Brake shoes, replacement

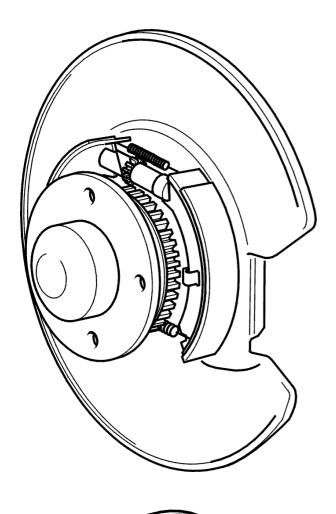
Special tools: <u>115 8147</u>

Preparations

- Remove cover panel under center console armrest.
- Undo parking brake adjusting bolt by parking brake lever until cable goes slack.
- Remove rear wheel.

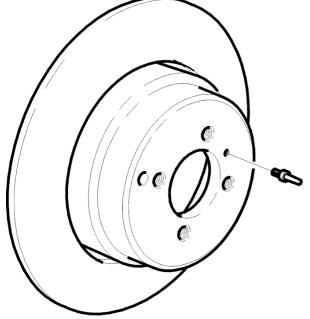
Removing brake caliper

- Remove both caliper mounting bolts and remove brake pipe from its mountings. If removing the LH brake caliper, you will also need to remove the mounting bolt for the brake pipe three– way connector.
- Remove brake caliper.
- Hang brake caliper from a steel wire in the spring to avoid damaging brake pipe.



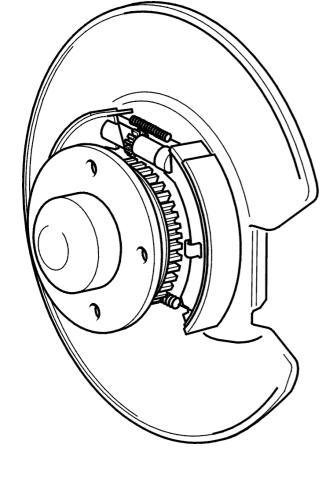
Removing brake disc

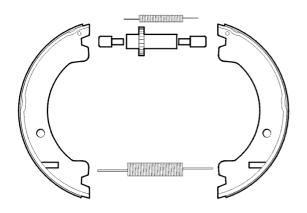
- Undo parking brake adjusting bolt until brake disc can be removed. Adjusting bolt can be accessed by turning the brake disc until the adjustment hole is centered over the adjusting bolt sitting between the brake shoes.
- Remove locating pin and mark brake disc against hub so that disc lines up properly when reinstalling.
- Remove brake disc.

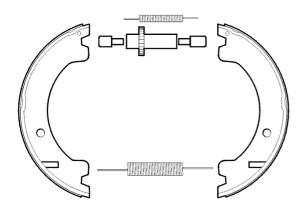


Removing brake shoes

- Remove lower return spring.
- Press brake shoes apart and remove from hub.





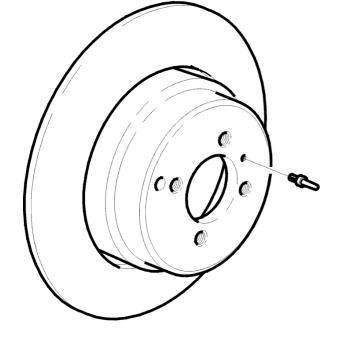


Cleaning and checking

- Check that no grease leaks out of the hub.
- Check that brake arms and cables are not worn and not rubbing anywhere.
- Clean the surfaces of the brake drum where the brake shoes make contact.
- Check that the adjusting bolts turn easily on their threads.
- Grease with heat-resistant grease if necessary.
- Apply a thin layer of heat–resistant graphite grease to the sliding surfaces.
- Check that hub flange is clean.
- Remove rust with a steel blade and steel brush.
- Brush any dirt off of wheel sensor and pulse wheel with a soft brush.

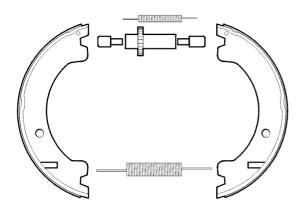
Installing brake shoes

- Install brake shoes on hub and install upper return spring.
- Check that adjusting bolts are turned correctly as per illustration. Illustration is looking from outside.



Note! Be careful when handling the new brake disc. Careless handling can cause damage (e.g. warping).

- Install brake disc on hub in line with mark on hub.
- Install locating pin and tighten to 8 Nm (6 ft.lb).
- Install brake caliper with new bolts. Tighten to 60 Nm (45 ft.lb).



- Install brake pipe in brackets.
- Install three–way connector mounting bolt, (LH brake caliper only).

Adjusting parking brake

Go to <u>Parking brake</u> and complete procedure as per instructions there.

Brake cable (later version), replacement

Note! There are two types of cable cover.

Older version:

* cable cover with loose guide sleeve towards endpiece.

Later version:

* cable cover with fixed plastic guide sleeve towards endpiece.

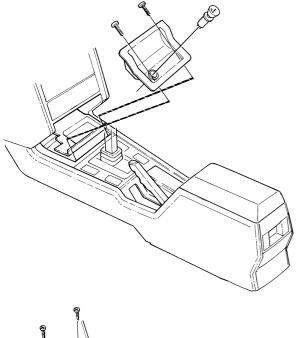
The removal and installation procedures are different for the two types. Follow instructions for the appropriate type.

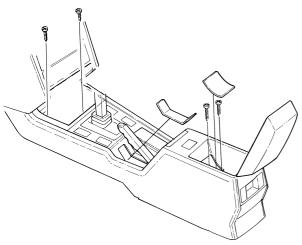
Preparations

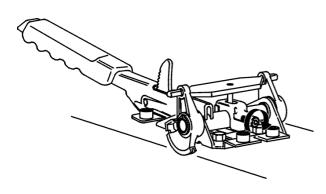
- Check that ignition is switched off.

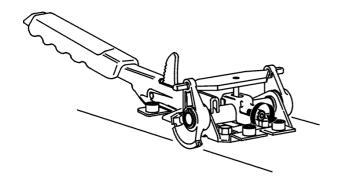
Removing center console

- Remove cigarette lighter panel (2 bolts). If DLC is fitted, remove this from panel first.
- Put parking brake on and put gearshift in neutral.









- Remove the two cover panels, one under the handbrake lever and the other under the armrest.
- Remove the four console bolts.
- Undo the connectors at the front of the console.

Cars with manual gearshift:

Undo gearshift gaiter from tunnel console by pressing on gaiter's rear snap fastening from underneath through the hole under the parking brake lever.

- Lift rear end of console first and press it forwards until the parking brake lever comes free of the console cross-member.
- Now lift front edge and remove console.

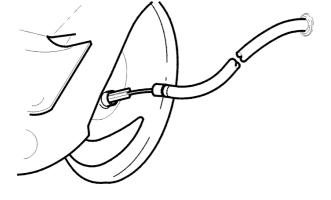
Removing cable

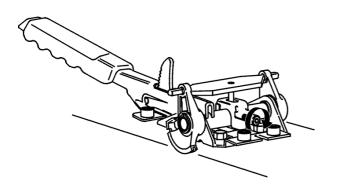
- Remove rear wheel.
- Remove cable clip mounting bolt located in front of rear wheel arch.
- Remove cable clip and rivet on carrier arm.
- Undo cable from carrier arm endpiece by bending cable cover guide sleeve up and down moderately.
- Remove cable rear end from grip on expander.
- Remove cable.

Installing cable

- Insert new cable through floor from outside.
- Install cable front end in parking brake mechanism.

- Check that O-ring on cable cover guide sleeve is OK.
- Install cable end in grip on expander.
- Pinch grip on expander around cable with a pair of pliers.
- Press guide sleeve home in carrier arm endpiece.
- Install cable to carrier arm with a new clip and rivet.
- Install mounting bolt in front of rear wheel arch.





Installing center console

- Install center console in reverse order to that in which it was removed.

Car with manual gearshift:

- Attach gearshift gaiter by hooks at front of tunnel console.
- Press snap fasteners on sides and at back together.

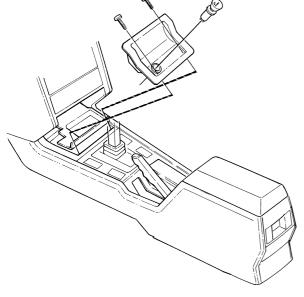
Parking brake lever, overhauling

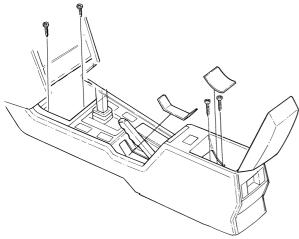
Preparations

- Check that ignition is switched off.
- Remove battery negative lead.

Removing center console

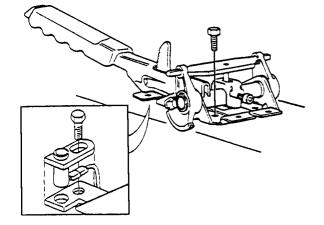
- Remove cigarette lighter panel (2 bolts).
- Tighten parking brake and put gearshift in neutral.



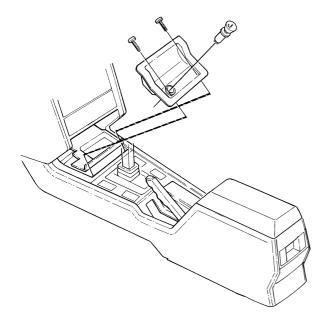


- Remove the two cover panels, one under the parking brake lever and the other under the armrest.
- Remove the four console bolts.
- Undo the connectors on the front of the console.
- Lift the rear end of the bracket first and push it forwards until the parking brake lever comes free in front of the console cross–member.
- Now lift front and remove bracket.

- Remove connector from parking brake contact.



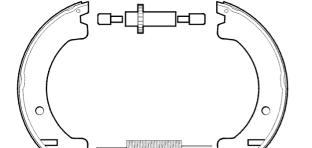
- Remove contact mounting bolt and contact itself.
- Remove parking brake lever mounting bolts (3).



- Remove brake cables and remove complete lever unit.

Installing center console

 Install center console in reverse order to which it was removed.



Finishing

- Install battery negative lead.
- Adjust parking brake as per Parking brake.

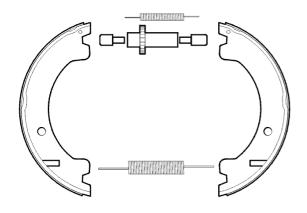
Parking brake

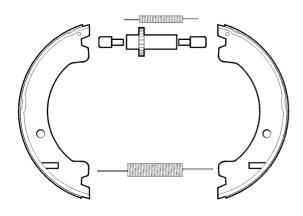
Special tools: <u>115 8147</u>

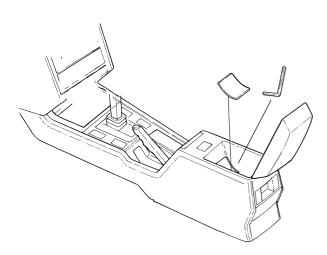
Procedure

The parking brake is adjusted by

- adjusting the brake shoes in one rear wheel first and then the other
- then adjust at the parking brake lever if necessary.







Preparations

- Apply the parking brake lightly (a few notches). Drive the car no more than 400 meters. This will clean rust and deposits off the brake shoes and brake drums, which are integrated in the rear brake discs
- Remove both the rear wheels.

Adjusting brake shoes

- Turn the brake disc until the adjustment hole is centrally over the small adjuster screw which is between the brake shoes
- Adjust the brake shoes by turning the adjuster screw upwards until the brake disc cannot rotate
- Then adjust the shoes slightly by turning the adjustment screw 4–6 notches in the other direction
- Adjust the brake shoe on the other rear wheel as above.

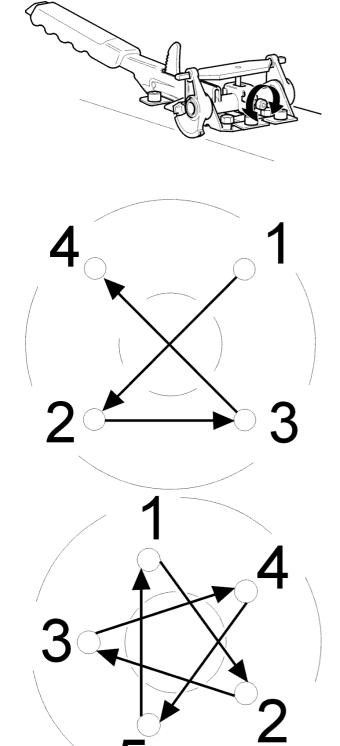
Check

- Check for play between the cable and parking brake lever. If there is no play, continue to <u>Installing wheels</u> to install the wheels
- If there is play between the cable and the parking brake lever, adjust the parking brake lever according to <u>Adjusting parking brake lever</u>.

Adjusting parking brake lever

 Remove the square cover plate under the centre console armrest to access the parking brake lever adjustment screw.

- Turn the adjuster screw so that full braking effect is achieved between the second and the eighth notch



- Check that wheel turns freely after adjustment when parking brake is off.

Installing wheels

- Ensure that the brake disk and wheel rim mating surfaces are clean
- Lubricate the centring lug on the hub for the rim using rustproofing agent, 116 1038–3
- Install the wheel
- Tighten the studs lightly. Then tighten the screws crosswise. Tighten to 110 Nm. When tightening using an impact wrench, torque socket <u>115 8147</u> must be used.

Note! Crosswise tightening and torque tightening is important to prevent stresses in the brake disc.