

## 5F - Series 5 Fixed Davit - Flat Mount Setup CLASS

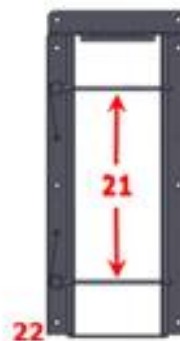
### Product & Major Parts List

1. 10" Winch handle
2. Winch – 35 ST
3. Lift line brake assembly
4. Winch plate
5. Brake safety plates
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
  - g. Bitt Mount – 6'-8" standard
  - h. Flat Mount – 4'-3" standard
16. Boom sheave
17. Boom connection to rescue davit & bolt
18. Safety pin for davit boom arm gate
19. Base channel (red)
20. Winch plate shock



### Flat Mount Installation

21. Tethered stainless steel pins
22. Davit flat mount



### 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<sup>®</sup> (Regular Grade or Mariner's Choice), LOCTITE<sup>®</sup> and a small diameter line for tethering to prevent davit from going overboard.

#### 1. Installation Of The Flat Mount

- a. 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.
- b. 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 350 lb. MWL. Bolts are not supplied.
- c. Additionally, the thread connection strength can be increased by using a Heli coil when blind threading. See **Image H2** below.
- d. If your vessel manufacturer or company engineer cannot assist with mounting questions you may have, call C-Hero<sup>®</sup>.
- e. The mounting should take into consideration of 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.
- f. A 6'-8" long davit boom is available but only if the mounting to the vessel will support it.



**Image H1** Series – Fixed Plus in the clear anodized flat mount



**Image H2** Heli coil example

## 5F - Series 5 Fixed Davit - Flat Mount Setup CLASS - Continued

### Flat Mount – Setup \*continued\*

#### Davit Boom Assembly

##### 2. Boom Installation

- Stand the base unit up against the bulkhead.
- Take the nut and bolt off the davit connection point.
- Lay the davit boom on the deck (**Images H3 & H4**), with the slot for the tension line facing up (towards the unit). Tighten with a 5/16" Allen wrench and a 3/4" wrench using Never-Seez® (Regular Grade or Mariner's Choice).



**Image H3** Boom connection point on base



**Image H4** Boom connected to davit base

##### 3. Boom Red Tension Line Installation

- Take the pin out of the end of the davit boom.
- Prop up the davit boom then grab the red tension line from under the winch plate.
- Place the eye of the red tension line in the slot and then pin it. Bend the cotter pin to secure it shown in **Image H5** below.



**Image H5** Tension line around the pin inside of the boom.  
Cotter pin has been inserted and bent to secure in place.



### Flat Mount – Setup \*continued\*

#### Lift Line

#### 4. Lift Line Installation

- Thread the lift line with stopper ball and into the sheave at the end of the davit boom. As shown in **Image H5** on previous page.
- Check the lift line to make sure that it is not crossed with the tension line.
- Lead the lift line into front of the rope brake, under the bronze roller.
- Pull the safety pin, open the brake arm, and the rubber will move out of the way.
- Use a rolling motion to get the line through the brake, then through the winch fairlead guide.
- The winch gets loaded clockwise, 4 wraps, over the chrome tailing arm and into the tailing jaws.
- There should be about 1' of line from the winch. Roll the rubber to line up with the holes, then pin it.
- Tie an overhand knot on the end of the lift line, to prevent it from running out.
- Winch handle (**Image H9**) goes into the top of the winch, use thumb lock.
- Snap the line brake closed. Best practice is to store the winch handle in the winch.
- 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 H6** Line brake open



**Image H7** Line brake closed, line wrapped, in the winch jaws. Tailed off the chrome tailing arm and ready to lift.



**Image H8** Line released with hand on brake



**Image H9** Winch handle with thumb lock



## Flat Mount – Setup \*continued\*

### Flat Mount & Boom Height Adjustment

#### 5. Installation of the Rescue Davit into the mount

- 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.
- 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

- 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.**
- 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 H11**, and the video below.



**Image H11** 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 H10** Mount showing top lip and tethered stainless steel pins



## 5F - Series 5 Fixed Davit - Flat Mount Setup CLASS - Continued

**Flat Mount** \*continued\*

**Boom Height Adjustment** \*continued\*



**Image H12** Beginning wrap to adjust boom height angle



**Image H13** Tension line start rear button only



**Image H14** Tension line putting two twists counterclockwise



**Image H15** Tension line wrapping finished



## 5F - Series 5 Fixed Davit - Flat Mount Setup CLASS - Continued

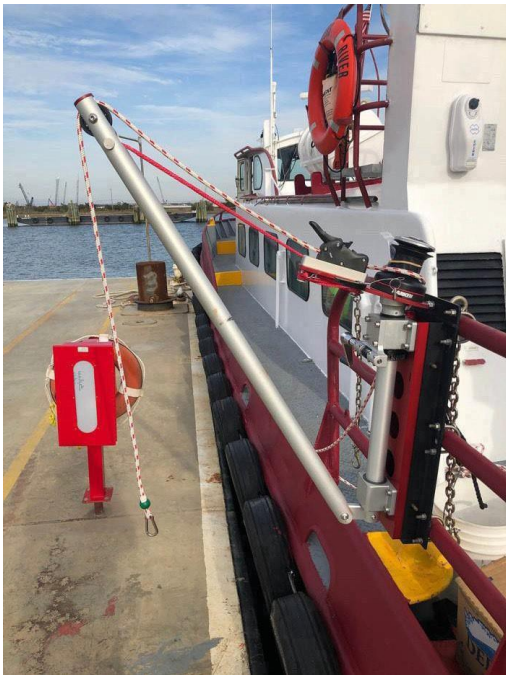
### Flat Mount – Setup \*continued\*

#### 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 H16**.

**Image H16** Tether Line (shown in green) not included



**Image H17** Flat Mount rescue davit, on a crew boat, secured with stainless steel U bolts on a sturdy railing



**Image H18** 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.