

3F - Series 3 Fixed Davit - Flat Mount Setup CLASS

Product & Major Parts List

- 1. 10" Winch handle
- 2. Winch-20 ST
- 3. Lift line brake assembly
- 4. Winch plate
- 6. Brake Roller
- 7. Brake safety pin & rubber stop
- 8. Winch fairlead & guide
- 9. Tension line 6mm
- 10. Davit boom arm gate
- 11. Tension line adjustment buttons
- 12. Tension line boom pin & cotter pin
- 13. Lift line w stopper ball 11mm
- 14. Snap hook 8kN rated
- **15.** Boom
 - c. Bitt Mount 6'-8" standard
 - d. Flat Mount 4'-3" standard
- 17. Boom connection to rescue davit & bolt
- 18. Safety pin for davit boom arm gate
- 19. Base channel (red)



Flat Mount Installation

- 20. Davit flat mount
- 21. Tethered stainless steel pins





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Flat Mount - Setup

One Time for the Vessel

Supplied Winch handle, lift line with stopper ball and snap hook, boom, tension line & connecting hardware. Flat mount frame with (2) two tethered pins.

Tools & Supplies Needed: 3/4" box wrench, Allen wrenches: 5/32" & 5/16", (8) eight 3/8" stainless steel bolts, or stainless steel U-bolts (handrail installation), pliers, NEVER•SEEZ[®] (Regular Grade or Mariner's Choice), LOCTITE[®] and a small diameter line for tethering to prevent davit from going overboard.

Installation Of The Flat Mount

- 1. Determine the best location for the Flat Mount Rescue Davit, considering that it needs to be strong enough to support the loads, your company engineer, or boat architect **must** be involved and approve the mounting location and procedure.
- 2. Attach mount with (8) eight 3/8" bolts or with U-Bolts if mounting to a handrail or railing what will adequately handle the load. Stainless steel bolts are required to comply with up to a 350 lb. MWL. Bolts are not supplied.
- Additionally, the thread connection strength can be increased by using a Heli coil when blind threading. See Image F2 below.
- 4. If your vessel manufacturer or company engineer cannot assist with mounting questions you may have, call C-Hero®.
- 5. The mounting should take into consideration the Flat Mount's standard 4'-3" long davit boom. Mount as high as possible, approximately shoulder height, and close to the vessel's edge.
- **E.** A 6'-8" long davit boom is available but only if the mounting to the vessel will support it.



Image F1: 3 Series – Fixed in the clear anodized flat mount frame

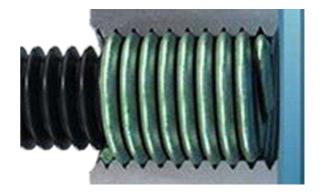


Image F2 Heli coil example



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Flat Mount - Setup *continued*

Lift Line

1. Lift Line Installation

- a. Thread the lift line with stopper ball and into the sheave at the end of the davit boom. As shown in **Image F5** above.
- b. Check the lift line to make sure that it is not crossed with the tension line.
- c. Lead the lift line into front of the rope brake, under the bronze roller.
- d. Pull the safety pin, open the brake arm, and the rubber will move out of the way.
- e. Use a rolling motion to get the line through the brake, then through the winch fairlead guide.
- f. The winch gets loaded clockwise, 4 wraps, over the chrome tailing arm and into the tailing jaws.
- g. There should be about 1' of line from the winch. Roll the rubber to line up with the holes, then pin it.
- h. Tie an overhand knot on the end of the lift line, to prevent it from running out.
- i. Winch handle (**Image F9**) goes into the top of the winch, use thumb lock.
- j. Snap the line brake closed. Best practice is to store the winch handle in the winch.
- k. **To Stow the Davit Boom**: Pivot the davit boom arm back to the end of the winch plate. While holding the boom, squeeze both sides of the davit gate together, then pin it.

NOTE: The winch and rope brake should always be set before each use, check to ensure the tethered pin is in place with the rubber. The rope brake, when closed, allows the line to be pulled, but not let out.



Image F6 Line brake open



Image F8 Line released with hand on brake



Image F7 Line brake closed, line wrapped, in the winch jaws. Tailed off the chrome tailing arm and ready to lift.



Image F9 Winch handle with thumb lock



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Flat Mount & Boom Height Adjustment Installation of the Rescue Davit into the mount

- 1. Tether the Rescue Davit if mounted over the water.
- Tip the top of the Rescue Davit into the mount and under the top lip. Once engaged at the top, push the bottom of the Rescue Davit into the mount so that it fully seats flush.
- Pin the Rescue Davit into the mount with both of the tethered through pins.
- Hold the red tension line and release the pin while slowly lowering the davit boom.
- 5. Lower the davit boom slowly to its full extension.

NOTE: The red boom tension line is a fixed piece of line that is always connected and depending on the angle of the bitt, may need to be adjusted. This will help ensure the lift line will clear the tires and fenders.

6. Davit boom height adjustment while in flat mount

- a. Deploy the davit boom and lift line, and see where the snap hook hangs, it should clear the outboard rubber. In most cases a 45- degree angle on the davit boom is optimum.
- b. The davit boom can be lifted by the red tension line, and slack taken out of it under the winch on the adjusting buttons, as shown in **Image F11**, and the video below.



Image F11 Boom height adjustment, with davit securely attached to the mount. Holding the red tension line, lift the boom to approximately to a 45-degree angle and wrap the red tension line around the tension line adjusting buttons found underneath the winch plate.



Image F10 Mount showing top lip and tethered stainless steel pins









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Boom Height Adjustment *continued*



Image F12 Beginning wrap to adjust boom height angle

Image F13 Tension line start rear button only



Image F14 Tension line putting two twists counterclockwise

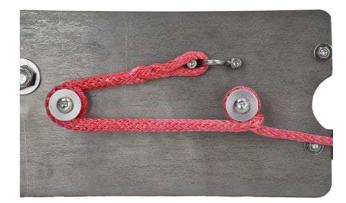


Image F15 Tension line wrapping finished





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Tethers & Examples



Note: C-Hero® strongly recommends connecting a tether (not included) to the hole under the winch plate or around the winch plate. See **Image F16**.

Image F16 Tether Line *not included* Flat Mount shown

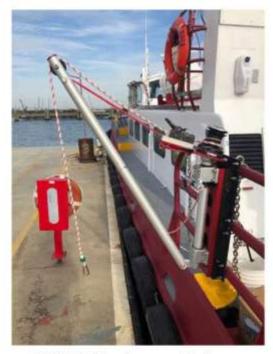


Image F17 Flat Mount rescue davit, on a crew boat, secured with stainless steel U bolts on a sturdy railing



Image F18 Flat Mount rescue davit on a passenger ferry boat

7. The Flat Mount Rescue Davit One Time Adjustments Are Now Complete

- a. The Rescue Davit location and location of the davit mount should be visibly posted.
- b. Moving a Davit from one boat to another? Refer to the manual for setup.
- c. Best practice is to store the handle in the winch.