

ACV-1

Automatic container lock

Operating and maintenance instructions.

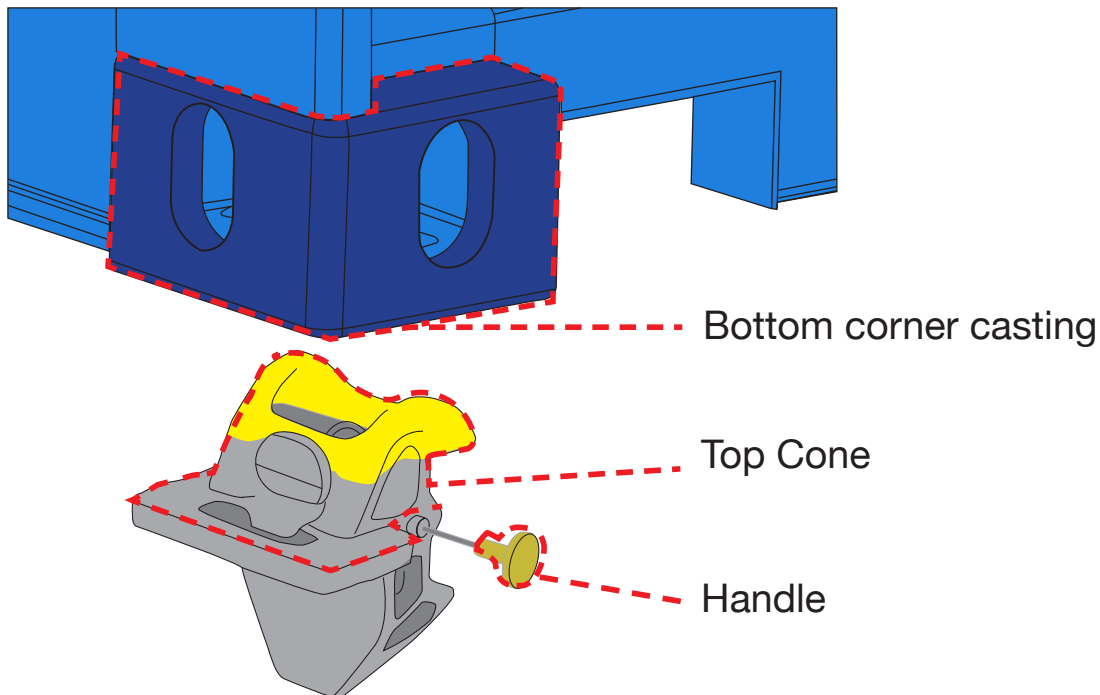


Table of contents

Coning	3
Loading	4
Unloading	4
Deconing	5
Emergency Operation	6
Inspection and service	7
Spare parts	8
How to replace parts - Detaching parts	9
How to replace parts - Attaching parts	10

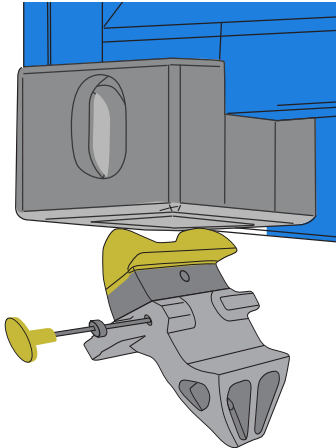
GENERAL NOTES!

ACV-1 to be used on deck in conjunction with ISO standard containers.
NOT TO BE USED AS BASE/BOTTOM LOCK.

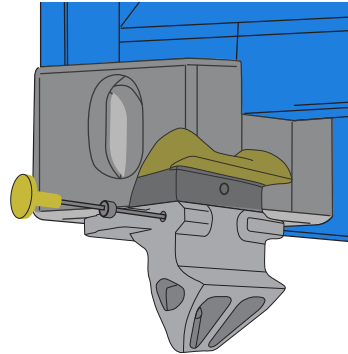


Disclaimer:
MacGregor does not take any responsibility of possible accidents/incidents if ACV-1 is wrongly used OR if damaged/
broken ACV-1 is being used.

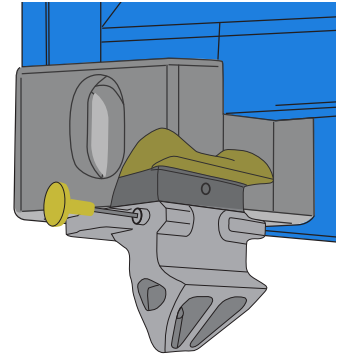
Coning



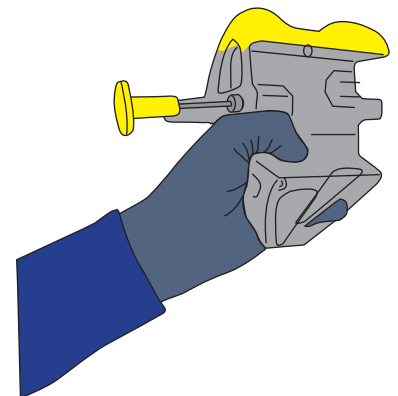
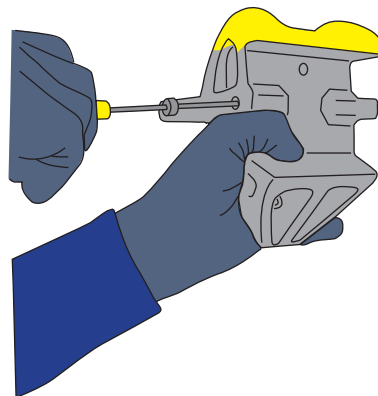
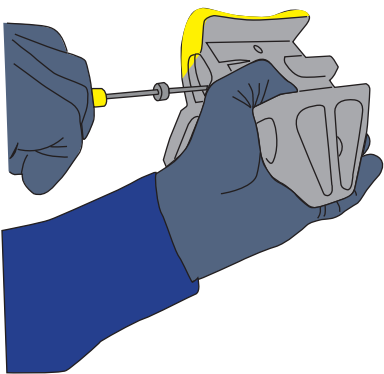
1. Tilt the lock and pull the handle. The handle must always point outwards from the container.



2. Insert top cone to bottom corner casting and straighten the lock.



3. Release the handle.



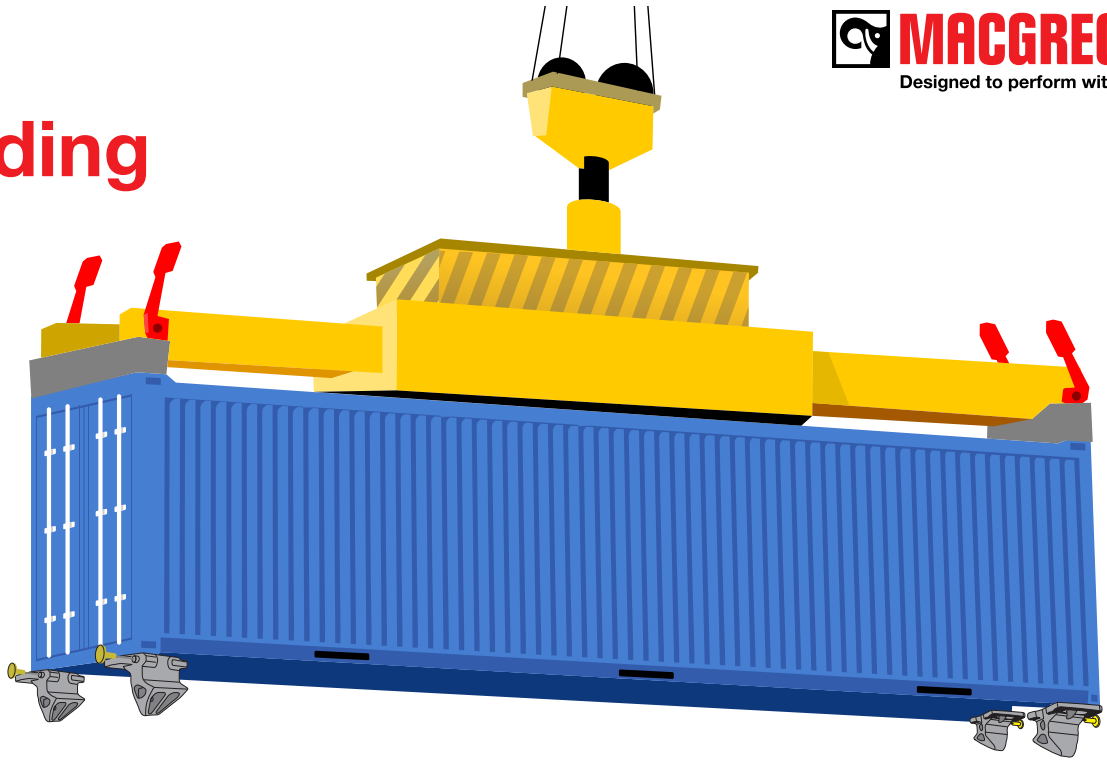
4. After all locks have been connected, lift the container onboard.



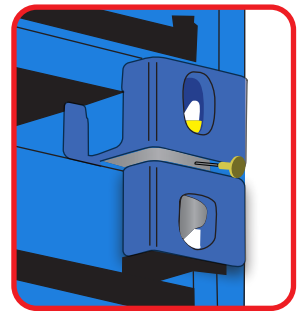
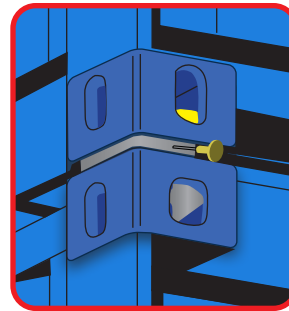
NOTE!

Handle **MUST** always point outwards from the container

Loading



5. After loading, ensure that the locks are fully and correctly engaged.

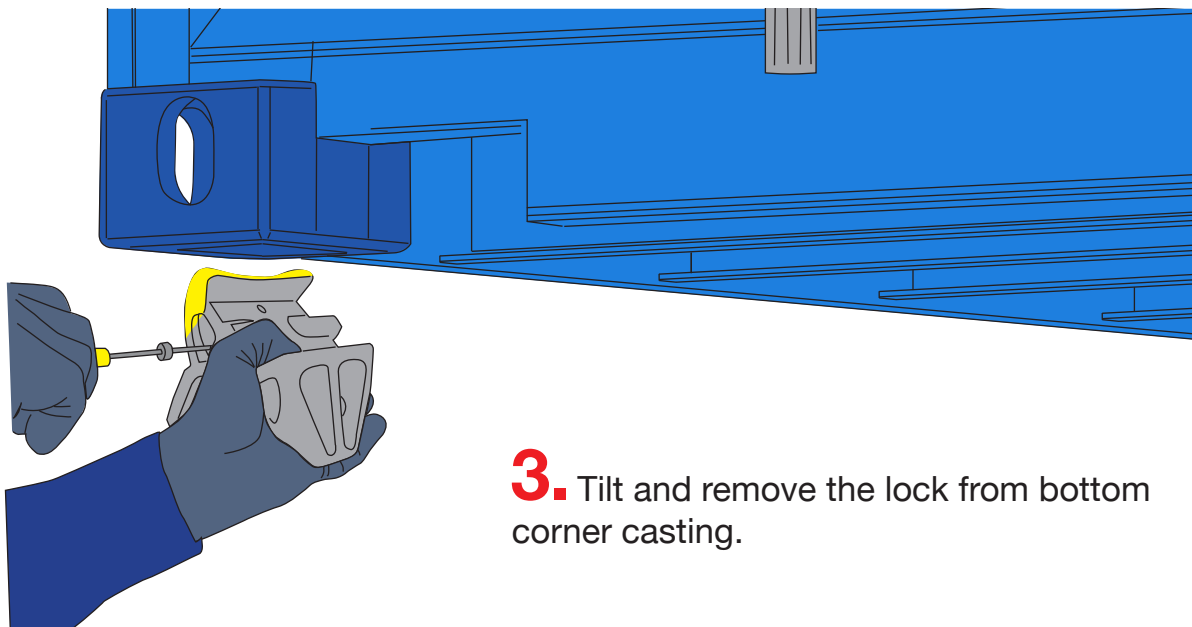
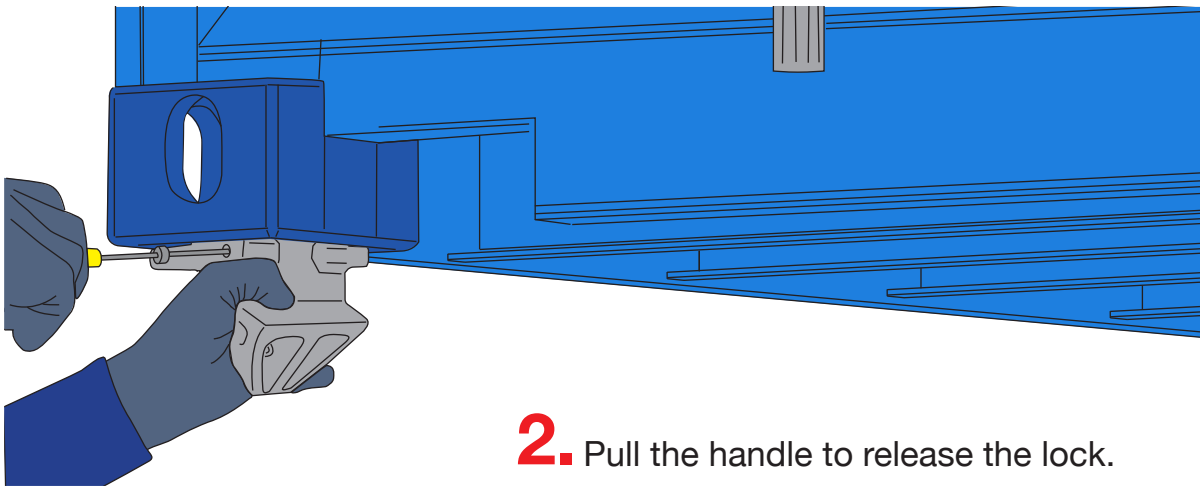
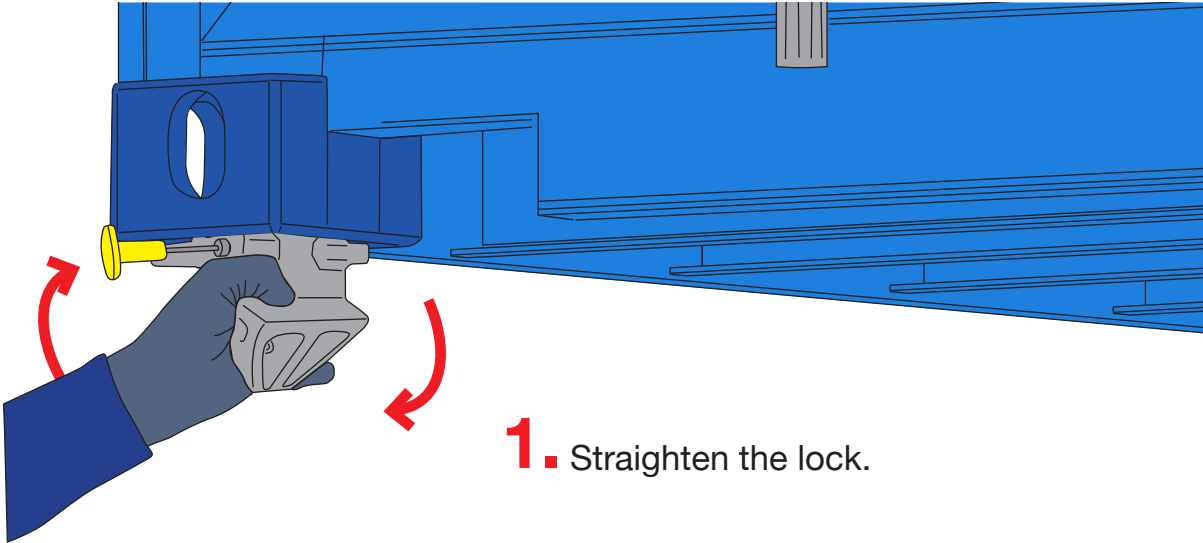


Unloading



Lift the upper container.
Locks will open automatically.

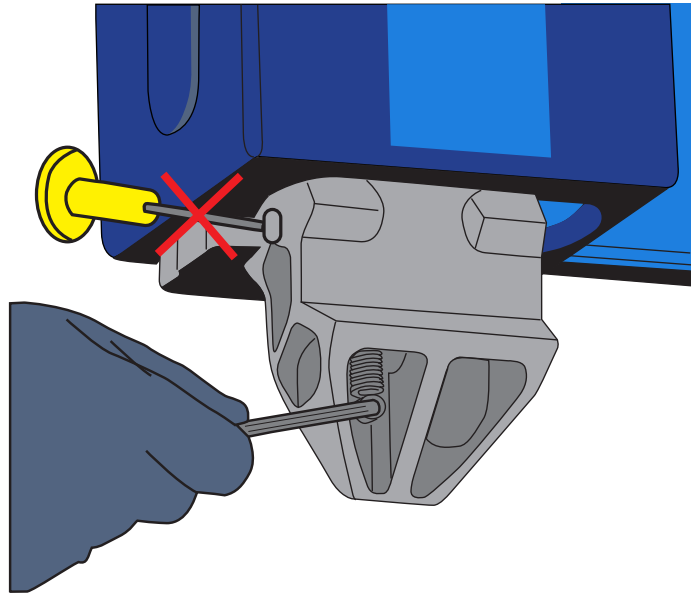
Deconing



Emergency Operation

If handle is broken or missing.

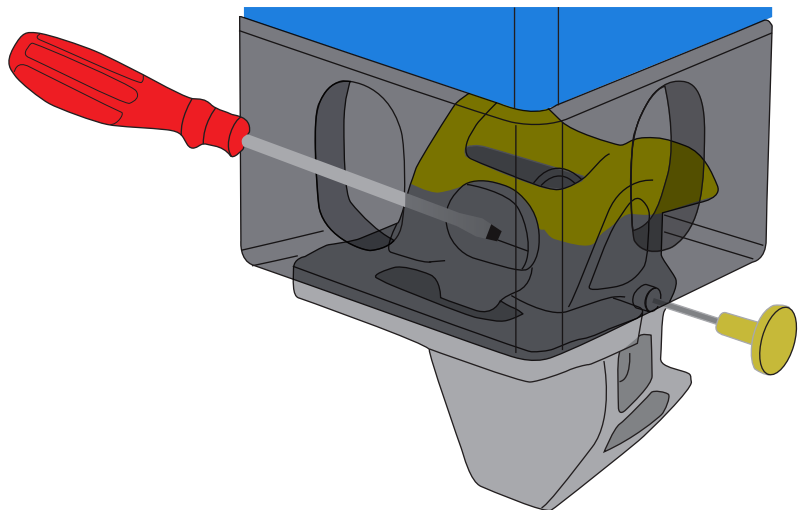
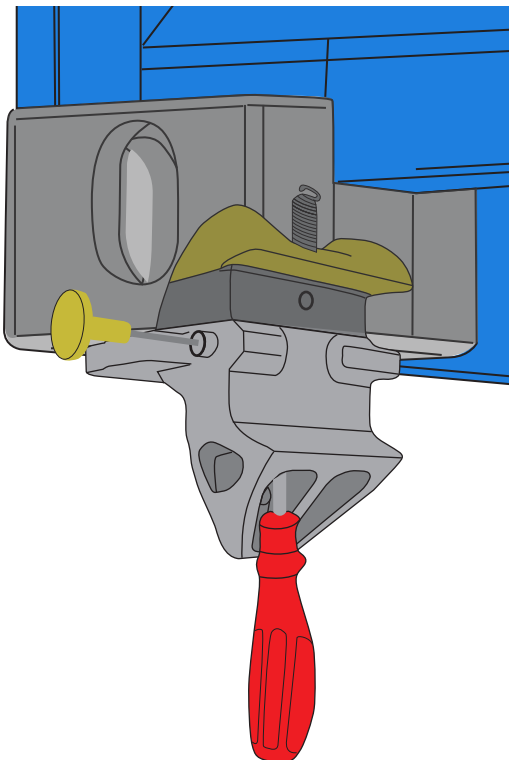
- 1.** Remove the screw that holds the spring.



- 2.** Push the spring upwards (e.g. with screw driver) until lock releases.

Or

Rotate the locking device via the corner casting side hole (e.g. with screw driver) until lock releases.



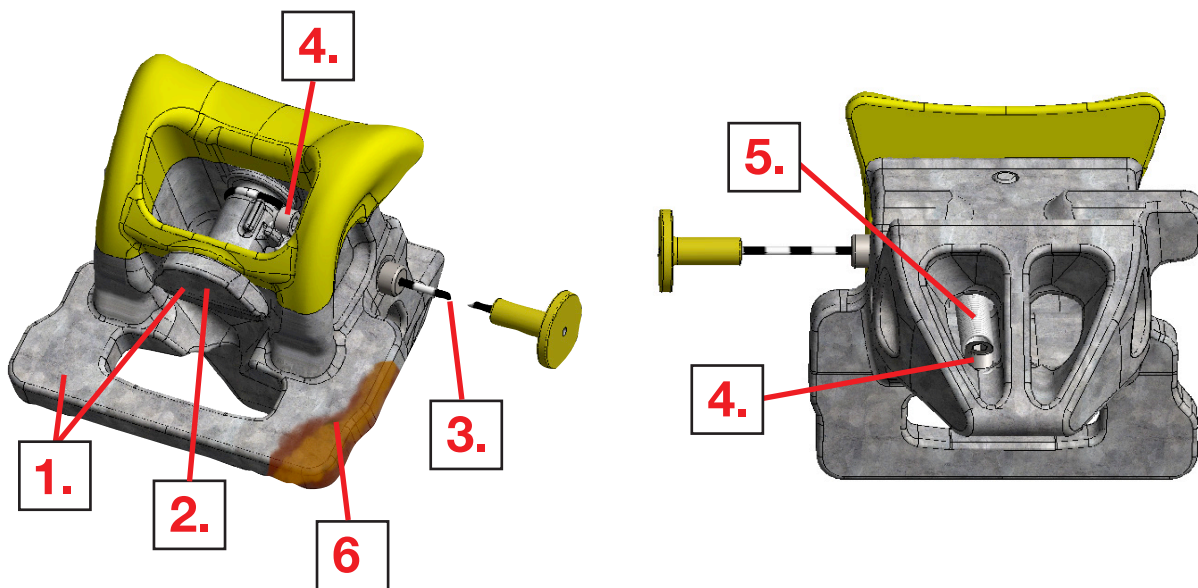
Inspection and service

Inspect the locks minimum every 10 months or follow the ship-owner's own maintenance plan for lashing products. In case of any doubt, consult the shipowner representatives for further details.

What to inspect:

Damage:


1. Cracks and/or deformation on housing and locking device
2. Malfunction of locking device (not rotating properly)
3. Damaged or missing handle
4. Loose screws
5. Spring damages
6. Excessive / severe corrosion (any surface)




Perform a function test during inspection:

Pull handle three times to check that locking device rotation and handle movement is smooth.

Scrapping criteria

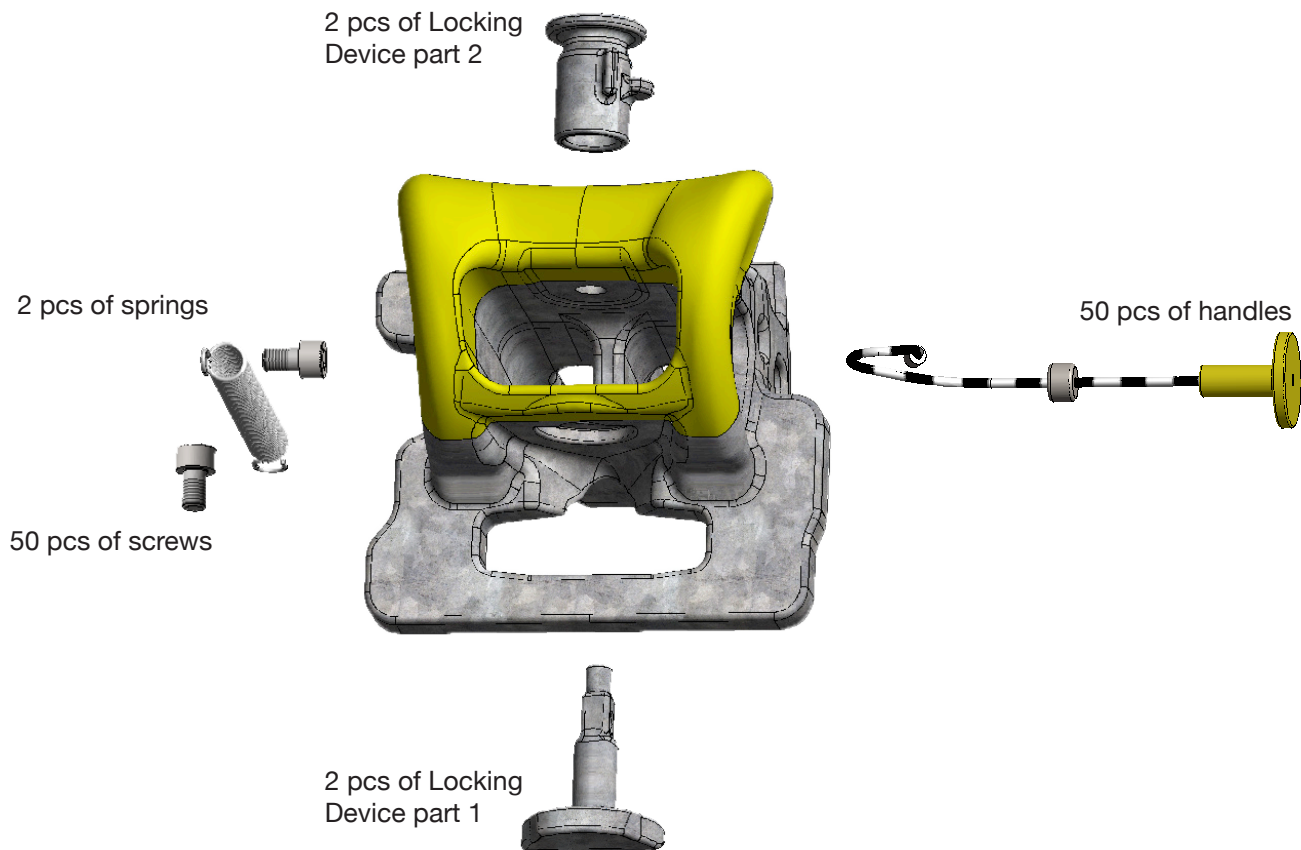
	Severe corrosion. (> 10% material missing) Cracks and/or deformation on housing and/or locking device. Remove the items which are to be scrapped from the use immediately
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When to inspect

	Visual check every 10 months. Or according to ship owners own inspection routine. Or in case a malfunction or damage is noted.
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Spare parts

Spare part kit material no. 400210851 for ACV-1 includes following items:



For spare part inquiries please contact our CSS Lashing Running Supply Teams as follows:

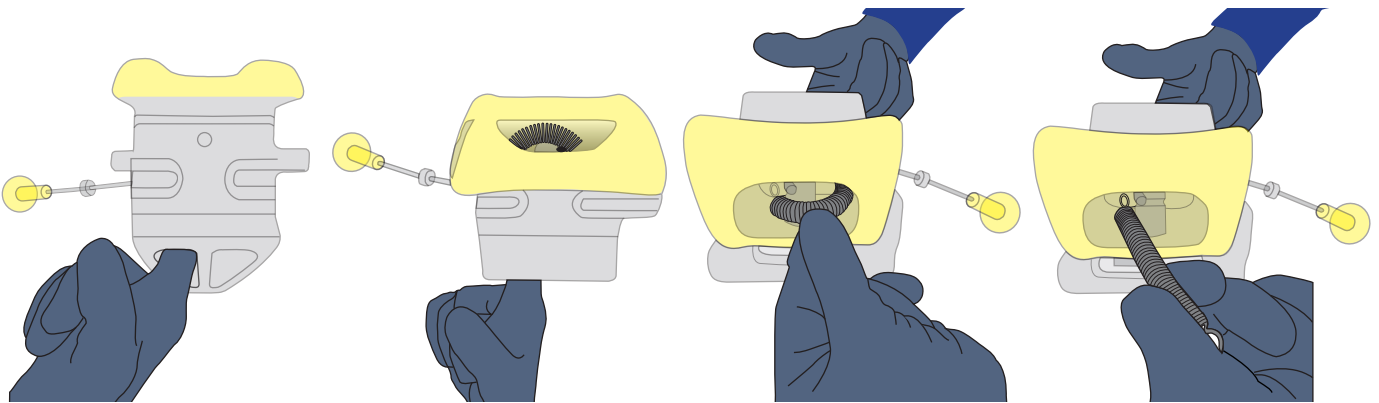
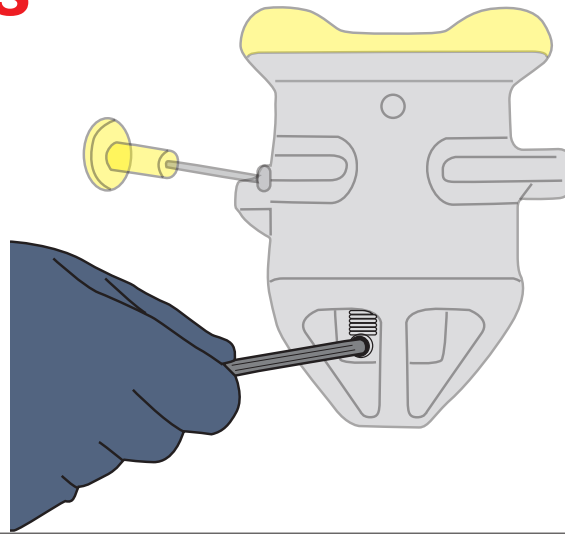
Finland --> lashing.fi@macgregor.com

Germany --> lashing.de@macgregor.com

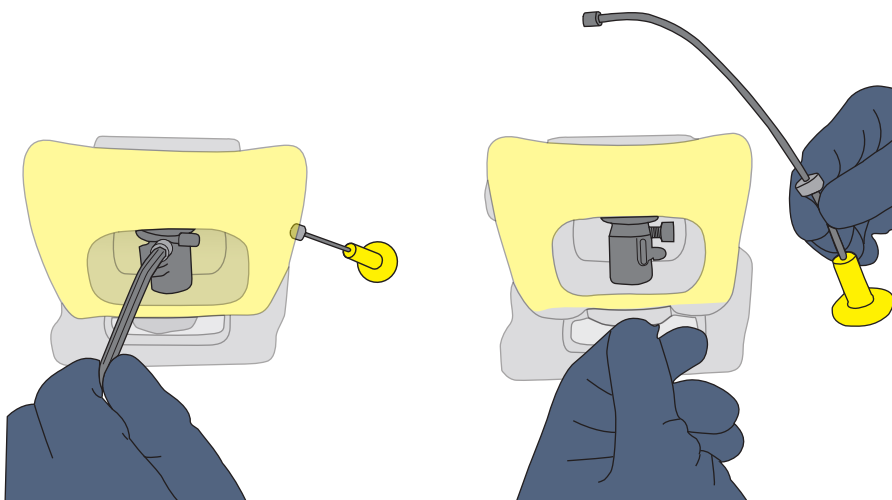
Singapore --> lashing.sg@macgregor.com

How to replace parts - Detaching parts

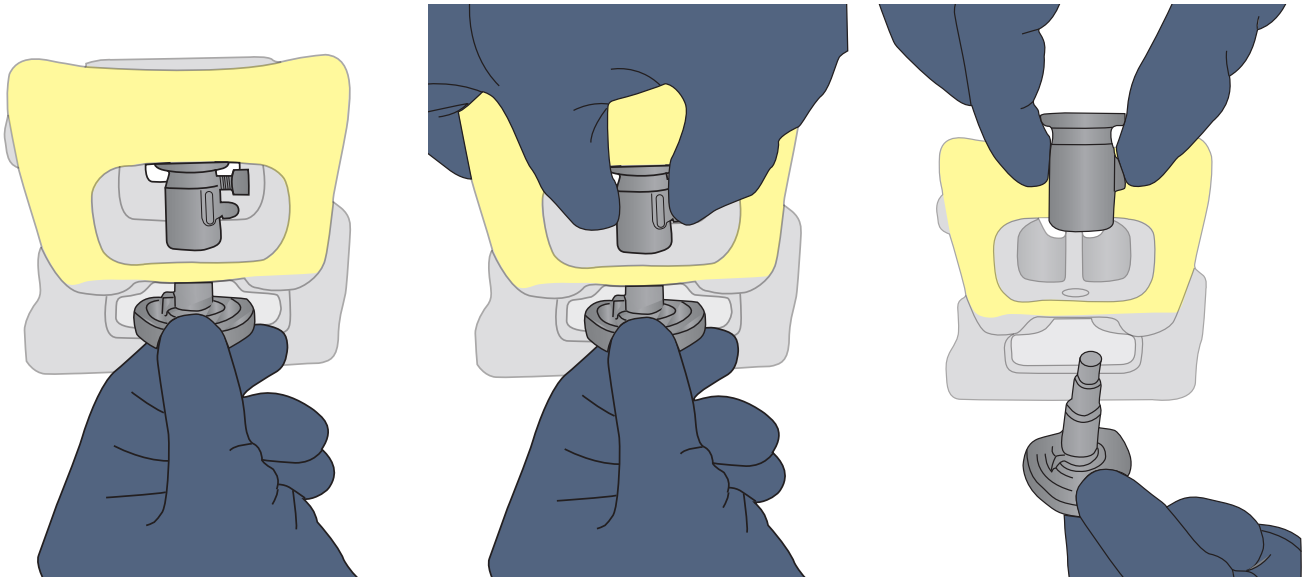
- 1.** Use allen key, size 5 (metric) to remove the screw holding the spring.



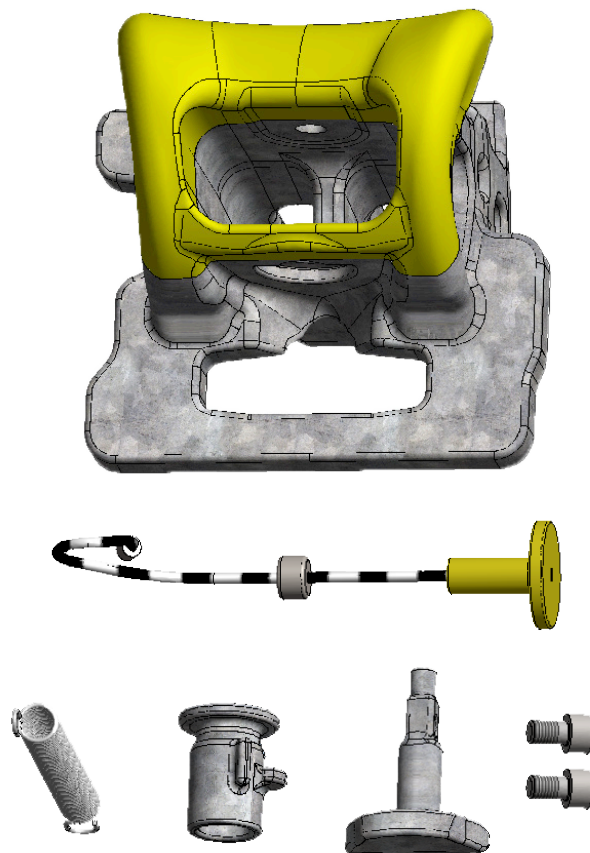
- 2.** Push the spring up with your finger and pull the spring out from top side of the lock.



- 3.** Loosen the screw of the handle wire with allen key and pull the handle out.

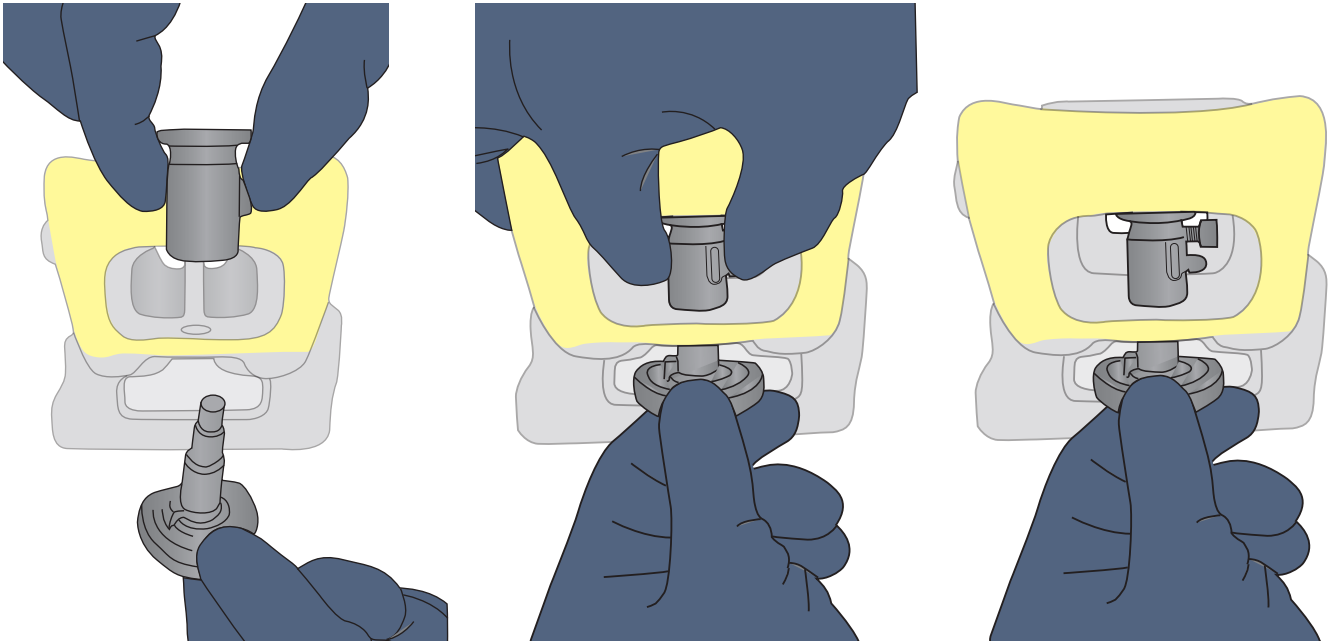


4. Pull the Locking device 1 out from the Locking device 2.

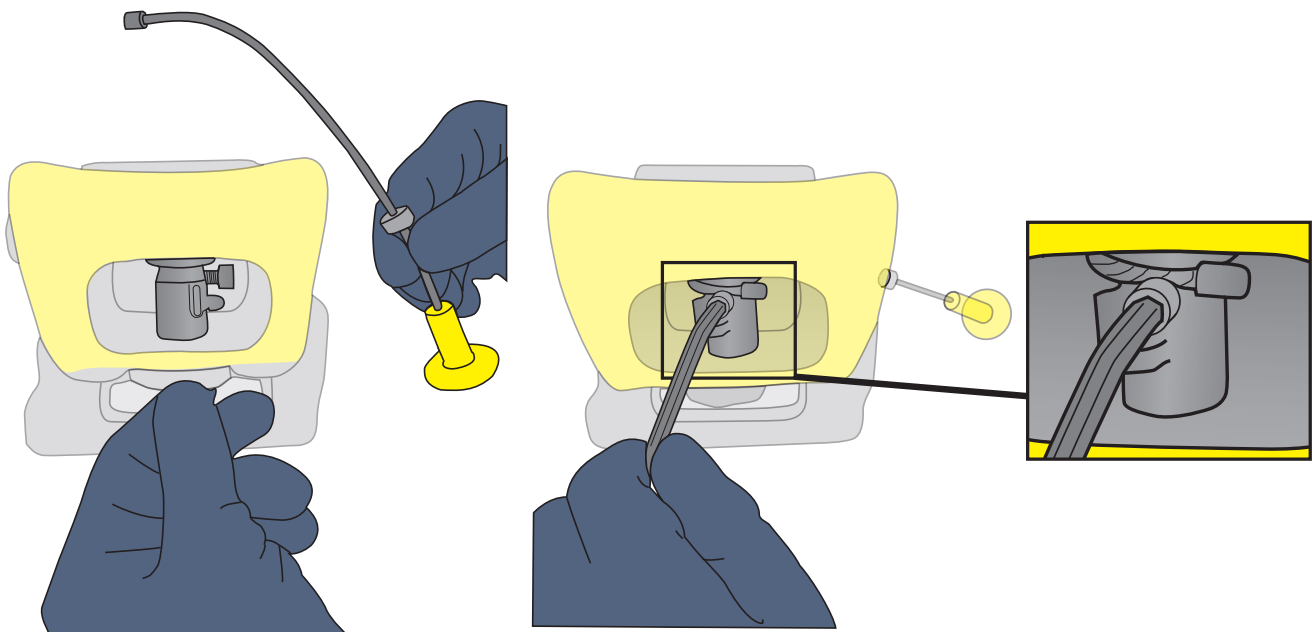


5. All parts are now removed and damaged/faulty parts can be changed.

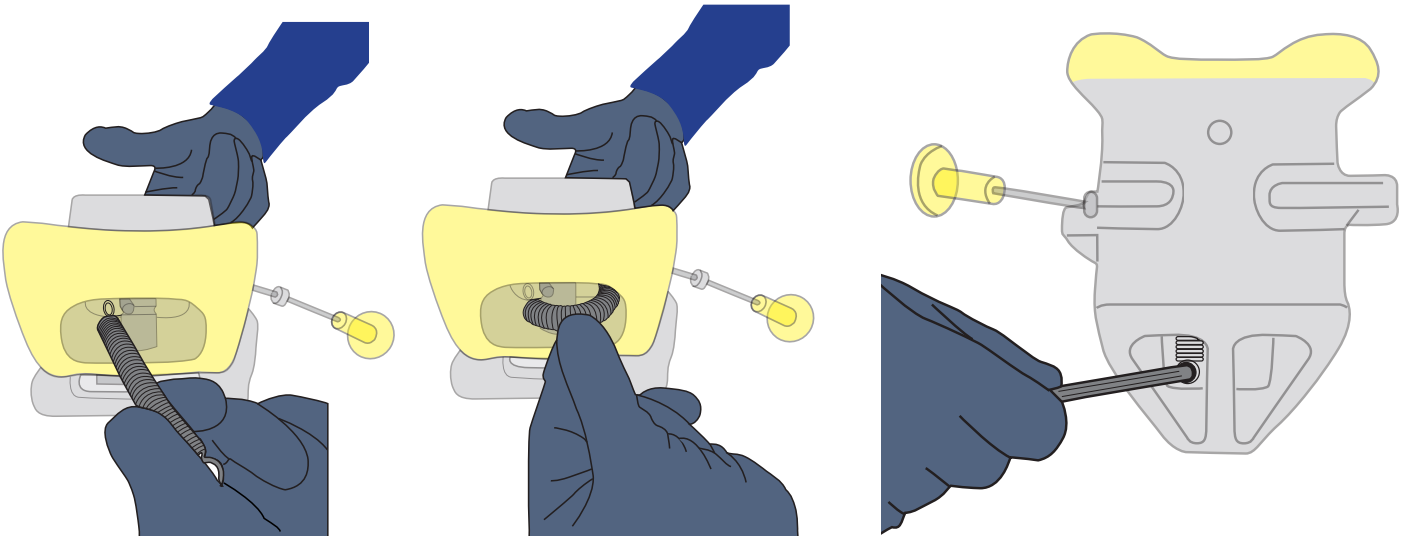
How to replace parts – Attaching parts



- 1.** Push the Locking device 1 inside the Locking device 2.

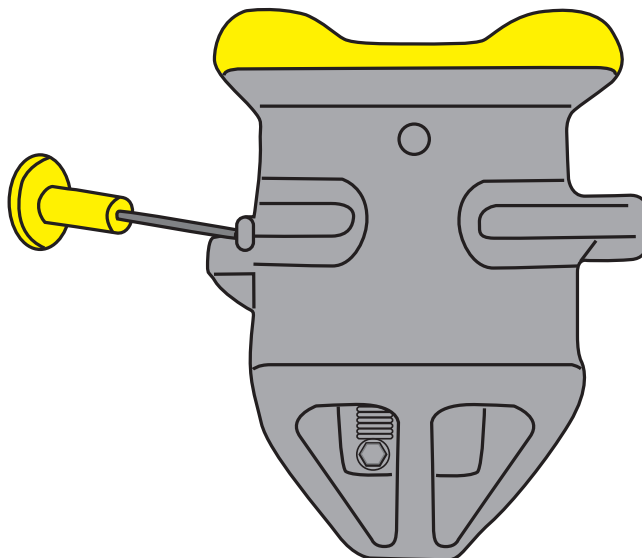


- 2.** Push the handle wire inside and rotate it around the Locking device 2. Tighten the screw of the handle wire firmly with allen key.



3. Insert the end of the spring to the hook on the Locking device 2. Rotate the spring around the Locking device 2 and attach the lower end of the spring firmly with screw by using an allen key.

NOTE! Perform a function test after lock maintenance is ready : Pull handle three times to check that locking device rotation and handle movement is smooth.



4. Lock is ready for use

