

## RX-8 Rear Spring/Shock Installation

Part No. 14027

### Tools Required:

- Torque wrench
- 3/8" ratchet
- 17mm socket
- 14mm socket
- 14mm socket
- Small screwdriver - straight
- Small screwdriver - phillips
- 17mm open/box wrench
- 1 1/2" extension (3/8" socket)

Estimated time for completion: 2 hrs

People required: 2

### INSTALLATION INSTRUCTIONS

1. Open the trunk lid to gain access to the shock assembly upper retaining bolts. Remove the factory tire tool kit. Remove the (3) forward plastic fasteners from the passengers side, and (2) forward fasteners from the drivers side, and pull back the coverings to gain access to the retaining bolts. Remove the two (2) retaining bolts (14mm head) and (2) nuts (14mm head) from each of the shock assemblies. See photo 1.

2. Jack up the car and place on safety stands. DO NOT work under a car supported only by a floor jack! Remove the rear wheels.

3. Remove the (2) upper link retaining bolts (A & B - 17mm head), and the lower shock retaining bolt (C - 17mm head) from both sides of the car. Remove the 12mm head bolts as shown at position D. See photo 2.

4. Push the bottom of the shock assembly off of the lower mounting boss (inward). Push down on the upright assembly (have an assistant push down on the brake caliper), and guide the lower end of the shock assembly behind the rear lower link. Carefully lower the assembly out of the car. See photos 3 & 4. Repeat these steps on the opposite side of the car.

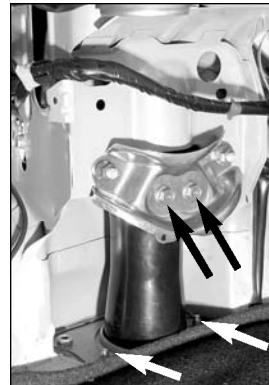
5. Disassemble the shock assembly with the aid of a spring compressor tool. If installing lowering springs, remove the bump stops and modify as shown in the photo by cutting and/or grinding. See photo 5.

6. Reassemble the spring assemblies, noting the correct parts positioning and orientation as shown in photo 6. (If installing new shocks, follow any instructions provided by the manufacturer.) Orient the top plates as shown in photo 7.

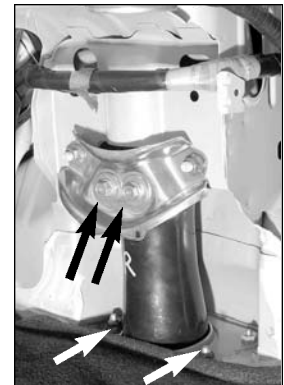
7. Reassemble the suspension in reverse order, with one exception! Do not fully tighten either of the upper link inner ends, or the shock lower attachment bolt - just install the bolts "finger tight"! Lower the car to the ground and perform the final tightening after pushing down on the chassis to settle the car. This method of tightening is difficult but important - if you tighten the rubber bushings with the suspension in "droop", the bushings can be over stressed and the ride height will be incorrect.

Photo 1

Left

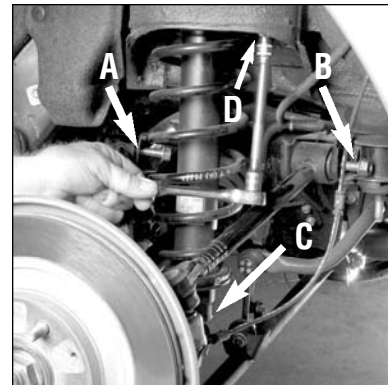


Right



Remove the retaining bolts and nuts.

Photo 2



A-arm and shock assembly retaining bolts.

Photo 3



Push down on the brake caliper, and move the assembly downward.

Photo 4



Maneuver the assembly out of the chassis.

8. Torque to the following specs:

- Upper link inner ends - 17mm head bolts (56-75 ft lbs)
- Lower shock bolt - 17mm head bolt (65-87 ft lbs)
- Shock rod nut - 17mm head nuts (23-34 ft lbs)
- Top Plate/Cover to chassis nuts (in trunk) - 14mm head nuts (34-46 ft lbs)
- Top Plate/Cover to bracket bolts (in trunk) - 14mm head bolts (28-38 ft lbs)
- Top Plate/Cover to chassis bolts (in wheel well)  
- 12mm head bolts (17-23 ft lbs)

Photo 5

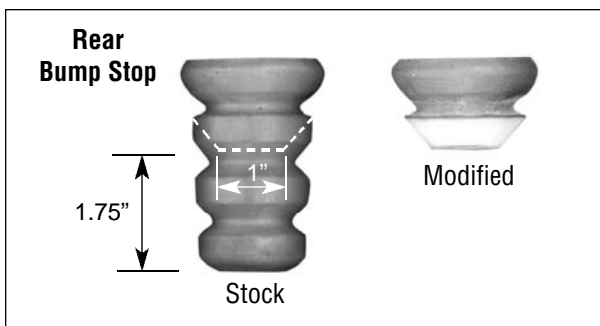
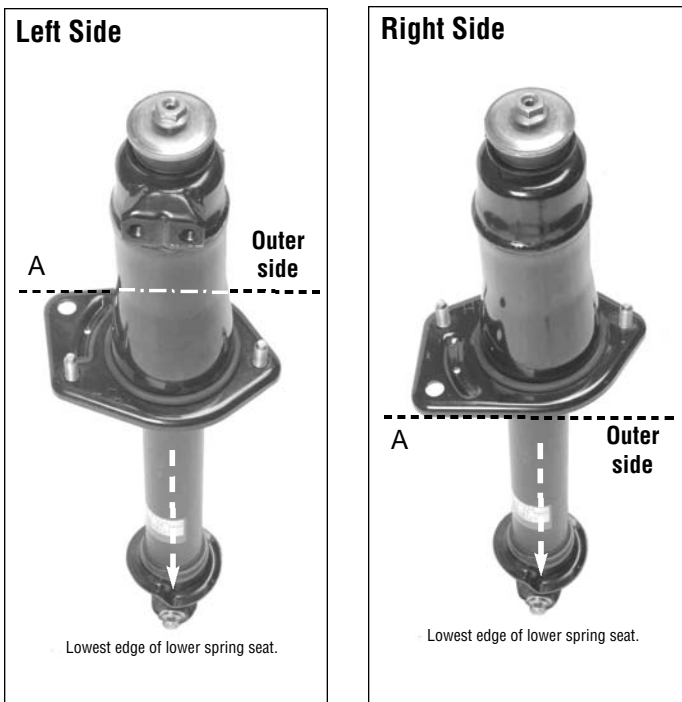


Photo 7



Install the spring with the edge of the lower spring seat facing towards you as shown above. Use edge "A" as reference when positioning the top plate/cover.

Photo 6

