WHITING® Roll-Up Door Maintenance Procedure

For doors equipped with CommandLIFT™ power door opener.

Caution - work on doors and related parts can be dangerous. It is strongly recommended that repair service work be performed by persons who have successfully completed appropriate training. If assistance is required, please contact WHITING® for a list of appropriate service locations.

Remember – appropriate Personal Protective Equipment must be worn at all times. This includes safety footwear, eye glasses, gloves and any other equipment made necessary by the surrounding environment. Failure to do so could result in serious injury!

Regular maintenance, including lubrication, on your **WHITING**® Roll-Up Door is imperative for long term, trouble free operation.

When the door is operated by an automatic door system, such as CommandLIFT $^{\text{TM}}$, adjustment problems could go unnoticed due to the fact that there is no physical effort required to raise and lower the door.

These maintenance steps are relatively easy and will eliminate future problems and equipment downtime.

General Inspection and Trouble Shooting Frequency: WEEKLY

Prior to maintenance procedures it is recommended that you wash the door, inside and out. Remove any built-up grease, oil and debris from the door surface and tracks.

Inspect the outer face of the door for damage, repair as necessary. Check the cables for fraying. Inspect the side seals and ensure they are against the face of the door and not torn. Check the top panel to ensure the seal is engaged against the header.

From inside the trailer, with the door lowered, check the hinges and rivets to ensure they are all in place and in good condition. Check to ensure all the rollers are in place and there are no broken tires. Check the condition of the track. Look for damage caused by pallets and lift trucks - usually close to the bottom of the tracks. Any track damage needs to be repaired immediately, as this can cause roller and or hinge failure. It can also cause a binding point in the movement of the door, making the door difficult to move up and down. Look at the relation of the edge of the door with the edge of the track on both sides. The "gaps" should be equal. If the door is all the way to one side, it could be an indication that one of the springs has more tension than the other. It could also be an indicator that the springs are not properly positioned on the balancer shaft.

Always use authentic **WHITING**® replacement parts to ensure compatibility and longevity of repairs.

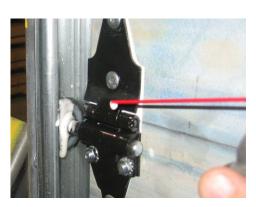
LUBRICATION Frequency: MONTHLY

One of the easiest and most effective methods to keep your roll up door operating smoothly is regular lubrication. There are numerous moving parts on a roll up door that, if neglected, will cause friction and premature failure. Roller bearings and shafts, hinge pins, and cable drum bearings all require lubrication. Photos below demonstrate lubrication points.

<u>DO NOT USE GREASE OF ANY KIND!</u> Grease sits on the surfaces and attracts dust, dirt and salt. The recommended lubricant is environmentally friendly, **WHITING**® brand EASY UP™ spray lubricant available from your local **WHITING**® dealer. Wipe excess lubricant from surfaces.



END HINGE PIN & ROLLER SHAFT



ROLLER BEARINGS



CENTER HINGE PIN



CABLE DRUM BEARING



SPRING WIRE RUST INHIBITOR

BALANCER ADJUSTMENT Frequency: QUARTERLY

A properly balanced door is the one most important aspects of keeping the door working smoothly. It is also one of the most overlooked. Time and the elements affect the tension on the spring that lifts the door. Over time, the spring wire will corrode and loose effective wire diameter. The springs themselves also get tired, which is to mean, over repetitive cycles they loose their tensile strength. An average spring for a **WHITING**® door should last 15,000 to 25,000 cycles, depending on door type, maintenance and working environment. As the door gets older, it will seem to get heavier, at this point the springs need to be adjusted and the bearing in the cable drums need to be lubricated. There will be a point when the spring can no longer be adjusted and must be replaced. Replace the balancer and cables at the same time.

Be sure to lubricate door as described above before checking the balance of the door. If you balance the door before lubrication, you may find it has too much tension after lubrication. This is because you have balanced the door to overcome the friction of dry rollers and hinge pins.

Adjust and lubricate balancer as follows:

- **1.** raise the door to the fully open position,
- **2.** remove turnbuckle link from CommandLIFT™ and the door connector plate,
- 3. open CommandLIFT™ lever cover and remove emergency cable from lever. Remove emergency cable from drive unit,
- **4.** the door is now free to move up and down manually,
- 5. lower door and check to ensure it doesn't come down or up too fast, a properly balanced door won't roll up unassisted, or fall to the sill. It shouldn't be too heavy to lift or too hard to pull down,
- **6.** if the door is heavy to lift or falls down to the sill, the balancer will need more tension.
- **7.** if the door flies up unassisted and is difficult to close, the balancer needs to have tension removed,
- **8.** fully open the door and push back towards the front of the trailer approximately 18", this may require the assistance of another person or a spreader bar placed between the header and the bottom of the door,
- 9. install vice grip pliers into the track at the bottom roller to hold the door in position while working on the balancer,
- 10. the springs should have equivalent tension, for this reason it is important to count the number of turns either put on or removed from each spring, this is easily done by placing a mark on the winding anchor before doing any adjustments,
- 11. insert winding bar into one of the holes on the winding anchor and carefully loosen set screws, lower the winding bar to add tension, raise the winding bar to remove tension, insert the second winding bar into the next hole on the winding anchor and repeat the process until the desired tension is achieved. Amount of tension to be added or removed depends on type of door,age of balancer and how far out of adjustment it was before maintenance. Adjusting the springs ½ revolution at a time is a safe method and usually effective.
- **12.** retighten all set screws, remove winding bars
- 13. repeat for other side, be sure to add or remove and equivalent amount of tension as you did on the first side,
- 14. using Whiting Easy-UP™ spray lubricant, spray the bearing in the ends of the cable drums and over the spring surface, use a rag to wipe excess lubricant from springs
- **15.** remove vice grip pliers from track
- **16.** test door manually
- **17.** reconnect CommandLIFT™
- **18.** test door with power opener