INSTALLATION INSTRUCTIONS FOR 1996-2001 VIPER SHOCKS Catalog #33505

- ***Please read these instructions entirely before beginning***. *Proper installation is a must to realize the maximum performance improvements.*

IMPORTANT NOTES:

- Upon initial inspection, some new shocks may have a small amount of oil in the area of the seal. This is a normal occurrence following manufacture and does not indicate a problem with your shocks.
- Any time you are working under a vehicle, be sure to use the proper jack stands and tire chocks to prevent any shifting or slipping of the car. Never use a jack only to support the vehicle while changing shocks.
- Inspect shock brackets or mounting points before installation to make sure they are not broken or bent.
- **Do not attempt to disassemble these shocks**. Return damaged shocks to Edelbrock for any necessary service or repairs.

INSTALLATION

Step 1 Support Viper by frame with jack stands or on a lift.

Step 2 Remove all four wheels.

Step 3 Removal of front shocks:

3(a) Loosen upper and lower shock nuts, but do not remove the bolts at this time. (see Fig. 1).

3(b) If the lower shock nut is to rear, the lower sway bar end link must be removed in order for the bolt to have enough clearance for removal. (see Fig. 1).

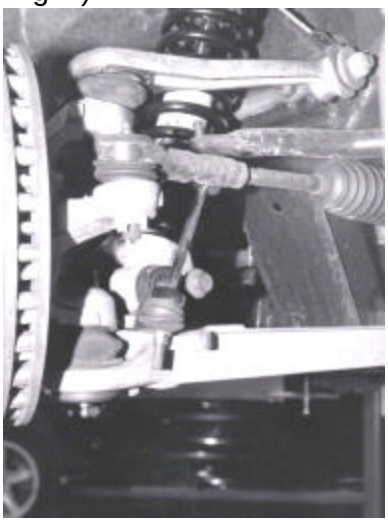

Fig. 1

3(c) Removal of lower sway bar endlink
If the tool for unseating the sway bar from the lower control arm is not available, the following procedure can be used. (The sway bar end link is held in place with a tapered seat). In order to remove:

- 3(c)1 Loosen lower sway bar end link nut, do not remove completely
- 3(c)2 Place jack under the nut
- 3(c)3 Jack up and apply pressure
- 3(c)4 Tap control arm with hammer (see Fig. 2).

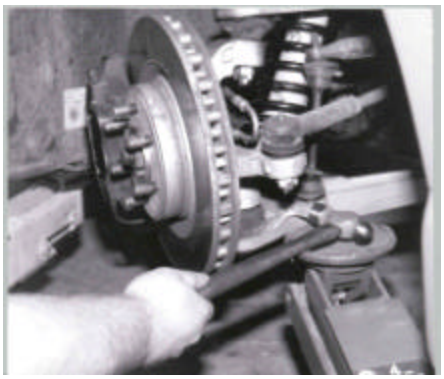

Fig. 2

An aluminum block should be placed between arm and hammer to minimize marking control arm, do not hammer directly on the arm. It should only require a couple of sharp taps with a hammer in order to pop from seat. Do both left and right sides, and remove nuts.

3(d) Remove upper and lower bolts to remove shock. It may need a little gentle persuasion with a pry bar (see Fig. 3). Bolt should come out by hand.

Fig. 3

3(e) Shock may be removed through the top.

Step 4 Removal of rear shock

4(a) Loosen upper and lower nuts.

4(b) In order to remove bolts, they may need a little gentle persuasion with a pry bar. Bolt should come out by hand (see Fig. 3).

4(c) Shock will now come out through the top.

Step 5 Disassembly of front coil springs from shocks

A coil spring compressor is required to remove the springs from shocks. All proper safety precautions must be followed. Consult spring compressor manufacturer recommended instructions before starting.

5(a) Compress coil spring (see Fig. 4).

Fig. 4

5(b) Move bump rubber up shaft in order to remove spring seat retainer (see Fig. 5).

Fig. 5

5(c) Release coil spring compressor carefully.

Step 6 Disassembly of rear coil springs from shock

6(a) Compress coil spring (see Fig. 6).

6(b) Move bump rubber down in order to remove spring seat retainer (see Fig. 6).

6(c) Release coil spring compressor carefully.

Fig. 6

Step 7 Assembly of IAS shocks (Note: Apply anti-seize compound to threaded collars)

7(a) Adjust all four threaded spring collars (see Fig. 7).
2 front topped out
2 rear = 5/8” from top of threaded collar.

Fig. 7

7(b) Install and tighten allen set screw with 1/8 allen wrench (see Fig. 8).

Fig. 8

7(c) Slide threaded collar onto shock. It should seat against snap ring. Front shocks are easily identified by short threads on the piston rod (see Fig. 9).

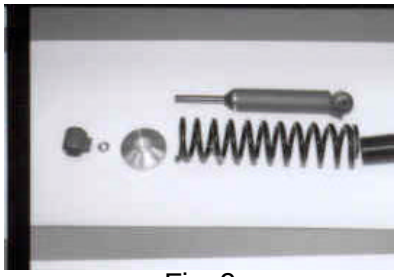

Fig. 9

The rears have long threads on Piston rod (see Fig. 10).

Fig. 10

Step 8 Assembly of Front shocks

8(a) Insert coil spring with flat ground end against threaded collar seat .

8(b) Put shock and coil spring in spring compressor (see Fig. 11).

Fig. 11

8(c) Compress coil spring until lower seat has enough clearance to install lower seat and 9/16 jamb nut (see Fig. 12).

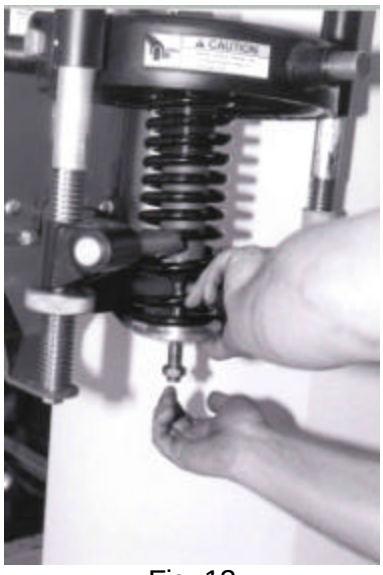

Fig. 12

Screw jamb nut by hand until it hard stops at end of threads (see Fig. 13).

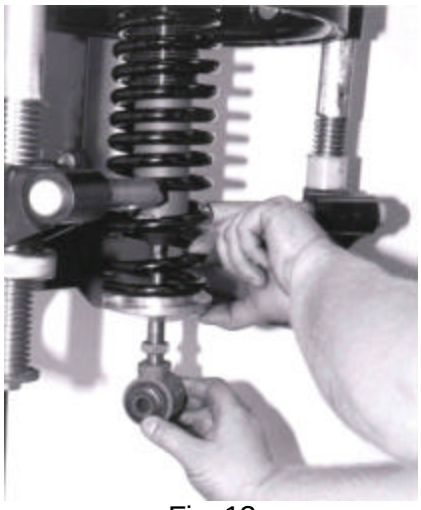

Fig. 13

8(d) Apply Loctite to threads, screw rod end on by hand until it hard stops, tighten jamb nut against rod end with 1" wrench on rod end using a 7/8" crowfoot wrench torque nut to 70 ft lbs. (see Fig. 14).

Fig. 14

8(e) After removing from spring compressor, make sure spring fits correctly in lower spring pocket. (see Fig. 15)

Fig. 15

Step 9 Rear IAS shocks

IAS shock reuses the O.E.M. large black clevis mount and must be unscrewed from the shock body.

9(a) Mount clevis in vice with soft jaws, aluminum preferred as not to mark up the clevis.

9(b) Using supplied crowfoot wrench (see Fig. 16)

Fig. 16
(Top photo – spanner wrench)
(Bottom photo – crowfoot wrench)

loosen shock body from clevis with ½" drive breaker bar and crowfoot wrench (see Fig. 17).

Fig. 17

(From the factory, the shock body was torqued to the clevis with Loctite, so it will require a bit of effort to remove).

9(c) Once the clevis and shock body are apart, the threads need to be cleaned to remove any grease, Loctite or dirt (use brake cleaner or parts wash), etc.

9(d) Install the threaded collar on to shock seating it against snap ring on the IAS shock (see Fig. 18).

9(e) Install short clevis adapter jamb nut with holes up towards shock body (see Fig. 18).

9(f) Screw clevis adapter nut on piston rod by hand until threads stop, install 9/16 jamb nut with Loctite (see Fig. 18).

9(g) Clamp supplied spanner wrench (see Fig. 16) in vise (see Fig. 18) to support threaded adapter torque nut to 75 ft lbs. with 7/8 socket.

Fig. 18

9(h) Clamp clevis in vise. Install spring on clevis spring seat (see Fig. 19).

Fig. 19

9(i) Assemble shock by screwing the adapter with Loctite applied into clevis (see Fig. 20),

Fig. 20

screw the adapter in clevis until it bottoms (see Fig. 21), torque to 70 ft lbs. using same spanner wrench (see Fig. 16).

Fig. 21

9(j) Screw the thin threaded adapter jamb nut with Loctite applied until it bottoms and torque to 70- ft lbs. with spanner wrench.

Step 10 Installing IAS shocks

Reinstallation is reverse of removal.

10(a) Both front and rear may require a little gentle persuasion with a long pry bar to push control arms down in order to install bolts (see Fig. 22 and Fig. 22a). Do not torque nuts at this time. Front lower bolts may be installed with nuts to the front. This will make it easier for reassembly.

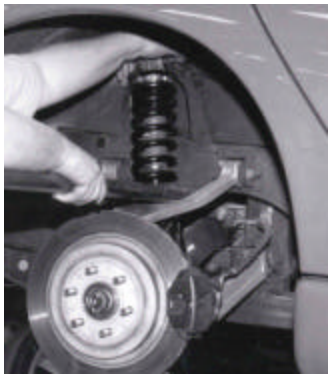

Fig. 22

Fig. 22a

10(b) Front sway bar end links may now be reinstalled. Install both left and right at the same time. After both sides are in position, the end link to control arm nuts can be torqued to 16 ft lbs.

10(c) Important: After all four shocks are installed, place jack or jack stand under control arm – support vehicle to load suspension at ride height and torque bolts to:

Front (upper and lower) 80-100 ft. lbs.
Rear (upper) 80-100 ft. lbs.
Rear (lower) 130 ft. lbs.

This must be done to pre-load bushing for their proper position in order for safe and proper handling. This is a very important step.

10(d) Install and torque wheels to 90 ft. lbs. After 5-10 miles, re-torque wheels to 90 ft. lbs.

Parts List

Qty.	Description	Qty.	Description
☐ 2	#33505 Front shock assemblies	☐ 1	Crowfoot wrench (for removal of shock from clevis)
☐ 2	#34505 Rear shock assemblies	☐ 1	Spanner wrench (for installing and torquing of rear threaded clevis adapter and jamb nut)
☐ 2	Rear rodend clevis adapters		
☐ 2	Rear rodend clevis adapter locknuts	☐ 1	Loctite tube
☐ 4	Upper coilover spring perch	☐ 1	Anti-seize
☐ 4	Coilover threaded sleeves	☐ 1	Hardware kit 4 - set screws 4 - 9/16 jam nuts

Enjoy the improved ride and handling from your new Edelbrock IAS shocks.

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