



Operator's Guide

Clamp Force Indicators for Paper Roll Clamps

This sheet provides operating instructions for Cascade Clamp Force Indicators. Clamp force should be checked daily using the minute test and at 100 hour Preventive Maintenance intervals. Clamps equipped with force control technology require special considerations – consult Cascade. Refer to the attachment service manual to calibrate or check system performance.

Measure Clamp Force

- 1 If checking load holding capability of short arm check valves, assure that roll clamp short arm **is not** fully open.

NOTE: Connect digital-type Clamp Force Indicator to a power source. Measurements will be taken automatically.

- 2 Position Clamp Force Indicator solidly against short arm contact pad. Center pad surfaces vertically and horizontally.
- 3 Slowly clamp long arm against opposite pad. Clamp fully at 2/3rd throttle, holding CLAMP lever several seconds. Release and record initial display value. **Determine if value is correct and does not exceed clamp force recommended for rolls being handled.**

NOTE: Clamp Force required to prevent crushing is commonly marked on roll.

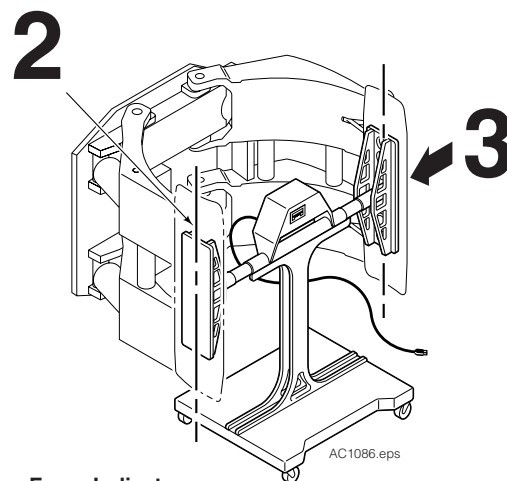
- If the gauge pressures drops more than 150 psi (10 bar) initially and an additional drop exceeds 25 psi (2 bar) per minute, the cylinder check valve cartridge or piston seals may be faulty. Continue troubleshooting using one of the following service manuals:

C&D-Roll Clamps – 667445

F-Roll Clamps – 674512

G-Roll Clamps – 213744

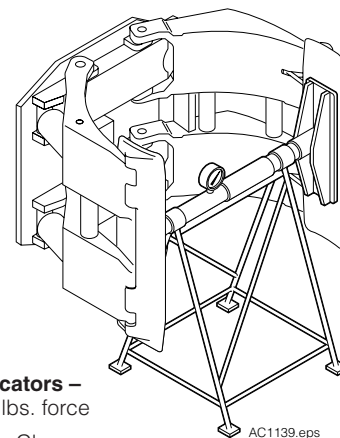
H-Roll Clamps – 6078255



Digital Clamp Force Indicator –
Measures up to 30,000 lbs. force

300G-DFI-812C – Split Arm Clamps
8 x 12 in. Radiused Pads

300G-DFI-824C – Solid Arm Clamps
8 x 24 in. Radiused Pads



Analog Clamp Force Indicators –
Measures 5,000 to 25,000 lbs. force

300G-CFI-812C – Split Arm Clamps
8 x 12 in. Radiused Pads

300G-CFI-824C – Solid Arm Clamps
8 x 24 in. Radiused Pads

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Internet: www.cascorp.com

Write: Cascade Corporation, PO Box 20187, Portland, OR 97294

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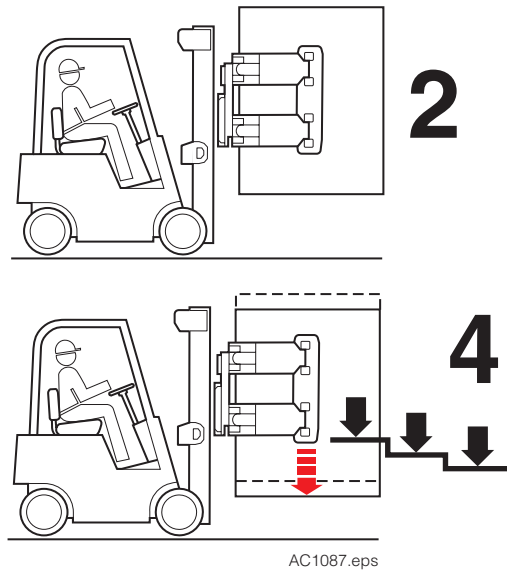
Internet: www.cascorp.com

Write: Cascade Corporation, 2501 Sheridan Ave., Springfield, OH 45505

Adjust Clamp Force

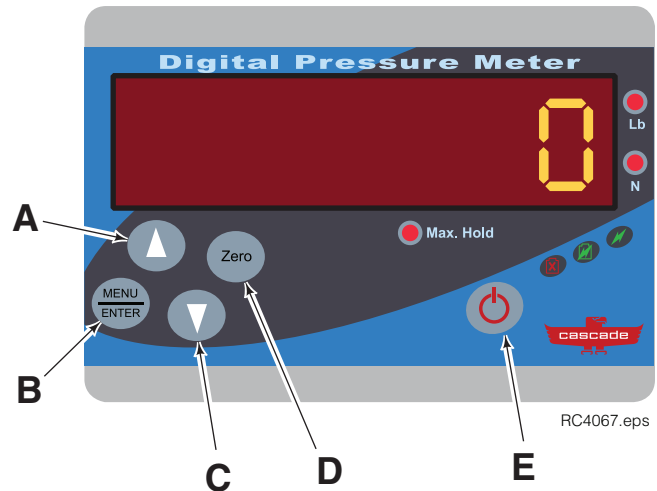
NOTE: For an expanded recommended procedure for setting clamp force, see Cascade Technical Bulletin TB 284 (Part Number 6053675).

- 1** Install a 5000 psi (345 bar) pressure gauge at the truck CLAMP supply terminal.
- 2** Clamp on a typical roll in the vertical roll handling position and slowly lift roll. If slippage occurs, increase truck system pressure in 100 psi (7 bar) increments until roll does not slip.
- 3** Lift roll 3 ft. (1 meter) and quickly lower roll, alternately stopping and lowering the carriage to determine if roll is slipping:
 - If roll **does** slip, increase truck system pressure in 100 psi (7 bar) increments until roll stops slipping.
 - If roll **does not** slip, the pressure may be set accurately. Go to Step 4.
- 4** Check rolls for damage to determine if there is excessive clamp force. If rolls are damaged, decrease truck system relief pressure in 100 psi (7 bar) increments until adequate clamp force is determined without damaging the roll.
- 5** Test Roll Clamp in a variety of operating conditions representing normal day to day operation. If roll slippage is reported by the driver, increase system pressure 100 psi (7 bar) and test again for secure clamping.
- 6** Keep a log of any roll slippage, pressure adjustments, and hydraulic system maintenance.



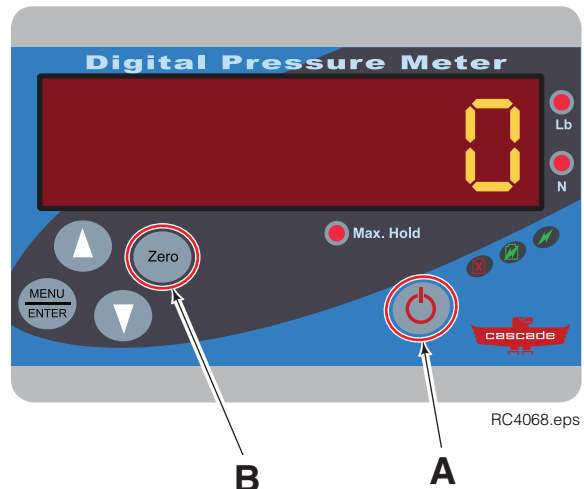
Digital Display Key Function

- A** – Up Arrow Button
- B** – Menu & Enter Button: For changing settings (Menu) and accepting an action or value (Enter).
- C** – Down Arrow Button
- D** – Zero Button: Zero's the display readout.
- E** – On/Off Button: Turns the display on or off. Hold the button until the screen changes.



Weight Mode

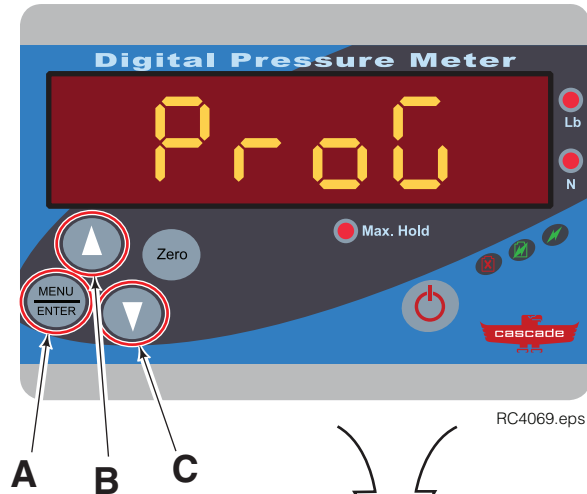
- A** Press the power button if the device is not on.
- B** Press the zero button to zero out any residual weight.
- C** Proceed with clamping instructions, as necessary.



User Settings Mode

To change settings for the indicator/display functions, use the diagram below.

To enter User Settings Mode, press the MENU/ENTER button (A). The display will show "ProG". To exit, hold the MENU/ENTER button (A) when "ProG" or "return" is displayed.



While in User Settings mode:

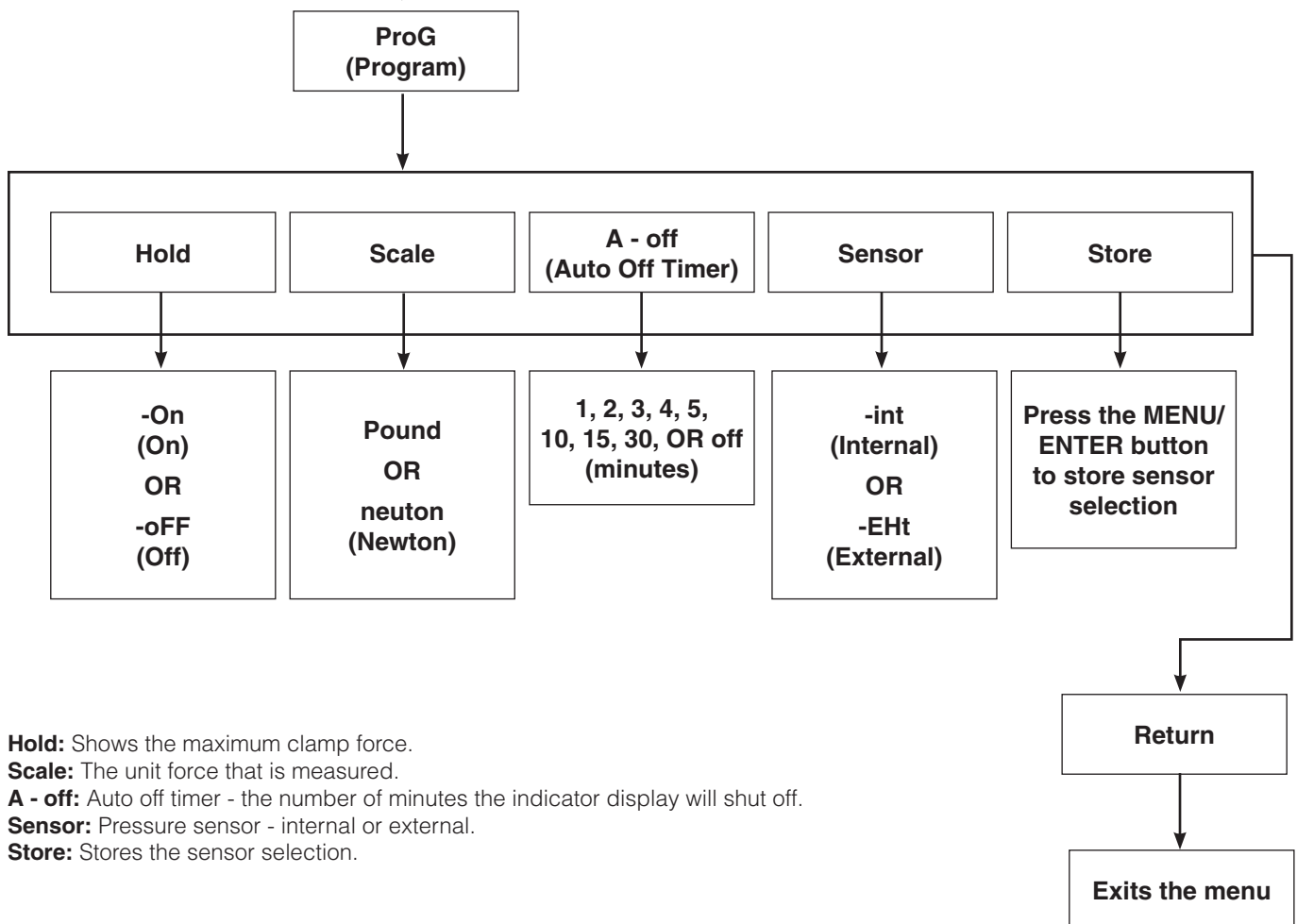
Main Menu -

- Press the Up (B) or Down (C) button to scroll through the setting title names.
- Press the MENU/ENTER button (A) to make a change to the displayed setting title by entering a submenu.

Submenu -

- Use the Up (B) and Down (C) buttons to scroll through the options.
- Press the MENU/ENTER Button (A) to accept.

NOTE: When in the "Sensor" submenu, once the option is selected with the MENU/ENTER button (A), then press Up button until "Store" shows on the display. Press the MENU/ENTER button (A) to store the sensor's selected option. Switch off the indicator/display and switch on for changes to be in effect.



Hold: Shows the maximum clamp force.

Scale: The unit force that is measured.

A - off: Auto off timer - the number of minutes the indicator display will shut off.

Sensor: Pressure sensor - internal or external.

Store: Stores the sensor selection.

Do you have questions you need answered right now?

Call your nearest Cascade Service Department.

Visit us online at www.cascorp.com

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