Spring Replacement – Roof Scuttle – Steel

Spring Removal

Tools needed for this procedure: *Two 9/16 box end wrenches, Bilco RS spring compression tool (TL-03 or TL-05), needle nose pliers*

Note: When replacing springs make sure to replace them one at a time and make sure the hold open arm is securely in place.

1) Open the cover of the door.

2) Using the 9/16 wrenches, remove the nut from the bolt, leaving the bolt holding the spring in place. (Figures 1 and 2)

Figure 1

Figure 2

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3) Using the appropriate RS spring compression tool (shown below) press down on the handle, allowing the bolt to be freely removed. Note: With the bolt removed, there is nothing holding the spring back other than your force with the compression tool. (Figures 3a, 3b and 4)

Figure 3a
TL-05 (for large steel springs)

Figure 3b
TL-03 (for small steel springs)

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Figure 4

4) Slowly ease the pressure off of the spring, allowing it to expand to its full length. (Figure 5)

Figure 5

5) With the spring fully expanded, remove the spring and tubing. (Figures 6 and 7)

Figure 6

Figure 7

6) This concludes the removal of the spring.

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Spring Installation – Pre-Compressed Spring

*Note: The following steps are for installation of a pre-compressed spring. If you do not have a pre-compressed spring, skip to step 11 for installation of a spring with a spring tool.

7) Rotate the spring upward so that it can be positioned in line with the bracket on the cover. You may have to slightly lower the cover in order for them to line up correctly. Once lined up, slide the bolt through the hole. Note: For doors that do not open to a 90-degree angle the hold open arm must be disconnected. (Figures 8 and 9)

Figure 8

Figure 9

8) Once the bolt is through the hole, put the nut on the other side and tighten it with the two 9/16 wrenches. (Figure 10)

Figure 10

9) Now that the spring is securely in place, break the plastic tie and use it to remove the pin that is holding the spring in a compressed state. (Figures 11 and 12)

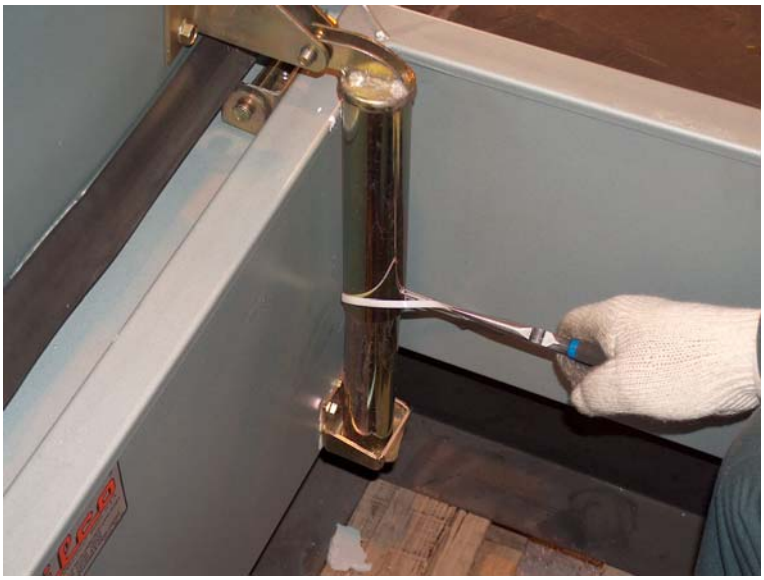

Figure 11

Spring Replacement – Roof Scuttle – Steel

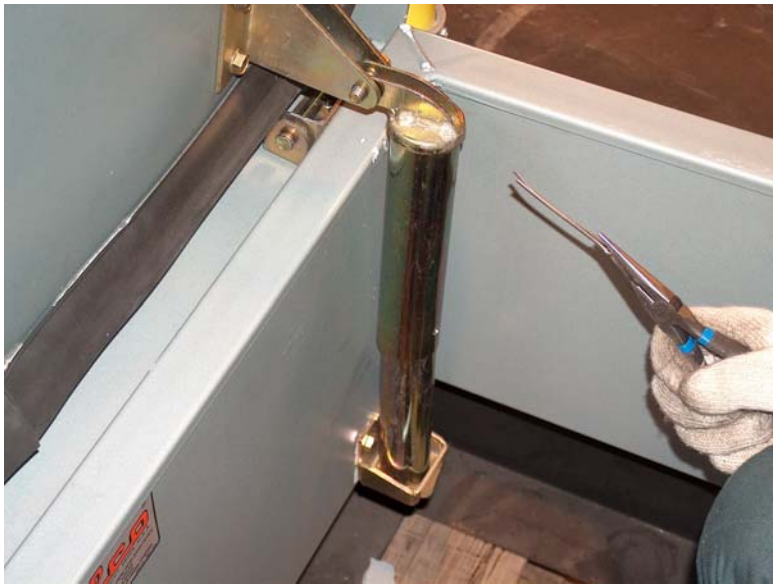

Figure 12

10) Open and close the door several times to ensure that the spring is fully functional and secure. This concludes the installation.

Spring Installation – Using Bilco Spring Tool

*Note: These steps are for a spring that has been decompressed and requires a spring tool in order to install. For compressed springs go back to step 7.

11) With the base in place, grease the spring while sliding it into tube, then place the cover on top of the spring. (Figure 13)

Figure 13

12) With the spring placed together, use the appropriate roof scuttle steel compression tool to compress the spring and align the hole in the spring with the hole in the spring ear and insert the bolt. (Figures 14 and 15)

Figure 14

Figure 15

13) Attach the nut to the bolt using the 9/16 wrenches. (Figure 16)

Figure 16

14) Open and close the door several times to ensure that the spring is fully functional and secure. This concludes the installation.

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