## ROOF HATCH-Diamond Series Spring Cylinder Kit Installation Guide | 141-408

## **GENERAL:**

The following guide provides instructions to safely remove and replace JL Industries roof hatch spring

Cylinders using the Spring Cylinder Kit part number: RHD-KIT-SPR-G1. This kit is designed to provide lift assistance to diamond series steel roof hatches sized 36"x30", including model number RHDG-1WT. Other sized roof hatches may require different springs, based on the weight of the cover. Please contact customer service for further support.

Tools needed: (1) 7/16" wrench, (2) 1/2" wrenches, drill

Tools provided: T30 torx head bit and spring compression clamp tool (new springs)

Caution: Roof hatch spring cylinders are under pressure. Please use the provided spring compression tools to remove and install spring cylinders. We recommend two installers and please use fall prevention safety equipment while performing this work.

## **INSTALLATION:**

## REPLACE OLD CYLINDER AND SPRING ASSEMBLY

- Open roof hatch lid so automatic hold-open arm engages to hold the lid open while working. As a safety precaution, we recommend two installers to ensure cover stays open.
- 2. Install the spring compression tool over the cylinders as shown in Fig 1.
- Rotate the tool lever arm up to compress the cylinder before removing bolts as shown in Fig. 2. 3.
- 4. Remove top bolts and nuts that attach cylinder to the lid.
- Carefully disengage the compression tool and remove top cylinder and spring. 5.
- Remove the bottom bolt and nut to remove the bottom cylinder. 6.
- 7. Discard defective cylinder(s) and/or spring(s).
- Repeat steps 2-7, on additional spring assemblies. 8.
- Using the two 1/2" wrenches, attach bottom spring housing cylinder to curb bracket using the 9. longer bolts and nuts (Fig.3).
- 10. Lubricate springs with the grease provided and nest smaller spring within larger spring and place inside bottom spring housing cylinder.
- Slide the top cylinder on top of the springs and onto the lower cylinder. 11.
- 12. Position the spring compression clamp tool as shown in Fig.1, then compress the cylinders together by moving the clamp handle up as shown in Fig. 2.
- Secure the top cylinder to the lid bracket using 1 ½" long bolts and nuts with two ½" wrenches 13. (Fig.3).
- 14. Remove spring compression clamp tool and repeat for other spring cylinder.
- Manually open and close the door to check functionality of the new springs. The springs pro-15. vide lift assistance while opening and closing the roof hatch door.





Fig. 2





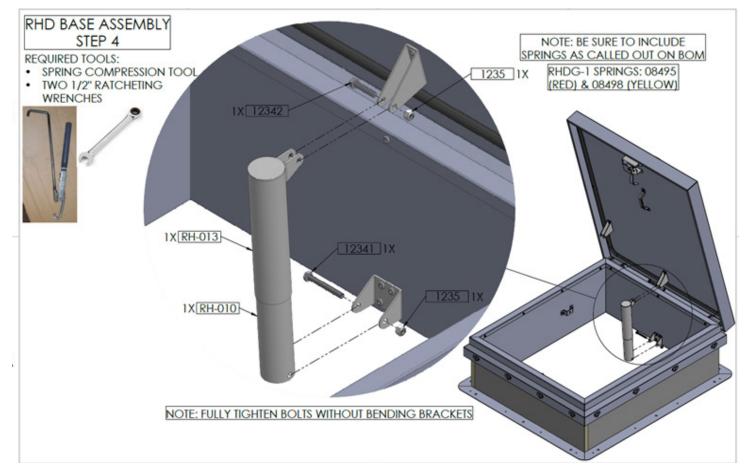


Fig. 3

