



CMC CLUTCH™ by Harken Industrial™

Inspection Procedure

Purpose / Intent

- This procedure outlines the relevant checks of a detailed inspection for Personal Protective Equipment (PPE).
- The detailed inspection should be performed at least once every 12 months and after any exceptional event(s) that may occur during use of the product.
- The inspector should be a competent person and have read and understood all parts of the Inspection Procedure, Periodic PPE Inspection Form and User Manual.
- The inspector should also stay informed of any changes to inspection requirements, the product and any related recalls, and this documentation.

Required Materials to Perform the Inspection

- CLUTCH User Manual
- CLUTCH Periodic PPE Inspection Form
- CLUTCH Latch Lubrication Procedure
- CLUTCH Inspection Procedure (this document)
- A new, unused CLUTCH for comparison
- 2m of rope within the acceptable parameters for the CLUTCH (see inside of Moving Side Plate or CLUTCH User Manual)
- Documentation of product history from the user

Product History

The user should provide information regarding the lifecycle of the device. Of special importance are:

- Date of purchase.
- Date of first use.
- Usage conditions and amount of use.
- Reports on any exceptional event that the device may have experienced. Exceptional events include the following:
 - Dynamic events such as falls or fall arrest
 - Overloading or improper use cases
 - Improper storage, cleaning or transport
 - Modifications made by parties other than the manufacturer
 - Other exceptional events

Any PPE exhibiting unexpected wear or degradation must be quarantined and undergo a detailed inspection.



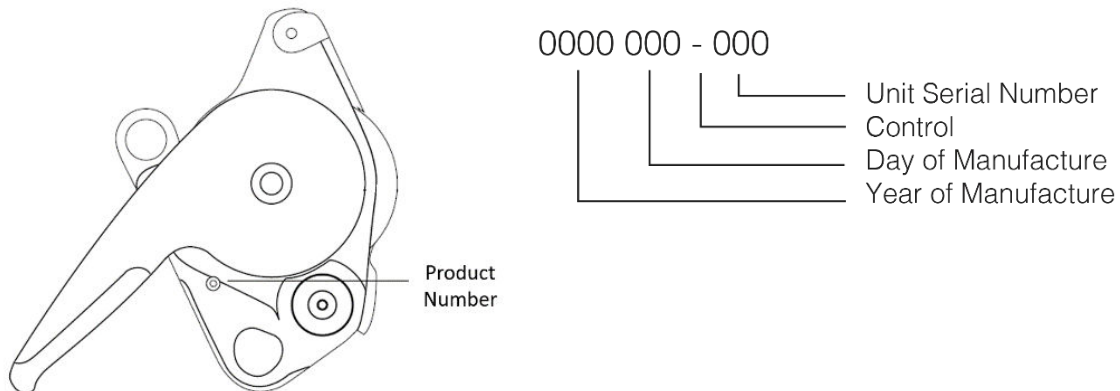
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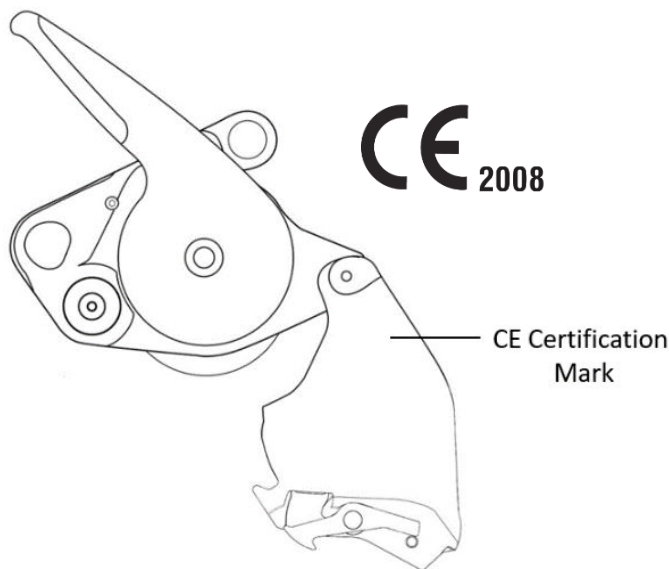
1. Visual Inspection

Ensure the presence and legibility of the device markings.

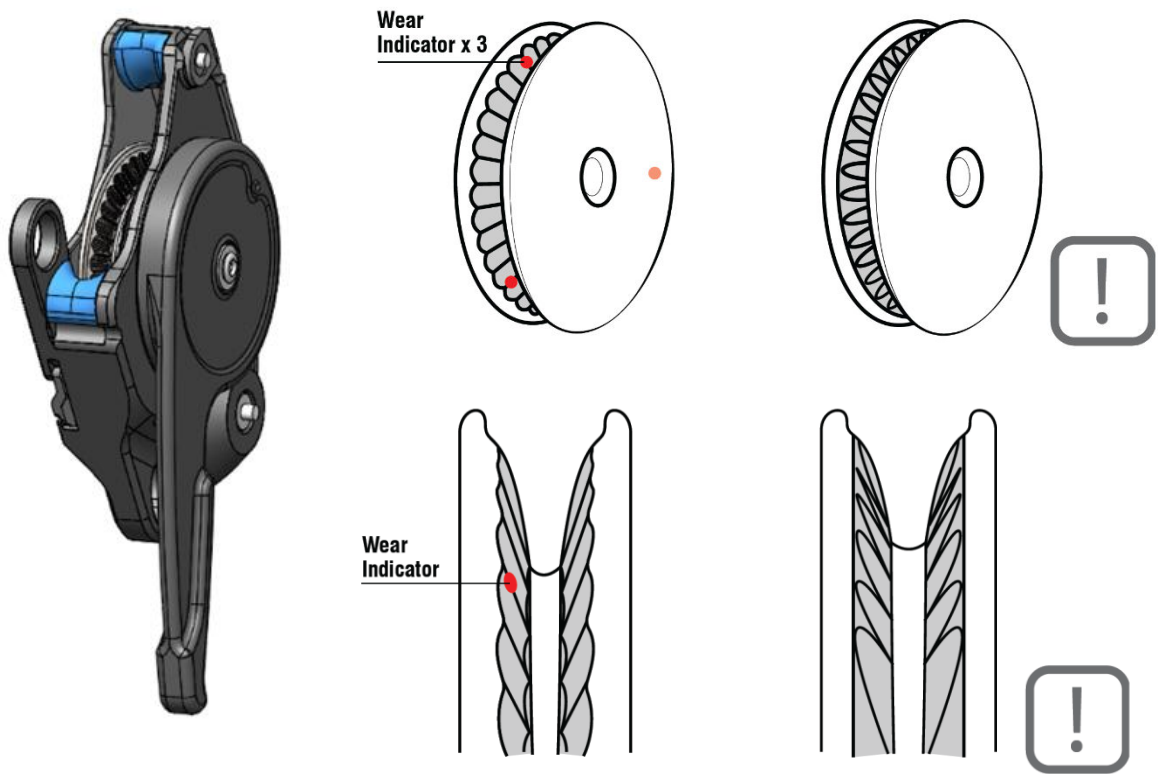
- Ensure that the product number is located and is legible on the backside of the Chassis in the area covered by the Control Handle when it is in the Stop position.



- Ensure that the CE certification mark is located and is legible on the inside surface of the Moving Side Plate.



- Visually compare the device with a new device and check to make sure that there are no missing or modified parts.
- Carefully inspect the entire device for signs of damage such as dents, deep scratches, cracks, yielding or excessive wear. Check for any sharp edges, especially in the areas of the rope path. Take extra care to inspect attachment points such as the Attachment Eye and the Becket for signs of damage or deformation.
- Inspect the Sheave, Tension Rope Guide, and Friction Shoe for wear. The Tension Rope Guide and Friction Shoe are shown in blue and the Sheave wear indicators (3) are shown in orange in the images below.



If the wear indicators have been worn away, the unit must be retired.

2. Functional Checks

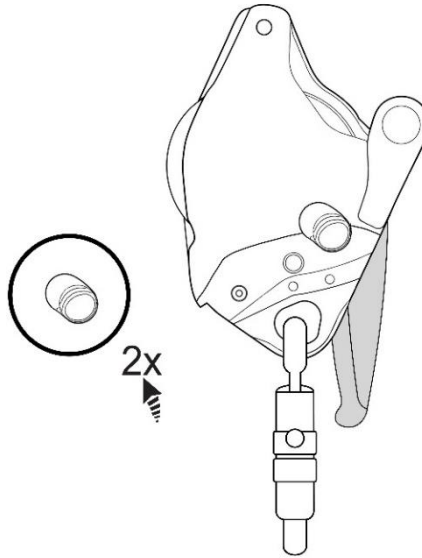
2.1 Sheave Movement

Open the device and perform the following checks on the Sheave:

- Ensure that the Sheave is able to rotate anti-clockwise and emits an audible clicking sound.
- Check that the Sheave is **not** able to rotate clockwise.
- Check that the Sheave is firmly attached to the Sheave Swing Arm without excessive axial movement, i.e. >2mm.

2.2 Sheave Swing Arm Movement

- With the device open, start with the Control Handle in the Stop position. Press the Sheave into the pinch area and check that the Sheave is able to swing into the Chassis and make contact with the stainless steel Friction Shoe.
- Release the Sheave and move the Control Handle to the Stand By position while observing the position of the Sheave and Sheave Swing Arm. The Sheave and Sheave Swing Arm should move to the left, rotating anticlockwise until the rope-path laser etching becomes visible on the inner surface of the Chassis.
- With the Control Handle in the Stand By position, press on the Sheave and check that the Sheave is able to swing into the Chassis and make contact with the stainless steel Friction Shoe.
- Check that the Sheave Swing Arm is firmly attached to the Chassis and inspect the rivet on both sides for damages.



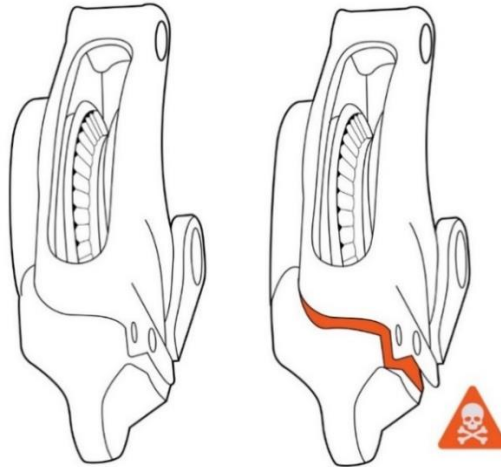
2.3 Control Handle Movement

- With the device closed, rotate the Control Handle through its range of motion from Stop to Anti-panic, ensuring there is no excessive drag.
- Rotate the Control Handle to the Stand By position and feel for a well-defined holding force at Stand By. Rotate the device back and forth in this configuration and check that the Control Handle stays in the Stand By position.
- Hold the device in the left hand with the Moving Side Plate facing the palm. Use your fingers to press the Sheave into the Chassis. While holding the Sheave into the Chassis, use your right hand to rotate the Control Handle from Stand By to Release (Range) position. Continue to rotate the Control Handle through the Release (Range) position and check that this action drives the Sheave away from the Chassis, i.e. overcomes the pressure applied with the left hand.
- Continue to rotate the Control Handle beyond the Release (Range) position while maintaining pressure on the Sheave with the left hand until the Anti-panic position is reached. Check that the Sheave releases and is once again able to be pressed into the Chassis.
- Inspect the rivet in the center of the Control Handle for damage.
- Ensure the Control Handle is firmly attached to the Chassis and has minimal clearance with the Chassis.

2.4 Side Plate Release Latch and Moving Side Plate Movement and Function

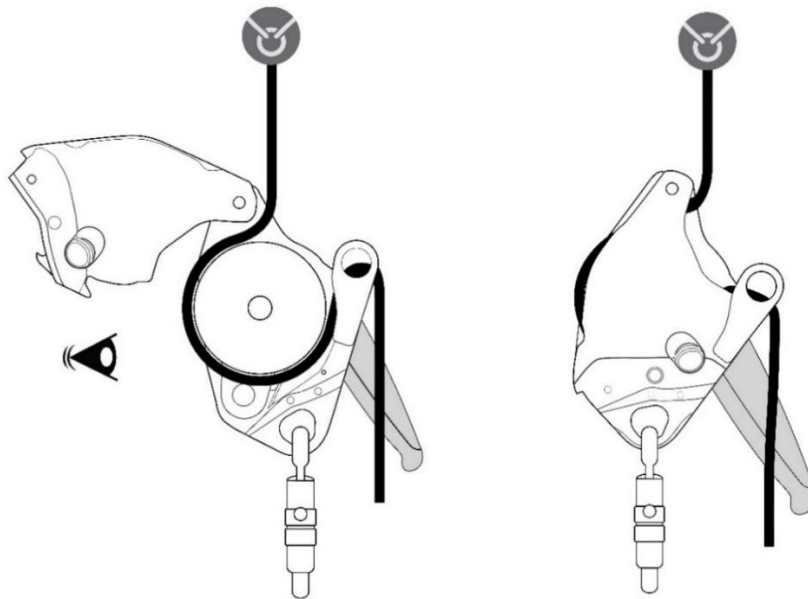
2.5 Check the Side Plate Release Latch for functionality by actuating it two times to open the Moving Side Plate.

- Inspect the rivet of the Side Plate Release Latch for damages. Ensure that the Side Plate Release Latch is firmly attached to the Moving Side Plate.
- On a yearly basis, or if latch function becomes impaired, apply lubricant (DuPont CS0116601 or equal) as indicated in the CLUTCH Latch Lubrication Procedure (Document Control No. 335011.00.05112020).
- Check the (2) latch pins in the Chassis. Check that they are flush with the surface of the Chassis and ensure they are not excessively worn in the area of engagement with the Side Plate Release Latch.
- Close the Moving Side Plate by pushing it into the closed position. The Side Plate Release Latch should make two successive clicks and securely lock the Moving Side Plate.
- Re-open the Moving Side Plate and close it again, making sure that it is accurately guided into the correct position.



2.6 Function Check

- Install a rope within the acceptable size range into the device as indicated on the inside of the Moving Side Plate or in the CLUTCH User Manual.

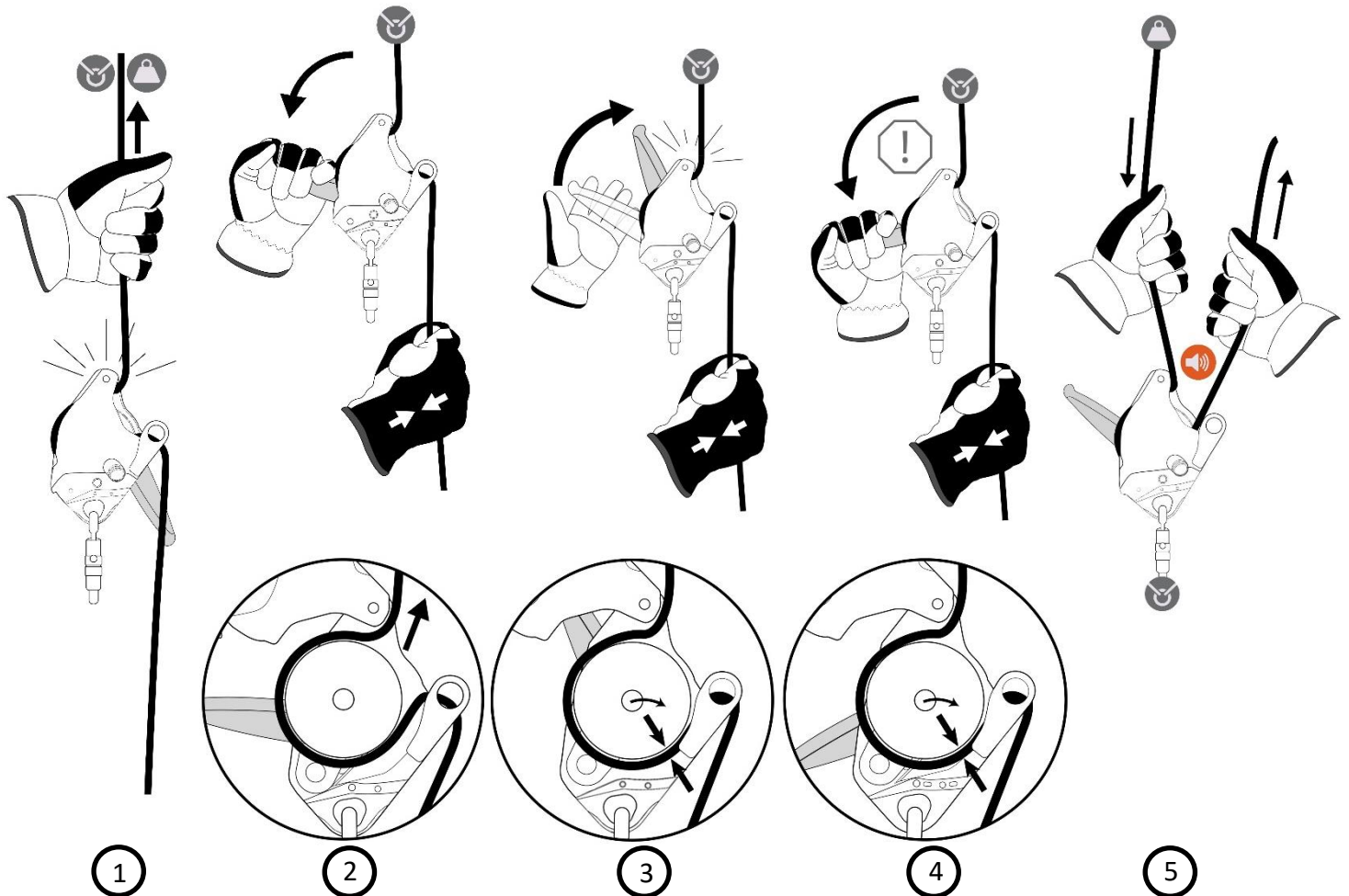


1. Move the Control Handle to the Stand By position and give a quick pull on the Tension Side (Load/Anchor) of the rope. Check that the CLUTCH locks up and prevents the rope from exiting the device.
2. Gradually apply a load to the device (rope taut, Control Handle in the Stand By position). Gradually move the Control Handle to the Release (Range) position to allow rope through the device. Check that it is possible to move rope through the device.
3. While maintaining load on the device, release the Control Handle and check that the device locks up and holds the rope.
4. While maintaining load on the device, quickly pull the Control Handle through the Release (Range) position and into the Anti-panic position. Check that the device locks up and prevents any more rope from releasing.
5. Pull rope through the device as if using it to haul. Check that the Sheave turns and emits an audible clicking sound



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Disposition

Use the criteria outlined in the inspection checklist to properly disposition the device. If one or more inspection points are marked as Monitor, then the device should be dispositioned as Monitor. If one or more inspection points are marked as Fail, then the device should be dispositioned as Fail.


Disposition States:

Pass – Continue to use, next required periodic check in 12 months.

Monitor – Use with caution, next required periodic check in <12 months (record date on Periodic PPE Inspection Form).

Fail – Do not use, render device useless before disposal to prevent further use.

CMC Rescue, Inc.
6740 Cortona Drive
Goleta, CA 93117, USA
805-562-9120 / 800-235-5741
cmcpro.com

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