



2. Existing & Possible Solutions, Brainstorming

⚙ Status	Completed
➤ Sub-task	📁 2.3 Solution Decision Matrix , 📁 2.4 Solution Proposal , 📁 2.1 Technical Research , 📁 2.2 Realize Possibilities

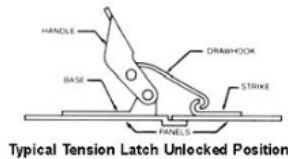
2.1 Technical Research

Camloc Tension Latches

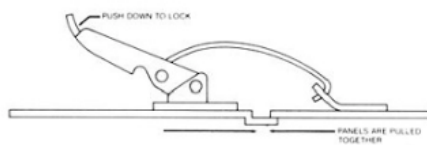
Light Duty, Medium Duty and Heavy Duty

Design and Features

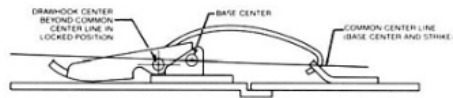
Basic Components:



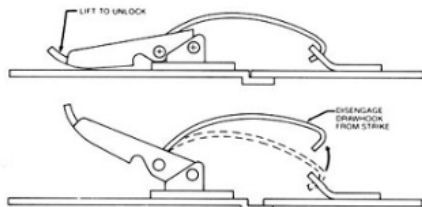
How It Operates:



With drawhook engaged in strike, a downward force is applied to handle causing draw hook to pull mating panels together.



Positive lock is achieved when drawhook center is beyond the common center line of the base and strike. Panels are held in place with tension load on latch.

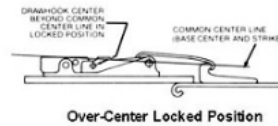
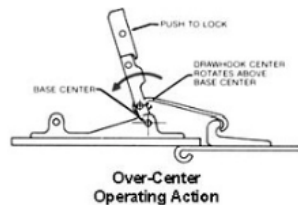


To unlock, simply pull up on handle and disengage drawhook from strike.

Operating Action:

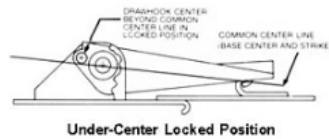
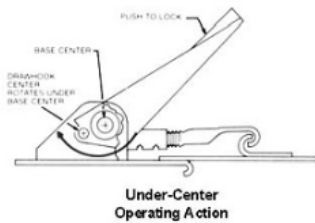
Over-Center and Under-Center.

There are two distinct operating actions for tension latches: over-center and under-center. Both provide positive lock-up.



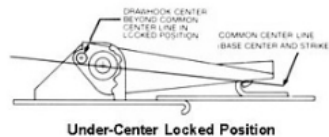
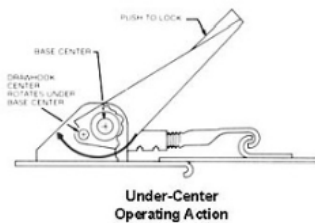
Over-center operating action rotates drawhook center over base center and comes to a locked position below the common center line of the base and strike. Its advantages are: low profile and large take-up.

Note: Strike must be mounted on same (or lower) panel plane as base of latch to insure positive lock-up.



Under-center operating action rotates the drawhook center under the base center and comes to a locked position above the common center line of the base and strike. Its advantages are: handle covers drawhook, short length and latch not sensitive to strike position.

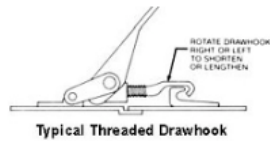
Take-Up:



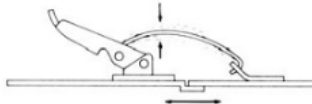
Take-up is the distance latch pulls two mating sections or panels together.

Camloc Tension Latches

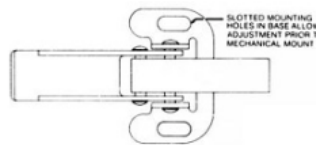
Adjustment:



Many latches are provided with threaded drawhooks. Adjustment of drawhooks' relative position to the strike is made by rotating the drawhook.



Self-compensating spring-steel drawhooks provide limited self-adjustment.



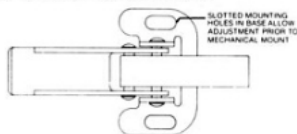
Strength: Ultimate and Working.

Ultimate strength is the load in pounds at which the latch's function is permanently impaired. Working strength is the maximum load in pounds which can be repeatedly applied without impaired function.

Special Purpose Bases:

Many special purposes are available.

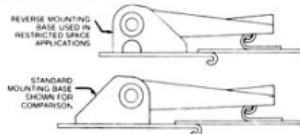
• Adjustable Slotted Base Versions.



• Radiused or Curved Base Versions.

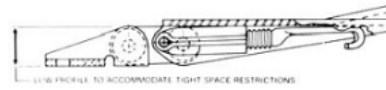


• Reverse Base Versions.



- Mechanical or Weld Mounting Base Versions. Base versions available for mechanical (rivet or bolt) mounting or weld (spot or conventional) mounting.

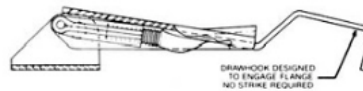
• Low Profile Versions.



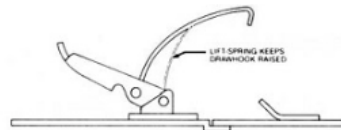
Special Purpose Drawhooks:

Many special drawhook versions are available including narrow or wide width for space consideration.

- Extended and Special Profile Versions for Gripping Wide Flanges or Spanning Raised Joints.



- Drawhooks with Lift-Spring - Drawhook automatically springs away from strike when disengaged and keeps in upright position while unlocked.



- Reverse Offset Drawhooks.



Secondary Lock Versions:

Secondary lock provides added security against accidental opening due to vibration, shock or other influences. Many secondary lock versions available.

- Some Secondary Lock Styles.



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2.2 Realize Possibilities

