

## Zero-Torque Cam and Keeper

### Advantages of Zero Torque

*Powerbrace offers a unique design in one family of cams and keepers that feature zero torque, with the cam closing in an over-center position so it wedges more tightly closed when pressure is applied against it. This provides extra protection from a door flying open when a load shifts against the door.*

### A Unique Cam Design

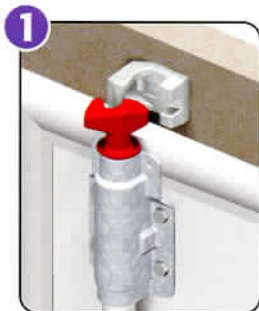
When opening and closing the door with a Powerbrace Zero-Torque cam and keeper, the special shape of the cam aligns it with the keeper as it makes contact. The double-toothed shape of the cam is then rotated into place in the slotted keeper, moving past dead center to stay firmly secure. If force is applied inside the trailer, the beveled surfaces of the cam and keeper work together as a lever, giving maximum effectiveness to the door closure.

### Secure Closure

The Zero-Torque cam and keeper operate like a locking pliers or a toggle clamp, with pressure against it only forcing it more tightly closed. With typical cam/keeper models, forces against the inside of the door try to rotate them open.

If a load has shifted during transit, or livestock is pushing against the door from the inside, a Zero-Torque cam/keeper gives warning in the form of feedback against the lever that there is a load on the door. With other cam/keepers, the person opening the door may find a load falling out when the door opens suddenly.

The Zero-Torque cam/keeper also provides extra leverage when closing the door. This is very useful when hauling livestock, since once the lockrod is rotated past center, any force against the door closes the lockrod even tighter, even before the lever is engaged in the seal plate.



1 Cam starting to engage keeper.



2 Cam leveraging door towards closed position.



3 Cam rotating over center.

## Zero-Torque Cam and Keeper *(continued)*

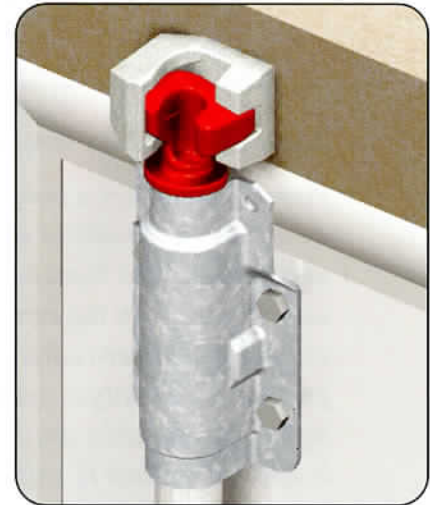
### *Advantages of Zero-Torque Cam and Keeper*

Benefits of using the Powerbrace Zero-Torque cam and keeper include:

- Cancels out the destructive reverse-leverage action resulting from a load pushing against the door, which is detrimental to ordinary locks.
- Provides leverage to close the doors.
- Gives secure closure because the more load against the door from the inside, the tighter the lockrod engages.
- Allows controlled opening of the door, even with pushy livestock.
- Provides icebreaker action to give leverage to open frozen doors.

### *What Is the Most Important Thing about the Zero-Torque Cam/Keeper?*

The unique design of this over-center cam/keeper allows secure closure of the door when a load is applied against it from the inside. It also provides controlled opening and closing of the door because of its leveraged design.



Cam and door fully closed.



#### *For Further Information:*

If you have any questions about the Powerbrace Zero Torque cam and keeper, please call our Customer Service Department at **262.697.5328**.



#### *Check Our Web site*

Additional information is available at [www.powerbrace.com](http://www.powerbrace.com).

## POWER



## BRACE

CORPORATION

Powerbrace Corporation  
7640 60th Avenue  
Kenosha, WI 53142  
**P 262 694 3202**  
**F 262 694 8367**

[www.powerbrace.com](http://www.powerbrace.com)  
a subsidiary of Miner Enterprises