

## Johnny O'Connell Signature Corvette Shocks Part # 420-401001-J, 420-401001FJ, 420-401001RJ



## **Tools Needed:**

3/8" drive ratchet 24" long 3/8" extension Torque wrench 10mm deep socket 13mm socket 13mm deep socket 15mm socket 18mm deep socket 22mm socket Lug nut socket (stock 19mm) 15mm flex head ratchet wrench 6mm open end wrench 13mm combination wrench 22mm combination wrench Vice grips 1/2" drive breaker bar 1/2" drive torque wrench Floor jack Jack stands

This procedure is best performed on a vehicle lift, however it is possible to install these mounts using a floor jack and jack stands.

For questions please see the Instructions area on our website <u>www.aFecontrol.com</u> or call 951-493-7128

## **Front Shocks**

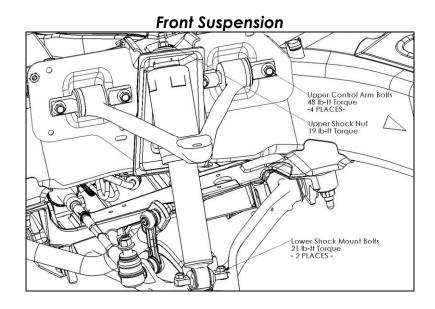
Using proper jacking points, lift and support the front of the car on jack stands. Open the hood and remove any components in the way of the upper front shock mounts.

**C5 Note:** The windshield washer bottle and the coolant reservoir must be moved. Neither component need be disconnected completely, just moved out of the way to facilitate the removal of the upper shock nut.

**C6 Note:** The coolant reservoir must be moved on to the driver's side of the engine bay, it is held in with 2 10mm flange nuts. It does not need to be disconnected from the hose's, just moved out of the way to facilitate the removal of the upper shock nut.

The upper shock nut is 15mm. Remove the nut from both shocks by holding the flats on the end of the shaft with a 6mm wrench. Vice grips can be used as an alternative if the nut is difficult.

Remove the front wheels. Remove the two bolts holding the lower shock mount to the lower control arm. Support the lower ball joint with a floor jack. Remove the 4 bolts the hold the upper control arm to the frame.



**Caution**: Note the position of any washers between the upper control arm mounts and the frame for use in re-assembly

Pivot upper control arm out of the way. Lower the floor jack and remove the shock.

Install the new shock in place. Place the bolts in the lower mount to locate the shock correctly. With the floor jack, raise the lower control arm until the shock is in the correct position. Install the upper bushing, upper washer and start the upper nut.

Pivot the upper control arm back in place and replace the washers and bolts. Torque the upper control arm mounting bolts to 48 lb-ft torque.

Install the nuts on the lower shock mounting bolts and torque to 21 lb-ft.

Torque upper nut on shock to 19 lb-ft. It may be necessary to keep the shaft from turning with a 6mm open end wrench.

Repeat shock R&R procedure for other side. Replace components in engine compartment and re-install wheels. Lower the car to the ground.

Item	Torque
Upper Shock Nut	19 lb-ft
Lower Shock Mounting Nuts	21 lb-ft
Front Upper Control Arm Bolts	48 lb-ft

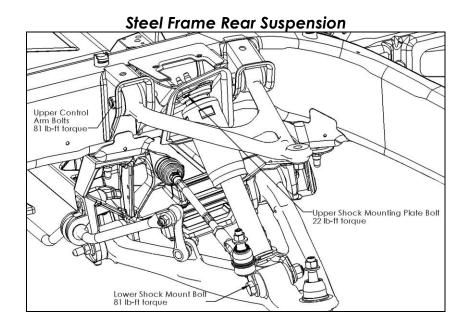
## **Rear Shocks**

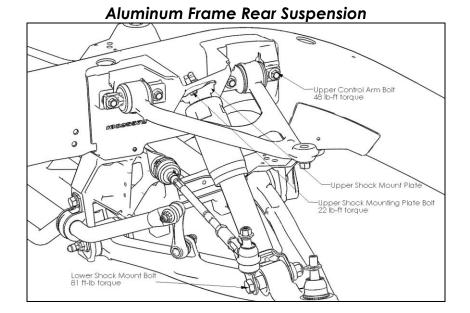
Using Proper jacking points, lift and support the rear of the car on jack stands.

Remove the rear wheels. Support the lower ball joint with a floor jack. Remove the two bolts holding the upper shock mount plate to the frame. Remove the large bolt that holds the lower shock mount to the control arm.

Remove the fasteners that hold the upper control arm to the frame. On aluminum frame cars there may be washers between the control arm mounts and the frame. Note their position for re-assembly.

**Caution**: Note the position of any washers between the upper control arm mounts and Pivot upper control arm out of the way. Lower the floor jack and remove the shock.





Install the new shock in place. Place the bolt in the lower mount to locate the shock correctly. With the floor jack, raise the lower control arm until the shock is in the correct position. The upper plate mounts with the white dot facing the front of the car. Install the upper mount bolts and torque to 22 lb-ft.

Pivot the upper control arm back in place and replace the bolts (and washers on aluminum frame cars). Torque the upper control arm mounting bolts. 48 lb-ft torque on C6 Z06 and ZR1 aluminum frame cars, 81lb-ft on all C5 and steel frame cars. See Diagrams for proper frame identification.

Torque the lower shock mounting nut to 81 lb-ft.

Repeat shock R&R procedure for other side. Re-install wheels and lower the car to the ground.

Item	Torque
Upper Shock Mounting Plate Bolts	22 lb-ft
Lower Shock Mounting Nut	81 lb-ft
Upper Control Arm Bolts (steel frame)	81 lb-ft
Upper Control Arm Bolts (Z06/ZR1 2006+)	48 lb-ft

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