



Shaver Industries

20 Steckle Place, Kitchener, ON N2E 2C3
Ph 1(888) 766 8328
www.shaverinc.com

Composite Draw-Tite Cord Field Replacement

The field replacement of your custom engineered Composite Draw-Tite Cord is a simple operation that only involves a few steps. Performing all of these steps in the proper order is important for the reliability of you overall door assembly.

- Open your door to the full “UP” (Open) position.
- Completely remove the vertical extrusion that contains the damaged Draw-Tite cord. This is done by removing the fastener that secures the extrusion to the upper bracket, and the two fasteners that secure the extrusion to the building.
- Lay the extrusion on a flat surface and remove the old cord as required.
- Feed the “unfinished” end of the new Draw-Tite Cord through the Lower Pulley Housing (located at the bottom of the extrusion) and into the protective Teflon sheath. It is important that the cord passes through the housing and enters into the sheath as shown in the following photo (Photo 1):



Photo #1
(Inserting DT Cord)

- Continue to feed the cord through the sheath until the unfinished end exits the sheath at the top of the extrusion.
- Crimp the included terminal onto the unfinished end of the cord. The use of the terminal is not mandatory.
- Reinstall the vertical extrusion and follow the original instructions and procedure for setting the cord tension. (Attached below)

Installing Draw-Tite Cord:

To install the Draw-Tite cord first position the door in the fully Open (UP) position. Remove the Phillips fastener located at the bottom corner of the “Box Valence” (the vinyl wrap covering the upper box section) and roll back the vinyl to expose the idler end of the roll tube. Make sure that the Draw-Tite cord is properly routed around the pulley at the bottom of the vertical extrusion and is not trapped between the extrusion and the floor. Locate the top end of the cord where it exits the protective Teflon sleeve and pull out 6-8” of cord as shown in the following photo (Photo 2):



Photo #2
(Draw-Tite Cord)

Using the access hole on the side of the angle bracket, insert the cord between the bracketry and the black Take-Up Drum, and then over the shaft of the idler bearing. A spring hook or piece of wire with a hook bent on the end may be useful for this operation. After the cord has been routed it should resemble the following photos (Photos 3 & 4)(your door may or may not have the bronze colored rollers depending on the configuration):

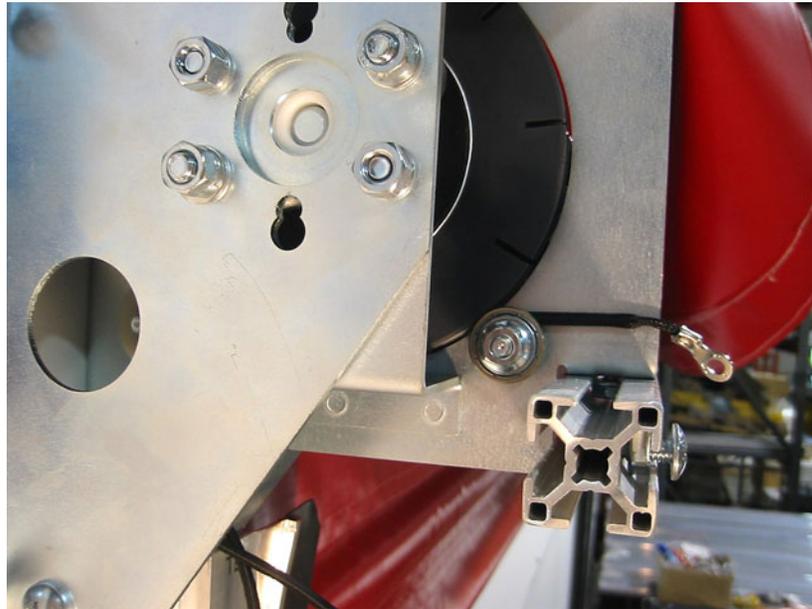


Photo #3
(Draw-Tite Cord Routing)

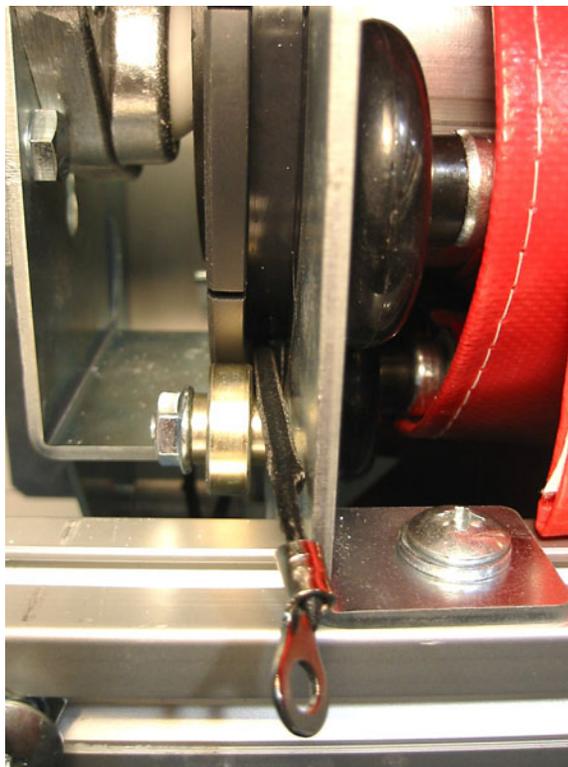


Photo #4
(Draw-Tite Cord Routing)

Using the access hole, route the cord over the edge of the white guide pulley as shown in the following photo (Photo 5):



Photo #5
(Draw-Tite Cord Routing)

Use your finger to stop the white guide pulley from freely turning and pull on the free end of the cord. This should cause the cord to “snap” into the groove of the white pulley and be properly aligned with the large groove in the black Take-Up Drum. The proper routing for the Draw-Tite cord is shown in the following diagram (Diagram 1):

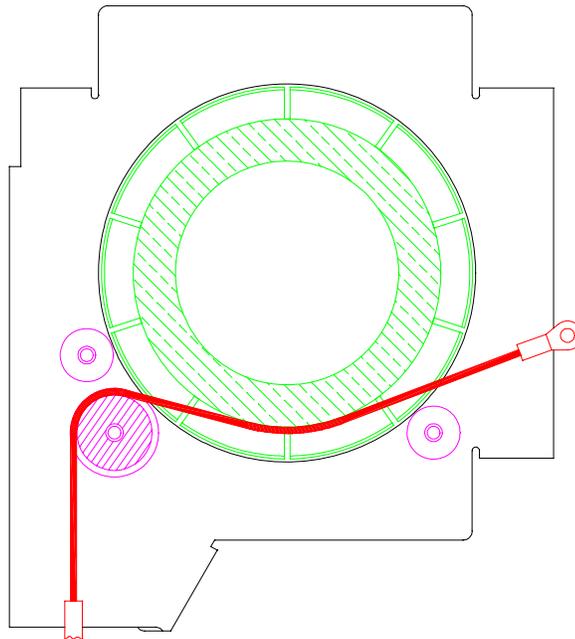


Diagram #1
(Draw-Tite Cord Routing)

Grasp the “ring terminal” end of the cord and engage the body of the cord with the slot on the Take-Up Drum closest to the 3 o’clock position. If in doubt, use the slot *above* the 3 o’clock position. The cord should be engaged into the slot per the following photo (Photo 6):

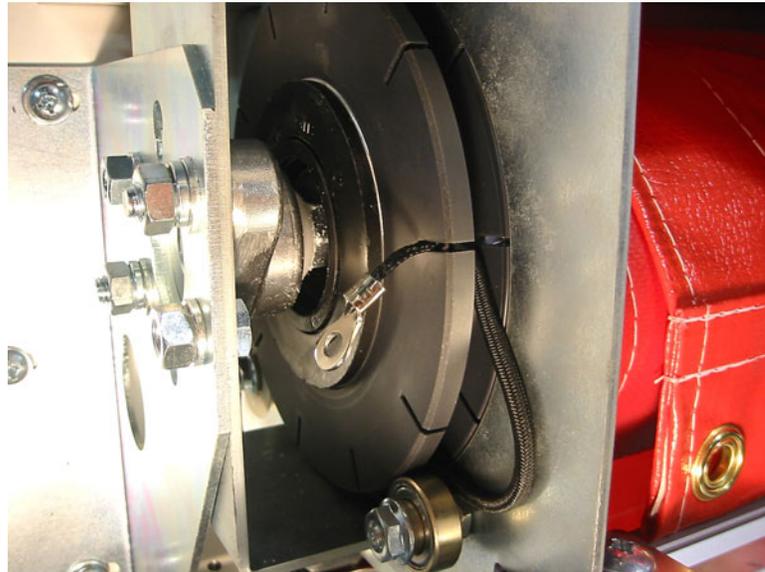


Photo #6

(Draw-Tite Cord to Take-Up Drum Engagement)

Grasp the bottom stiffener (above the chain pocket) on the door and lift the lowermost roller up and out of the funnel bracket. If the roller hits the other rollers and cannot be swung clear of the funnel, carefully “jog” the door down a few inches until there is clearance. When you are done the roller and bottom of the door should be free of the vertical extrusion as shown in the following photo (Photo 7):



Photo #7

(Lower Roller Removed from Track)

Go to the bottom of the vertical extrusion and locate the end of the Draw-Tite Cord with the large eyelet. Make sure that the cord is properly routed through the lower white pulley. Grab the eyelet, and while stretching the cord bring the eyelet up to the exposed lower roller on the bottom of the door per the following photo (Photo 8):

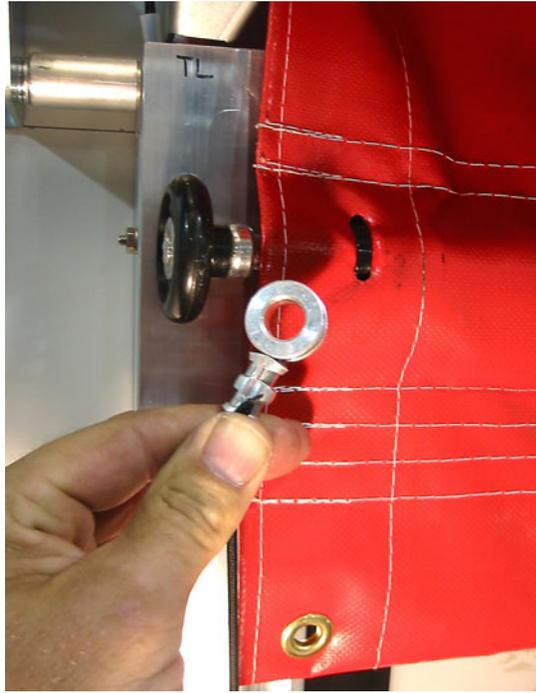


Photo #8
(Lower Roller and Draw-Tite Cord)

While holding the cord, slide the lower roller out of the bottom stiffener. Slide the shaft of the roller through the eyelet and then back into the bottom stiffener. The eyelet will end up behind the front vinyl surface as shown in the following photo (Photo 9):



Photo #9
(Lower Roller and Draw-Tite Cord Installed)

Raise the bottom stiffener and feed the lower roller back into the funnel bracket and vertical extrusion per the following photo (Photo 10). Be careful with the Draw-Tite cord and make sure that it goes into the vertical extrusion. Go down the entire length of the vertical extrusion and ensure that the cord has entered the track and is not caught on the EPDM (Neoprene) track seals. Once again check to make sure that the cord is properly routed around the lower pulley.



Photo #10
(Lower Roller Reinserted in Vertical Extrusion)

Adjusting the Draw-Tite Tension:

Proper Draw-Tite tension is critical for the proper performance of your door. By design, the cord will be elastic throughout almost the entire travel of the door. When the door reaches the fully closed position the elasticity is absorbed and the cord tension becomes quite firm. The useful length of the cord needs to be adjusted so that the tension becomes firm at the correct point in the door travel.

Note: The cord tension is tested with the door in the fully closed position. The cord tension is adjusted with the door in the fully open position. Internal tube motors have a limited duty cycle and rapid cycling from open to closed may cause the motor to thermally “trip” (overload). If this happens the door will stop moving and it may take up to 10 minutes for the internal protection to reset.

Close the door using the operator station. Observe the action of the door and watch for any binds or “hang-ups” during the travel. Resolve these issue before continuing with the adjustment procedure.

Grasp the lower stiffener on one side of the door and pull gently upward per the following photo (Photo 11):



Photo #11
(Checking the Draw-Tite Tension)

The door will typically move upward under relatively light tension for some distance (inches) and then a firm resistance will be felt (~15lbs force). Note the distance that the door traveled before the resistance was felt.

Open the door using the operator station. If the distance that the door traveled exceeded 3” (three inches), move the Draw-Tite cord up to the next available slot in the Take-Up Drum and repeat the testing process. If the cord is already in the highest available slot, move on to the next step.

Grasp the eyelet at the end of the cord and pull firmly until a few inches of the cord have passed through the slot. Release tension and the cord will lock into position as shown in the following photo (Photo 12):

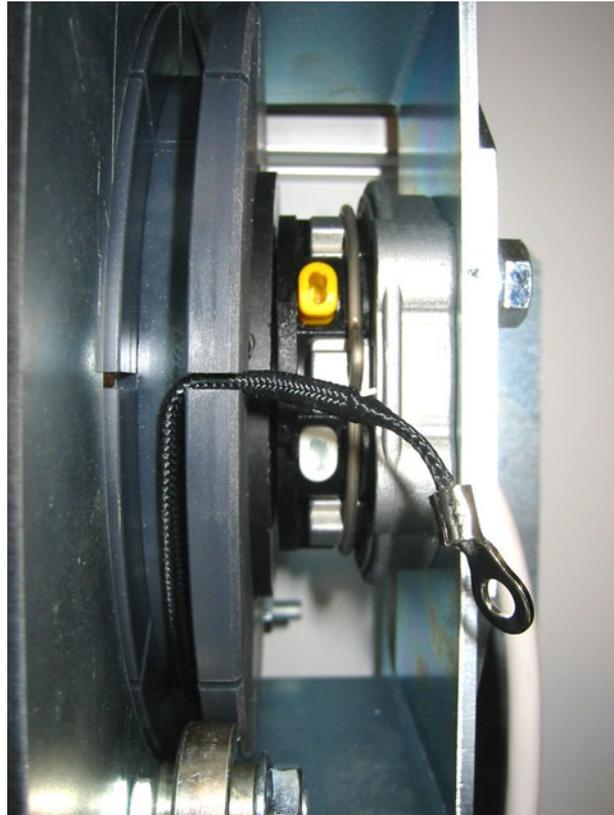


Photo #12
(Adjusting the Draw-Tite Tension)

The amount of cord that you pull through the slot (relaxed) should roughly equal the amount of door travel that you measured during the testing step.

Close the door and retest the tension. Repeat the process as required until you have only ~1” of travel before the tension is felt. It is “OK” to have up to ~6” of cord “pigtail” exposed at the Take-Up Drum. If the pigtail is longer than that you should tie a couple of loose knots in the pigtail to ensure that the eyelet doesn’t get caught on any of the surrounding hardware.

Repeat the entire tension adjustment procedure on the other side (left/right) of the door.

After the tension is properly set you can use the limit switch (end stop) adjustment procedure to finalize your “Closed” position. This position should be set so that the bottom chain pocket comes in contact with the floor along the entire width of the door and compresses slightly (~1”). Do not set the door for more compression than that. Doing so may damage the Draw-Tite mechanism or hinder the operation of the Safety-Edge.