

## Installation of new gas springs in Dimension Icon 06 25 2017 BSB

1. Gas springs: I have used the McMaster Carr # 9416K23 125 lb gas spring
  - a. It is 33.94" extended length, 17.8" compressed with a 16.14" stroke.
  - b. You can get them in many forces but I believe that the 150 lb or 125 lb is about right.
  - c. The various versions end up with slightly different numbers in the TechMart order for the 125 lb one is 9416K404.
  - d. The ends have M8 threaded screws on the ends and you need to take off the ends of the old gas springs that you remove and put them on the new springs.
  - e. You can probably use springs that are a little less than 33.94" long (maybe 1 or two inches) but they should not be any longer.
2. Attach two lashing (tie down) straps (that each can support >200 lbs) with adjustable locks between overhead rack and door handle. They should be attached to the overhead rack so that they can pull the door up and back.
3. Lift the door and tighten the straps until the door is as wide open as you can get it.
4. Check that both straps are secure and helping to hold the door. You need to put your head inside the Icon enclosure so if the door falls down it will hurt you very badly. **Do not put your head in if everything is not secure!!!**
5. The door should be folded back some on top of the hood.
6. Remove the two nuts that hold the gas springs on to the door and on to the back of the enclosure.
7. Note that one gas spring might be slightly longer than the other so you need to remove the short one first.
8. Try to pull the gas spring off the bolt on the door. If it does not come off easily you need to push up the door some more. You can try to just lift it a little with your hand to see if that takes the pressure off the spring. If not tighten the straps some more.
9. Now remove the gas spring from the back bolt.
10. Take the ends off the old gas spring and put them on the new spring.
11. Try and install the new gas spring. If it is too long to fit on the two bolts raise the door with the straps a little more.
12. Replace the nuts for the new spring.
13. Repeat the operation on the second spring.
14. With both springs in place slowly loosen the straps one at a time. Note that if the springs are too weak they will not hold up the door so you need to be careful that the door does not just come down on your head!