

# Technical Bulletin

## Proper Operator Tensioning

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*Our Technical Bulletins are provided to inform you of design options, design improvements, standard sizes and changes, different models, applications, installation, operation and maintenance.*

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**The R•O•M Roll-up Shutter Door has been factory set so the spring tension of the operator is at equilibrium; meaning approximately the same force is required to open or close.** This counterbalance setting will ensure the maximum life expectancy of the roll-up door and provide consistent operation. Too much tension creates too much force to close the door thus creating more stress on the operator spring, end shoes, and slats. If you feel it is necessary to adjust the operator tension due to a variance in compartment size and actual installation, this can be done easily by following the steps below:

### **Please read the following before making any adjustment to the R•O•M Roll-up Door**

1. Make sure all screw heads on the pennant plates and sidetrack channels are not protruding; the nylon end shoes should not touch the screws during operation.
2. Check the compartment to see if it is square. The door will work much easier if the compartment is square. Ideally the roll-up door should have ¼" of the total side play when moved laterally at any point. Check the alignment of the pennant plates. They should be parallel and equal distance from the front and bottom of the opening.
3. If the door is difficult to open and close, the roll-up door may need to be lubricated.
4. If the door opens easily and is difficult to close there may be too much tension. If the door is difficult to open and easy to close and/or the curtain drapes loosely around the operator drum, there is not enough tension. If the roll-up door does not perform to your satisfaction, the tension of the operator may need adjustment.

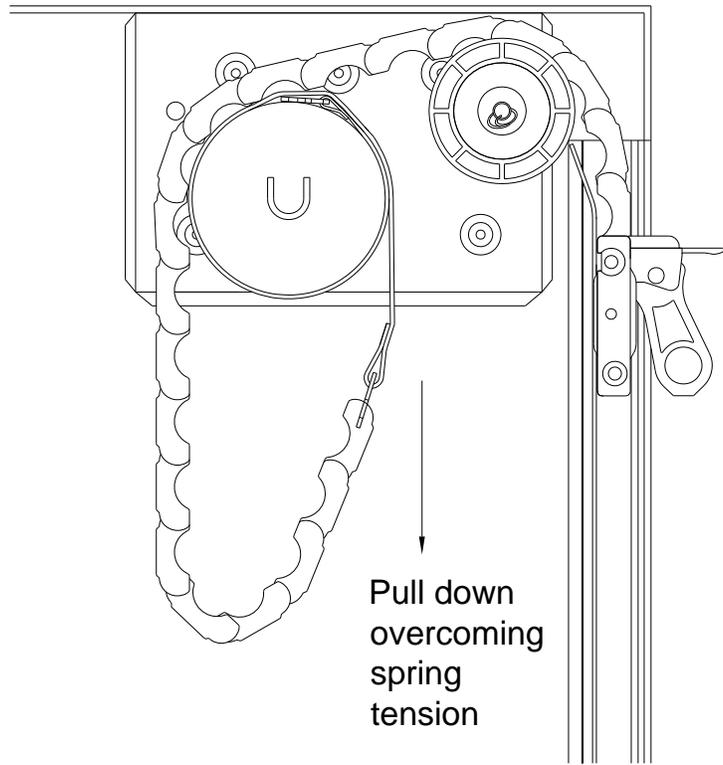
Note: The factory number of turns is identified on a label located on the right side of operator drum.

***Please provide this information to your engineering, manufacturing, sales and marketing departments, and to your dealers.***

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## A. Adjusting the tension if the compartment is easily accessible

1. Open the roll-up door completely.
2. Pull down on the bottom of the roll inside the compartment (Ref. Fig. 1) overcoming spring tension. Pull the curtain of the roll-up door all the way down so that the operator can be reached.
3. Put the tension pin (nail) back into the hole of the nylon end cap that is located on the right side of the roll-up door while looking into the compartment. You may need to slightly turn the operator clockwise (towards back of compartment) to align the holes of the end cap with the shaft. The tension pin is always oriented horizontally.



*Ref. Fig. 1*

4. Remove the operator securement fasteners (Hex Head Cap Screw;  $\frac{1}{4}$ -20 x 1  $\frac{1}{4}$ " &  $\frac{1}{4}$ -20 nut) at each end of the operator shaft.
5. Turn operator clockwise one or one-half turn to decrease tension or counterclockwise one or one-half turn to increase tension.
6. Replace the operator securement fasteners at each end of operator shaft.
7. Remove the tension pin and slowly allow tension to be transferred back onto the roll-up door curtain.

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## **B. Adjusting the tension from outside the compartment**

If you cannot physically access the operator using the method in Section "A", you must remove the roll-up door's track and curtain.

1. Raise the roll-up door to its open position. Remove all of the fasteners from the track and pull the track out and away from the compartment.
2. Carefully pull the roll-up door down until the top slat with the strap attachment is sufficiently exposed and the operator can be reached.
3. Put the tension pin back into the hole of the nylon end cap that is located on the right side of the roll-up door while looking into the compartment. You may need to slightly turn the operator clockwise to align the holes of the end cap with the shaft. The tension pin is always oriented horizontally.
4. Remove the curtain by separating the t-clip strap connection. To separate, lift up on the roll-up door, rotate clip, and push down and away on the clip.
5. Grip the operator firmly with both hands and have someone remove the locking nail. Turn operator clockwise one or one-half turn to decrease tension or counterclockwise one or one-half turn to increase tension.
6. Replace the tension pin and re-attach the straps to the top slats.
7. Remove the tension pin and slowly allow tension to be transferred back onto the roll-up door curtain. Route the curtain over the nylon rollers and raise the curtain up to the header. Re-install track.

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