will make cleaning impossible.** Any plugs used can be left in the kicker bracket.
- 4.1.8 After the compound is fully cured, make for new drainage by drilling at an angle with an 8-10 mm drill bit through the now covered up old drain holes. Make sure to drill up all through the epoxy sealing layer to allow full drainage.
- 4.1.9 Make sure that the sail slide compartment can be drained as well. Drill up at an angle with an Ø8-10 mm drill bit just below the kicker fitting if necessary to allow water escape.



4.2 Furling masts

Furling masts has two internal compartments; one forward and one aft. One or both compartments may need to be sealed depending on the extent of the leak.

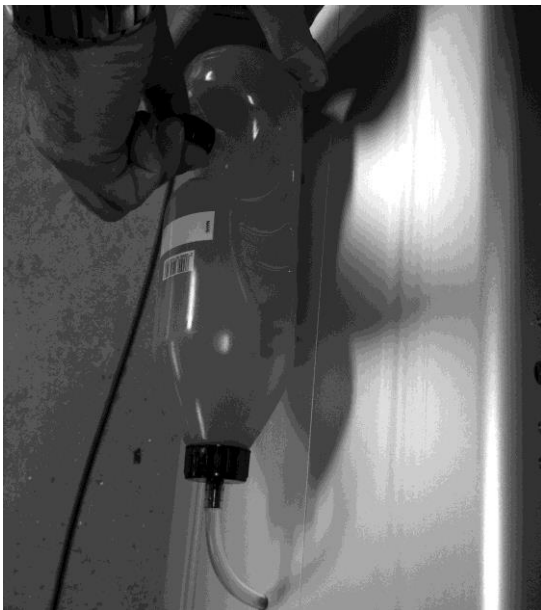
- 4.2.1 Drill an Ø25 mm hole into one or both of the mast compartments depending on the extent of the leakage. Locate the hole(s) approximately 50 mm directly above the existing drain hole(s).
- 4.2.2 Use the steel wire and a piece of cloth to clean the inside of the mast with ethanol.
- 4.2.3 Use a hair drier to dry out the inside of the mast after cleaning. Do not over heat the mast, see warning, section 2.
- 4.2.4 Cover the drain holes with transparent tape. Also cover the aft face opening with tape and plug the lower pop-rivet holes in the kicker fitting with the enclosed plugs to prevent sealing compound from sipping out.
- 4.2.5 Pour sealing compound into the Ø25 mm hole(s) (a little at a time, see warning, section 2).
- 4.2.6 Fill up a total of 5-10 mm.
- 4.2.7 When the sealing compound is semi-set, the tape can be removed and the mast cleaned with acetone. **Do not wait until the compound is fully cured as this will make cleaning impossible.** Any plugs used can be left in the kicker bracket.
- 4.2.8 After the compound is fully cured, make for new drainage by drilling at an angle with an 8-10mm drill bit through the now covered up old drain holes.
- 4.2.9 Remove the tape but leave the plugs in the kicker fitting.



4.3 Alternative internal sealing procedure

Instead of drilling new Ø25 mm holes to pour the sealing compound, an alternative approach is possible. The enclosed plastic bottle can be used. A plastic bottle with a 10 mm flexible spout (usually found in sport shops) can also be used.

- 4.3.1 Use the steel wire and a piece of cloth to clean the inside of the mast with ethanol through the existing drain hole(s). Use small pieces of cloth as the drain holes are only about 10 mm in diameter.
- 4.3.2 Use a hair drier to dry out the inside of the mast after cleaning. Do not over heat the mast, see warning, section 2.
- 4.3.3 Cover the drain holes(s) on one side of the mast with transparent tape. Leave the drain hole(s) on the other side of the mast un-covered.
- 4.3.4 If the sail slide compartment on conventional masts needs to be sealed, it has to be cleaned and dried as well. Then cover the sail groove between the mast collar and the kicker fitting with transparent tape but leave a small gap (~5 mm) for pouring.
- 4.3.5 Inject sealing compound into the non-covered drain hole(s) using the plastic bottle. Use tape to seal the spout entrance to avoid leakage. The sail slide compartment is filled through the gap between the kicker and the tape.
- 4.3.6 Fill up a total of 5-10 mm and rapidly cover the injection hole(s) with tape.
- 4.3.7 When the sealing compound is semi-set, the tape can be removed and the mast cleaned with acetone. **Do not wait until the compound is fully cured as this will make cleaning impossible.**
- 4.3.8 After the compound is fully cured, make for new drainage by drilling at an angle with an 8-10 mm drill bit through the now covered up old drain holes.
- 4.3.9 Make sure that the sail slide compartment can be drained as well. Drill up at an angle just below the kicker fitting if necessary to allow water escape.



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