



Installation Instructions

Lockey® TB 250/450/650 Plus Hydraulic Pedestrian Gate Closer (with hydraulically adjustable closing speed)

The Lockey TB 250/450/650 Plus Pedestrian Gate Closer is a fully featured commercial closer that provides consistent automatic closing without slamming. This gate closer has an adjustable closing speed and a choice of bracket fitting holes giving more control of the gate when closing.

Mounted on the gate surface, the Lockey TB Plus Pedestrian Gate Closer is suitable for retrofitting to existing gates and for fitting to new gates at the time of fabrication.



Each gate closer kit includes a closer, brackets, fitting bar, and instructions. Mounting bolts and screws are not included as they vary according to the gate and post specification.

Maintenance is only regular inspection and lubrication.

Closing speed is adjusted by turning a hexagon headed screw located on one eyelet.

As with all gate closers of this type, it is advisable to fit a 'stop' restricting the opening angle to avoid damage to the closer.

Features

- Automatic close of gates up to 72" wide and 250 lbs.
- Hydraulically controlled nitrogen powered closing
- Installs on gate post and top, middle or bottom of right or left hand gate
- Mounts on opening side of gate to push gate closed
- Maximum opening angle up to 110° depending on hinge arrangement
- Mounting brackets and fitting bar included

Quick reference

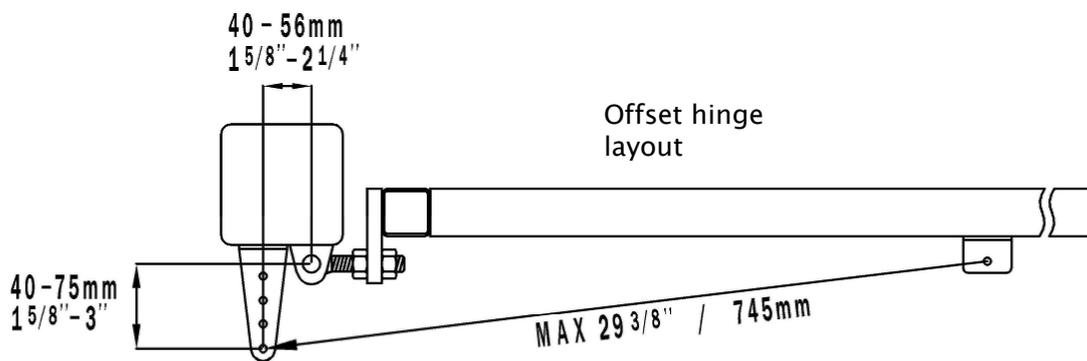
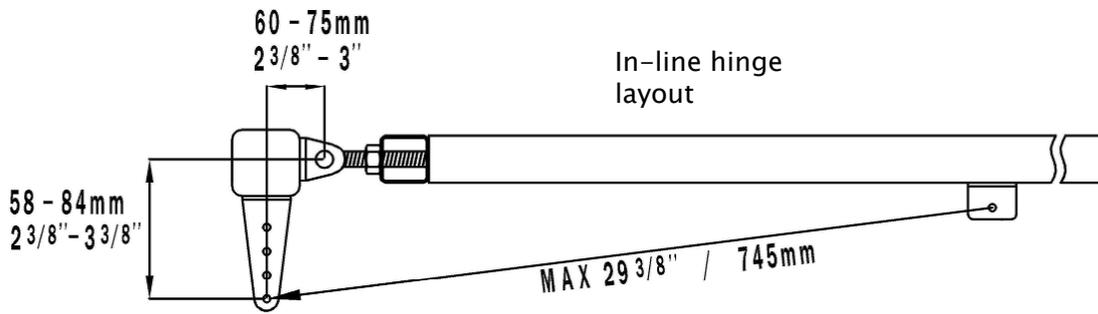
Model	Gate Width	Gate Weight
TB250 Plus	36-50"	75-160 lbs.
TB450 Plus	40-64"	75-175 lbs.
TB650 Plus	44-72"	150-250 lbs.

Technical overview

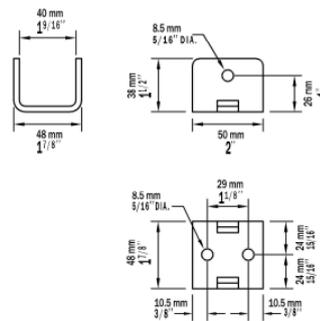
	TB250 Plus	TB400 Plus	TB600 Plus
Max. opening angle	90° plus depends on hinge	90° plus depends on hinge	90° plus depends on hinge
Type of gate material	Metal, wood, vinyl	Metal, wood, vinyl	Metal, wood, vinyl
Closing / latch speed	Adjustable	Adjustable	Adjustable
Closer material	Bright zinc plated steel	Bright zinc plated steel	Bright zinc plated steel
Hinge arrangements	In-line and offset	In-line and offset	In-line and offset
Opening pressure	Approximately 3-7 lbs.	Approximately 6-12 lbs.	Approximately 8-18 lbs.



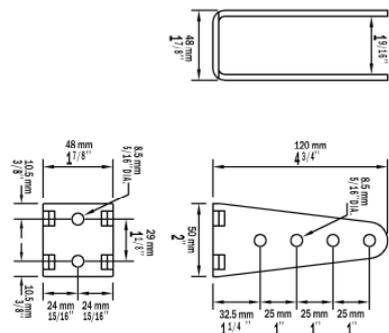
Installation Drawings



Gate Bracket



Post Bracket





NOTE: DO NOT ALTER SPEED ADJUSTMENT SCREW BEFORE COMPLETING INSTALLATION



Fig. 1 Speed Adjustment Screw



Fig. 2 Gatepost Bracket

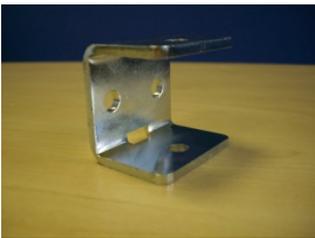


Fig. 3 Gate Bracket



Fig. 4 Hexagon Headed Securing Pins



Fig. 6 Button Head Socket Cap Screws with Plain Washers



Fig. 7 Black Fitting Bar



NOTE: DO NOT ALTER SPEED ADJUSTMENT SCREW BEFORE COMPLETING INSTALLATION

Step 1 - Fix gatepost bracket to the gatepost using a temporary clamp and using the dimensions shown on page 2.

Step 2 - Using one of the hexagon headed securing pins, place one end of the fitting bar to the gatepost bracket hole farthest away from the gatepost. Fix the gate bracket to the fitting bar using the other hexagon headed securing pin, and then swing the bar and the bracket around to the gate, ensuring that the brackets are horizontally in-line with each other. Fix to gate using a temporary clamp. Remove the fitting bar.

Step 3 - Open the gate to 90 degrees and make sure the distance between the centres of the gatepost bracket hole and gate bracket hole are 22 in. or more. If you have an in-line hinge arrangement check that the two holes closest to the gate post have a distance 22 in. or more between hole centers. If you have an offset hinge arrangement check that the two holes farthest from the gate post have a distance of 22 in. or more between hole centers.

Step 4 - After confirming the gate-opening angle is sufficient; mark the fixing holes for the two mounting brackets on the gatepost and gate. Drill and tap the fixing holes in the gatepost and gate, and fix the mounting brackets to the gatepost and gate. Alternatively, weld brackets to gatepost and gate.

Step 5 - Grease the nylon spacers and hexagon headed securing pins. Open the gate until the holes on the mounting brackets align with the holes in the gate closer cylinder. Then fit the gate closer cylinder and spacers to the mounting brackets on the gatepost and gate using the hexagon headed stainless steel securing pins making sure the speed adjustment screw is facing away from the gate.

Step 6 - Turn the speed adjustment screw on the closer counter-clockwise and the gate will begin to close automatically.

Step 7 - Test that the gate opens and closes correctly and that the hand force needed to open the gate is appropriate. If the hand force is too much, open the gate a little, turn the closing speed adjustment screw fully clockwise to hold the closer slightly compressed, remove the hexagon headed securing pin from the gatepost bracket and move the closer one hole nearer to the gatepost. Refit the hexagon headed securing pin. Repeat steps 6 and 7 until gate operates correctly, and finally, adjust the closing speed.

Step 8 - Fit a mechanical stop to restrict the gate's opening angle. To do this, open the gate to a position where the distance between centers of the hexagon headed fixing pins is 22 in. or more. Set the gate's mechanical stop to restrict the opening at this point.

Step 9 - Check all bracket fixings are secure. Fit M6 socket button head screws and washers into the underside of the hexagon headed stainless steel securing pins using a thread locking liquid.

Step 10 - If the brackets have been welded, paint brackets and gate parts as necessary. Finally, coat the eyelets, exposed parts of the stainless steel fixing pins and socket button screws with a layer of grease. The gate closer is now ready for use.

Step 11 - Review the maintenance instructions on the following page and ensure that regular maintenance is completed on the gate closer.



Maintenance

Regular maintenance is required to ensure the maximum life of the gate closer and the safety of the users. The regularity of maintenance should reflect the frequency of use, environment and the likelihood of vandalism or misuse. Should you require more information about gate closer maintenance, please contact us using the contact information at the bottom of the page.

The following checks and lubrication should be regularly completed:

- 1) Check to ensure all fixings are secure
- 2) Check gate closer, brackets and eyelets are not damaged or worn
- 3) Coat eyelets, securing pins and button head socket screws with lithium grease and periodically remove closer and coat fixing pins and spacers with lithium grease
- 4) Remove gate closer immediately if it malfunctions in any way or in the event of any damage

Usage

Lockey TB250/450/650 Plus Pedestrian Gate Closers are suitable for medium use gates. To ensure the maximum life of the closer, follow the following instructions as closely as possible:

- 1) Encourage users to allow the gate closer to close the gate and not to push or pull the gate closed
- 2) Should the gate have a high usage period, it will not damage the closer if the gate is temporarily held open by a drop bolt, hook or similar device

Disclaimer

LockeyUSA will not accept any liability whatsoever for damage caused by incorrect fitting, misuse, or incorrect assessment of the application. In purchasing this product, the purchaser accepts all responsibility for the installation, operation and maintenance of the product.

For more information, please review LockeyUSA's full warranty at www.LockeyUSA.com.

REFERENCE INFORMATION – OPENING FORCE CHART

Although each hinge arrangement and weight will vary from gate to gate, the Opening Force Chart will give you an understanding of the approximate added opening pressure.

Gate Closer	36" Gate	48" Gate	60" Gate	Constant Closing Pressure	Approximate Width	Approximate Weight
<i>Added Opening Force</i>				0 lbs		
No Closer	3/4 lb.	1/2 lb.	1/4 lb	45 lbs.	36-50 inches	50-160 lbs.
TB250 Plus	6 lbs.	4 lbs.	3 lbs.	90 lbs.	40-64 inches	75-175 lbs.
TB450 Plus	10 lbs.	8 lbs.	6 lbs.	135 lbs.	44-72 inches	150-250 lbs.
TB650 Plus	13 lbs.	10 lbs.	8 lbs.			

<i>Added Force at 45° Open</i>			
TB250 Plus	7 lbs.	5 lbs.	4.5 lbs.
TB450 Plus	13 lbs.	9.5 lbs.	8 lbs.
TB650 Plus	18.5 lbs.	13.5 lbs.	12 lbs.

Note:

All measurements are taken using the 1st mounting hole on the post bracket with a 3" distance between the center of the hinge and the center of the post mounting bracket. The opening pressure will INCREASE using the 2nd, 3rd and 4th holes. These are "Added" opening pressures. This chart DOES NOT take into consideration the hinge arrangements, quality of hinges, ease of operation, wind, etc. For more information visit www.lockeyusa.com