



Haynes
shows you how

BMW 3-Series and Z4 (99-05) Includes 2006 325ci/330ci Coupe and Convertible models Haynes Online Manual.

11 Rear suspension shock absorber - removal, overhaul and installation

Note:

New shock absorber upper mounting nuts and a new mounting gasket will be required on installation.

Removal

1 Check the front wheels, then raise the rear of the vehicle and support it securely on jackstands. To improve access, remove the rear wheel.

2 On Sedan and Coupe models, lift up the floor panel in the trunk and remove the liner that covers the shock. On the left-hand side, remove the warning triangle, pry out the plastic rivet, and remove the warning triangle bracket. Pry out the retaining clips securing the side trim cover in position, and remove the trim and insulation panel to gain access to the shock absorber upper mounting fasteners (see illustrations) .

11.2a Pry out the warning triangle bracket plastic rivet



11.2b Lever up the center pin, then pry out the plastic rivets



3 On wagon models, remove the interior trim panel as described in [Chapter 11, Section 27](#).

4 Position a jack underneath the trailing arm, and raise the jack so that it is supporting the weight of the arm. This will prevent the arm dropping when the shock absorber is unbolted.

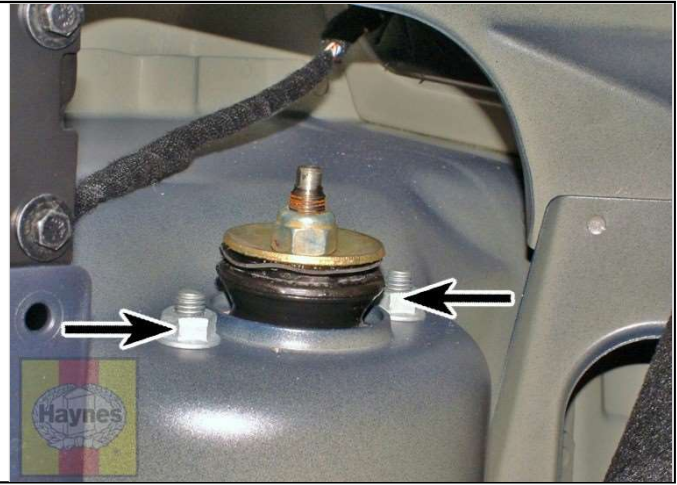
5 Loosen and remove the bolt securing the shock absorber to the trailing arm (see illustration) .

11.5 Remove the shock absorber lower bolt



6 From inside the trunk, remove the upper mounting nuts (see illustration) . Lower the shock absorber out from underneath the car and recover the gasket which is installed between the upper mounting and body.

11.6 Remove the rear shock absorber upper mounting nuts



Overhaul

Note:

A new piston nut will be required.

7 Remove the trim cap from the top of the shock absorber, then remove all traces of dirt. Loosen and remove the piston nut and dished washer, noting which way around it is installed.

8 Lift off the upper mounting plate and remove the dust cover.

9 Slide the spacer and rubber stop off from the shock absorber piston.

10 Examine the shock absorber for signs of fluid leakage. Check the piston for signs of pitting along its entire length, and check the body for signs of damage. While holding it in an upright position, test the operation of the shock absorber by moving the piston through a full stroke, and then through short strokes of 2 to 4-inches (50 to 100 mm). In both cases, the resistance felt should be smooth and continuous. If the resistance is jerky, or uneven, or if there is any visible sign of wear or damage, replacement is necessary.

11 Inspect all other components for signs of damage or deterioration, and replace any that are suspect.

12 Slide the rubber stop and spacer onto the shock piston, and install the dust cover.

13 Install the upper mounting plate and dished washer, and screw on the new piston nut and tighten it securely. Reinstall the trim cap.

Installation

14 Ensure the upper mounting plate and body contact surfaces are clean and dry, and install a new gasket to the upper mounting plate.

15 Maneuver the shock absorber into position, and install the new upper mounting nuts.

16 Ensure the lower end of the shock absorber is positioned with the mounting bushing spacer washer facing towards the bolt. Screw in the lower mounting bolt, tightening it by hand only at this stage.

17 Tighten the upper mounting nuts to the specified torque setting then reinstall the insulation panel, luggage compartment trim panel, rear light access cover and loudspeaker (as applicable).

18 Reinstall the wheel and lower the car to the ground. With the car resting on its wheels, tighten the shock absorber lower mounting bolt and wheel bolts to the specified torque.

© 2024 Haynes Manuals, Inc. Contact us