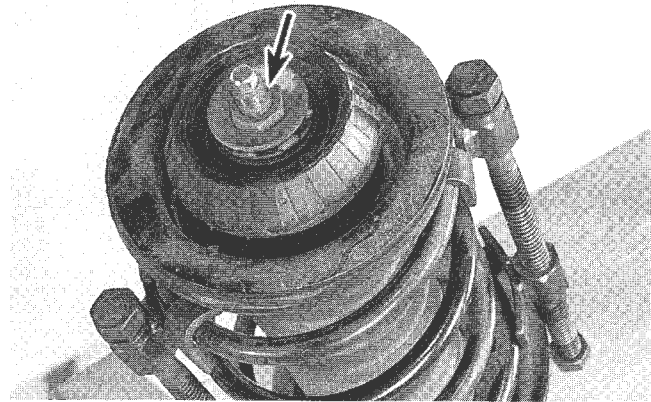
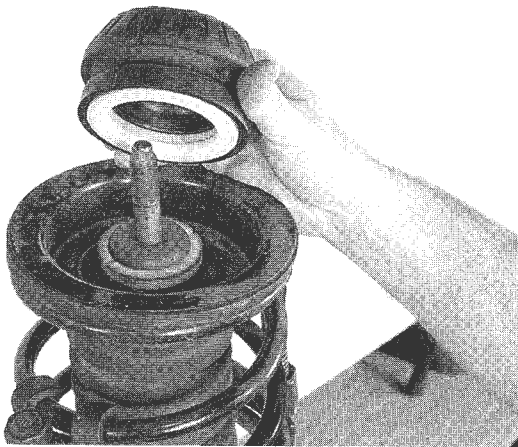


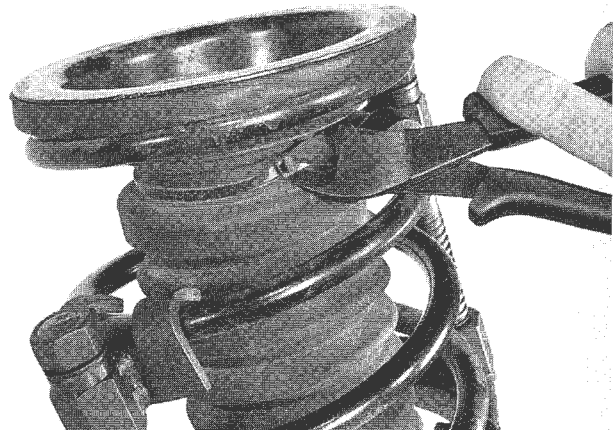
8.4 Use the spring compressor following the manufacturer's directions



8.6 Remove the nut and washer (arrow) from the strut shaft



8.7 Lift the upper strut support off of the damper shaft



8.8 Cut the plastic dust boot retainer

- 5 Remove the hub assembly.
- 6 Refitting is the reverse of removal. Tighten the hub retaining bolts to the torque listed in this Chapter's Specifications.

8 Spring and strut components (front) - disassembly and reassembly

Refer to illustrations 8.4, 8.6, 8.7, 8.8, 8.9, 8.14a, 8.14b, 8.15 and 8.16

- 1 The spring on the front strut is under considerable pressure, requiring a special spring compressor to be used to safely compress the spring and disengage its components. Do not attempt to disassemble the spring without the proper compressor, as serious injury can occur.
- 2 A strut spring compressor can be purchased through most auto parts stores. Compressors can also be rented on a daily basis from some rental agencies.
- 3 Hold the knuckle in a vice using wood blocks to cushion the jaws to prevent damage to it.
- 4 Following the manufacturer's instructions for the particular spring compressor being used, slightly compress the spring,

making sure that the jaws of the compressor are firmly seated around the coils and cannot slip off (see illustration).

- 5 Tighten the compressor from side to side, a little at a time, until the spring seat is clear of the uppermost coil.
- 6 With the spring firmly compressed and clear of its seat, hold the mounting insulator stationary and remove the top strut bearing nut and washer (see illustration).
- 7 Pull the upper support off the top of the strut assembly (see illustration).
- 8 Remove the bearing (noting its orientation) and washers and cut the dust boot strap (see illustration).
- 9 Carefully lift the compressed spring from the assembly (see illustration) and set it aside in a safe place.



Warning: Never place your head near the ends of the spring.

- 10 The spring should be checked for cracking or deformation of any kind. If the vehicle was sagging in the front, this is an indication that the springs are in need of renewal.



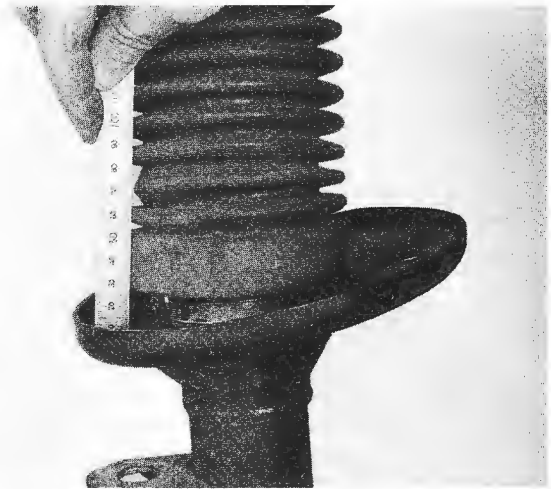
8.9 The spring and compressors can be lifted off the assembly



8.14a Loosen the dust boot clamp with a screwdriver ...



8.14b ... and remove the dust boot and filter from the strut



8.15 The dust boot should fit securely on the strut and the lower edge should be the specified distance from the base of the spring mount

- 11 To test the shock absorber, hold it in an upright position and work the piston rod up and down its full length of travel, four or five times. If you can feel a strong resistance because of hydraulic pressure, the shock absorber is functioning properly. If you feel no marked resistance or if there is a sudden free movement in travel, the shock absorber should be renewed.
- 12 If there are excessive amounts of fluid evident on the outside of the shock absorber, the shock absorber should be renewed.
- 13 If the shock absorber is defective, obtain a new unit from a dealer or parts store.
- 14 Detach the clamp and remove the dust boot and filter assembly from the defective shock body (see illustrations).
- 15 With the strut rod of the new shock absorber all the way out, refit the dust boot/filter assembly and clamp so the boot lower edge is 30 to 35 mm from the spring mount base (see illustration).
- 16 With the shock absorber unit mounted in a vice with protective wood blocks, refit the spring over the shock absorber body. Make sure the lower coil conforms to the spring seat (see illustration).



8.16 When refitting the spring, make sure that the end engages in the lower seat like this

- 17 Refit the upper strut support bearing.
- 18 Refit the upper strut support.
- 19 Refit the washer and a new locknut to the top of the piston rod. Tighten this nut to its proper torque setting.
- 20 Carefully relieve tension on the coil spring by loosening the compressor from side to side, a little at a time. Check to be sure the top of the spring is raised properly into its seat.

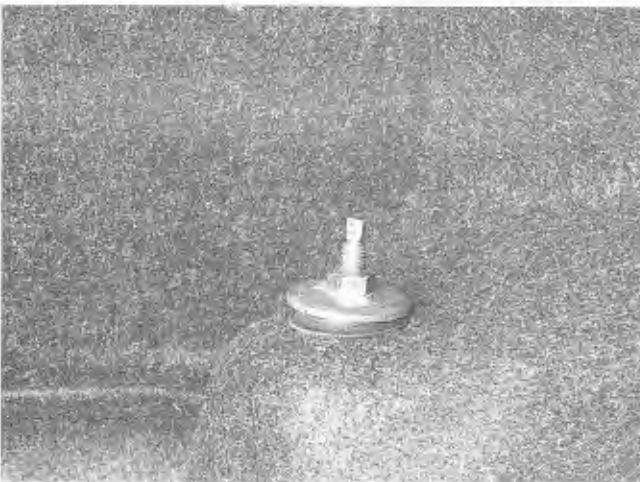
9 Balljoints - check and renewal

CHECK

- 1 Inspect the control arm balljoints for looseness whenever either of them is separated from the steering knuckle. See if you can turn the ballstud in its socket with your fingers.
- 2 If the balljoint is loose, or if the ballstud can be turned, renew the balljoint. You can also check the balljoints with the suspension assembled as follows.
- 3 Raise the front of the vehicle and support it securely on jackstands placed under the chassis. Make sure the vehicle is stable. It should not rock on the stands.
- 4 Wipe each balljoint clean and inspect the seal for cuts and tears. If the seal is damaged, renew the balljoint.
- 5 To check the balljoint, grasp the top and bottom of the tyre and rock it in-and-out. If there is any up-and-down movement of the balljoint stud, renew the lower balljoint.

RENEWAL

- 6 Remove the control arm (see Section 3).
- 7 To renew the balljoint, take the control arm and a new balljoint to an automotive machine shop. The machine shop will press out the old balljoint and press in the new unit. You cannot do this at home unless you have a hydraulic press.
- 8 Refit the control arm.
- 9 Have the front end alignment checked by a dealer service department or alignment shop.



10.1 The upper shock absorber attachment is inside the luggage compartment on sedan models

10 Shock absorbers (rear) - removal, inspection and refitting

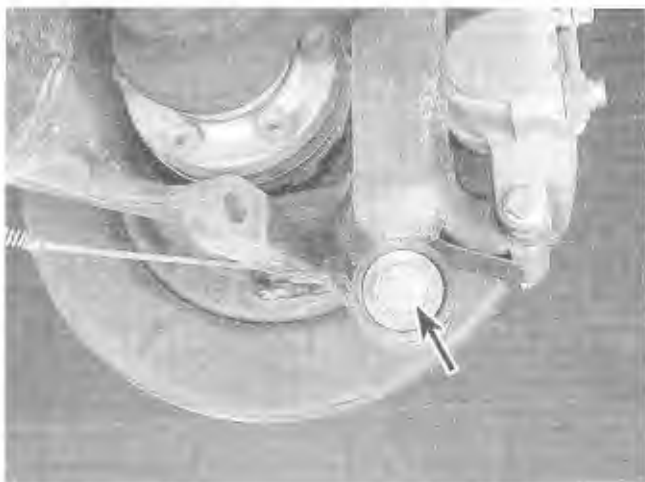
REMOVAL

Refer to illustrations 10.1 and 10.3

- 1 On sedan models, open the luggage compartment, remove any trim which would interfere with access and remove the cover and upper shock absorber nut (see illustration).
- 2 Raise the vehicle and support it securely on jackstands. Support the control arm with a floor jack to prevent it from dropping down when the shock absorber is disconnected.
- 3 On sedan and station wagon models, remove the lower shock absorber attaching bolt and remove the shock absorber from the vehicle (see illustration). On station wagon models, remove the three bolts and detach the upper shock absorber mount, then remove the upper shock nut and detach the mount.

REFITTING

- 4 Place the shock absorber in position on the hub and refit the bolt finger tight. Make sure the bushes and washers are refitted in the correct order.
- 5 On sedan models, feed the upper stud of the shock absorber through the body. Refit the nut and tighten it by hand until it is fully refitted on the stud threads.
- 6 On station wagon models, insert the upper stud through the shock mount opening and refit the nut. Tighten the nut until the measurement from the top of the nut to the end of the stud is as listed in the Specifications Section. Refit the upper shock absorber mount and tighten the bolts to the figure listed in the Specifications Section.
- 7 Tighten the lower shock absorber bolt to the figure listed in this Chapter's Specifications.
- 8 Lower the vehicle weight onto the suspension and tighten the upper nut to the torque listed in this Chapter's Specifications.
- 9 On sedan models, refit the cover and trim.



10.3 Remove the lower shock absorber bolt (arrow)