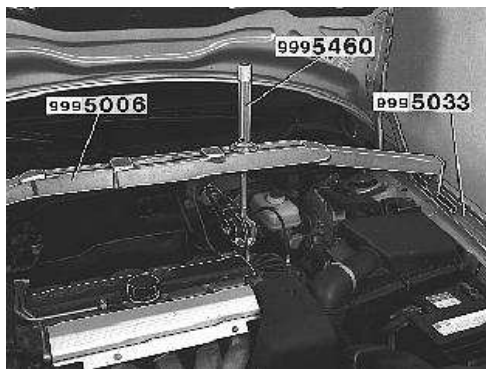


Steering gear, replacement

Special tools: [999 5006](#) , [999 5033](#) , [999 5259](#) , [999 5460](#)

Note! On cars with SRS, ensure that the front wheels are pointing straight ahead. Also lock the steering wheel with the steering lock before undoing tie rods (track rods) or steering shaft universal joints. These precautions are necessary to prevent the SRS contact reel from reaching either limit position.

Attach support rails [999 5033](#), mounting bracket [999 5006](#) and lifting hook [999 5460](#). Jack up the engine slightly to relieve load on engine mountings



Note! On cars with SRS: Ensure that the front wheels are pointing straight ahead.

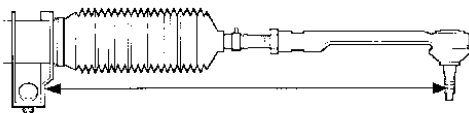
Remove:

- front wheels
- tie rod ends from steering arms. Use puller [999 5259](#) .

Caution! On cars with SRS



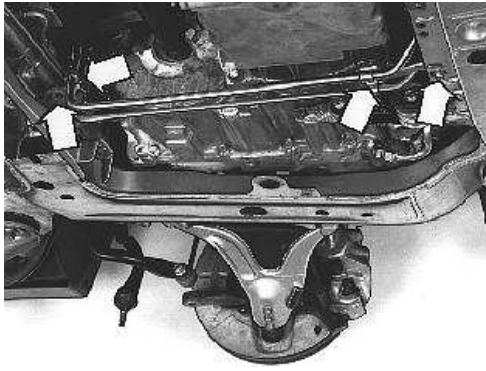
On one side, measure length of tie rod relative to steering gear housing. Note dimension



Remove:

- splashguard under engine, applies to earlier version
- fluid line brackets and clips at front and rear.

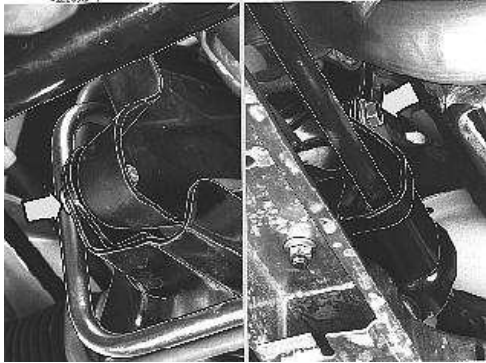
Note! Paragraphs [Remove steering gear crash](#)



guard and Place container under steering gear to collect fluid applies to right-hand drive cars only.

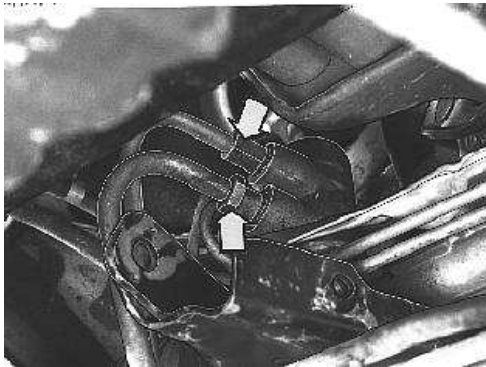
Remove steering gear crash guard

Guard is attached by two bolts.

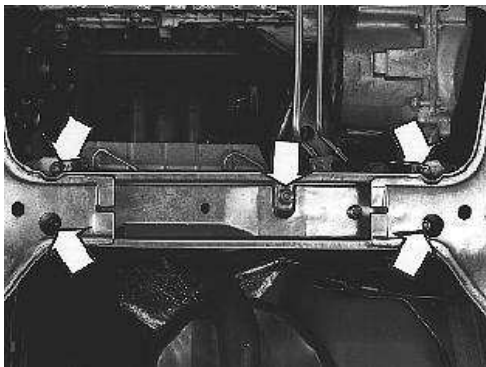


Place container under steering gear to collect fluid

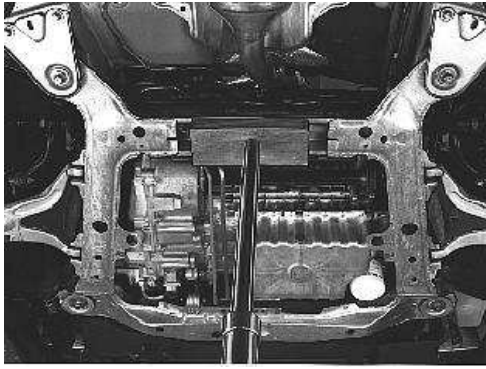
Disconnect fluid lines and pull lines forward to clear crash guard when subframe is lowered



Remove five nuts securing steering gear to subframe



Position hoist under rear of subframe



Remove:

- the four screws securing subframe brackets to body on each side
- the two screws and the brackets and washers.

Slacken off the front sub-frame screws **10-15 mm.**

Lower the rear edge of the sub-frame

Note! Ensure that steering gear screws clear subframe.

Remove hoist

Note! Paragraph below applies to **left-hand drive** cars only.

Place container under steering gear to collect fluid

Disconnect fluid lines from steering gear



Remove:

- set bolt in lower universal joint. Push joint clear of steering gear
- screw securing steering gear to rear engine mounting
- steering gear on right.

Note! Paragraph below applies to **right-hand drive** cars only.

Allow steering gear to rest on subframe



Remove heat shield. Torx TX 25 tool

Remove steering gear on right

Installation

When replacing steering gear: and mounting for center mounting. Do not tighten bracket screws yet

Left-hand drive:

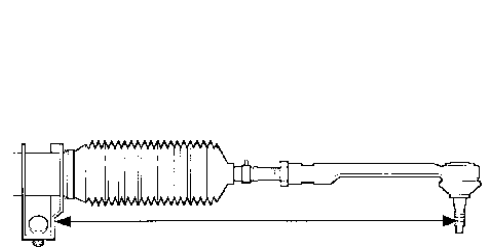
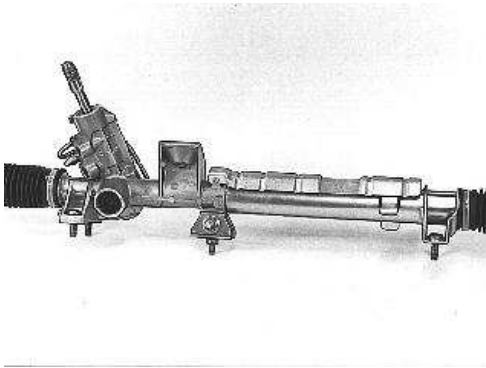
Transfer heat shield.

Left and right-hand drive:

Transfer the mounting for the center mounting.

Do not tighten bracket screws yet.

Plug open ends of fluid lines.



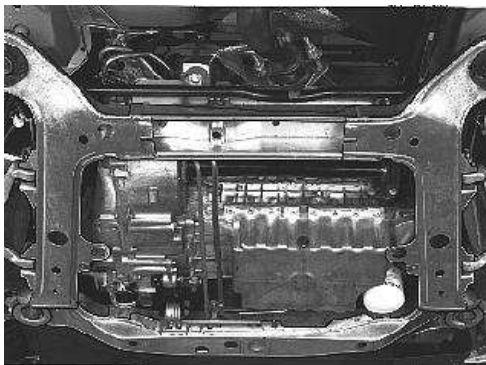
Check that tie rod position is the same as when removed, see illustration

Note! On cars with SRS

Install steering gear from right-hand side

On right-hand drive cars: Let drive shaft end rest on sub-frame. Install heat shield.

Support steering gear on rear engine mounting. Hold steering gear so that it is positioned straight relative to frame. Tighten engine mounting bolt to **50 Nm.**



Reconnect steering gear input shaft to lower universal joint

Tighten joint set bolt to **20 Nm**.
Install screw locking spring.

Note! Different versions of the pinion, see [Steering column/steering shaft/boot and needle bearing/lower universal joint, replacement.](#)
[Cars without SRS:](#) .

Left-hand drive cars only: Connect fluid lines loosely to steering gear. Use new O-rings.

Install front fluid line brackets loosely.

Align fluid lines in brackets and tighten connections with steering gear.

Raise subframe at rear with hoist. Use a mobile jack.

Insert steering gear mounting screws while raising frame.

Install subframe brackets loosely

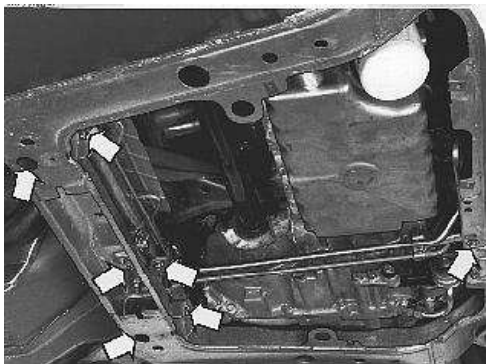
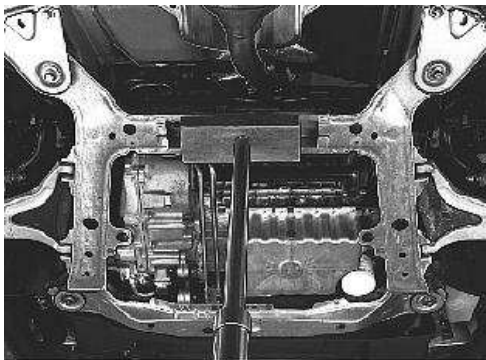
Install new subframe bolts loosely. Transfer hoist to front of subframe. Replace front screws but do not tighten at this point. Do not tighten yet.

First tighten bolts at left side of subframe to **105 Nm** and angle-tighten **120°**. Then tighten the right-hand bolts to same values. Finally, tighten bracket bolts on both sides to **50 Nm**.

Tighten:

- steering gear to **50 Nm**. Use new nuts
- steering gear center mounting screw (if bracket has been transferred) to **80 Nm**.

Note! Paragraph below applies to **right-hand drive cars only**.



Install:

- fluid lines with new O-rings
- front and rear fluid line brackets loosely.

Tighten fluid line connections.

Left and right-hand drive versions:

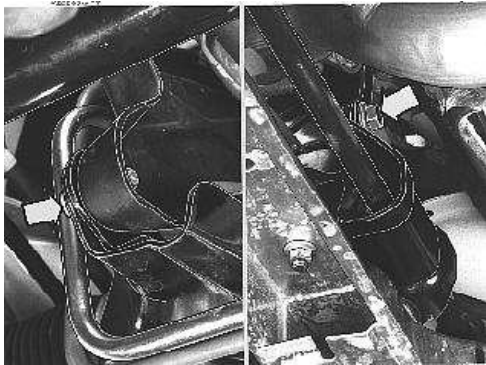
Install and tighten fluid line brackets and clips at front and rear

Note! Paragraph below applies to **right-hand**

drive cars only.

Install steering gear crash guard

Tighten to **80 Nm**.



Install:

- tie rods to steering arms. Use new nuts. Tighten to **70 Nm**.
- splashguard under engine (earlier version).



Mount wheels

Lubricate wheel locating pin on hub with anti-rust agent, P/N **1161030-0**.

Tighten studs lightly. Tighten crosswise to **110 Nm**.

Note! See also Specifications [Wheels and hubs, front suspension](#).

Fill power steering reservoir with fluid and bleed system

See technical specifications for oil type [Steering](#).

Turn steering wheel repeatedly from lock to lock. Top up oil if necessary.

Lower car.

Apply parking brake. Start engine.

Check fluid level while bleeding system as described below.

- **A.** Turn steering wheel slowly to right and hold in limit position for 10 seconds.

- **B.** Turn steering wheel slowly to left and hold in limit position for 10 seconds

Repeated steps **A** and **B** 20 times. Move car after 10 times to avoid damage to tires.



Check toe-in. See [Toe-in](#) .