



Jump starting

Jumper cables must only be connected as shown.

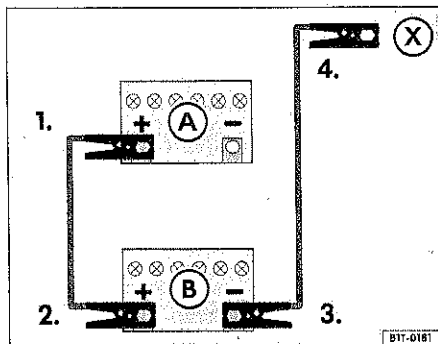


Fig. 47 How to connect the jumper cables.

The ⇒ fig. 47 shows the discharged battery (A) and the battery supplying power (B).

Attaching jumper cables

1. Switch off the ignition on both vehicles ⇒ ⚠.
2. Connect the *red* jumper cable to the positive (+) terminal (1) in the engine compartment of your vehicle with the 'dead' battery (A) ⇒ ⚠.
3. Connect the other end of the *red* jumper cable to the positive (+) terminal (2) in the other vehicle (B).
4. Connect the *black* jumper cable to the negative (-) terminal (3) in the other vehicle (B).
5. Connect the other end of the *black* (-) jumper cable in the engine compartment of your vehicle as shown (X). Never connect the jumper cable to the 'dead' battery itself, or to anything near it ⇒ ⚠.
6. Route the cables so that they cannot get caught in any moving parts in the engine compartment of either vehicle.

Starting the engine

7. Start the engine of the vehicle providing help (with the good battery) and let it run at idle speed.
8. Start the engine of your vehicle (with the low battery) and wait a minute or two until the engine is running smoothly. If the engine does not start after about 10 seconds, stop and try again after about 30 seconds.

Removing the jumper cables

9. Before you remove the jumper cables, switch off the headlights if they are on.
10. Switch on the air conditioning fan and the rear window defogger in your vehicle. This helps minimize voltage spikes when the cables are disconnected.
11. Disconnect the jumper cables in reverse order of the way they were connected, as follows:
12. Disconnect the *black* (-) cable (4) from your vehicle.
13. Disconnect the *black* (-) cable (3) from the other vehicle.
14. Disconnect the *red* (+) cable (2) from the other vehicle.
15. Disconnect the *red* (+) cable (1) from your vehicle.
16. Close the red cap over the positive (+) terminal on your vehicle.

Do not let the vehicles touch each other while the jumper cables are connected. If they do, electrical current may flow between the vehicles when the positive (+) terminals are connected. ▶

⚠ WARNING

Stop! Before working in the engine compartment, always read and heed all WARNINGS ⇒ page 45, "Safety is job No. 1 when working in the engine compartment". The engine compartment of any motor vehicle is a potentially dangerous area and can cause serious personal injury.

⚠ WARNING

Improper use of jumper cables when jump-starting a vehicle with a dead battery can cause the battery to explode leading to serious personal injury. To help reduce the risk of battery explosion:

- Always make sure that the battery providing starting assistance has the same voltage as the discharged battery (12 V) and about the same capacity (see battery label).
- Never jump-start a vehicle with a frozen battery. The battery can explode. If a battery is or has been frozen, replace it.
- Batteries give off explosive hydrogen gas. Always keep fire, sparks, open flame and smoking materials away from batteries. Never



⚠ WARNING (continued)

use a cellular telephone while connecting or disconnecting jumper cables.

- Never short out the battery terminals by connecting the positive (+) and negative (-) terminals with each other.
- Always follow the jumper cables' manufacturer's instructions.
- Never connect the negative cable from the other vehicle directly to the negative terminal of the discharged battery. The hydrogen gas from the battery is explosive.
- Never attach the negative cable from the vehicle providing starting assistance to parts of the fuel system or to the brake hoses or brake lines.
- Never allow the non-insulated parts of the battery clamps to touch. Never allow the jumper cable attached to the positive battery terminal to contact metal parts of the vehicle.
- Always route the jumper cables so that they cannot get caught in any moving parts in the engine compartment.

ⓘ Note

Connecting jumper cables improperly can cause expensive damage to the vehicle's electrical system. ◀



Applies to vehicles: with engine preheating

Engine preheater

The coolant is warmed and that makes a "cold start" easier.

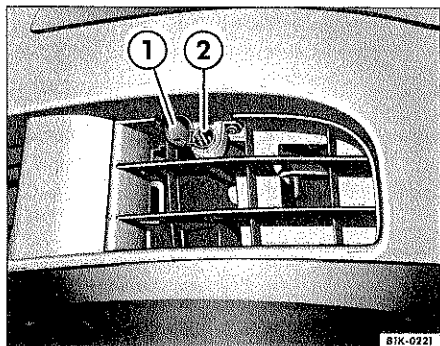


Fig. 48 In the left front of the bumper: engine preheater connector socket

With the vehicle parked, the engine preheater is connected to a standard household outlet using the cable provided. A heating element slowly warms the engine coolant. If the vehicle is started when the engine is warmed sufficiently, the engine reaches operating temperature more quickly and fuel consumption and emissions during the warm-up phase are reduced. In addition, the heater reaches its full output more quickly.

Delivery package

The engine preheater consists of:

- a heating element in the engine coolant circuit,
- a connector socket in the left front of the vehicle,
- a connector cable,
- a connecting cable with an integrated protective switch.

Connecting the engine preheater

- Open the cap ⇒ fig. 48 ①.
- Insert the connector cable in the socket ② ⇒ ⚠.
- Connect the connector cable with the connecting cable ⇒ ⚠.
- Connect the connecting cable to a standard household 230V outlet ⇒ ⚠.

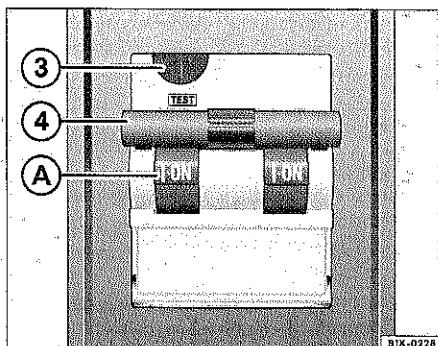


Fig. 49 Engine preheater protective switch.

Preheating time

No preheating time limit is specified. If the vehicle is parked outdoors at very low temperatures, we recommend keeping the engine preheater connected overnight.

Protective switch

A protective switch is installed in a box in the connecting cable. The protective switch is activated if dangerous voltage levels occur.

Testing the protective switch

The protective switch must be tested to ensure it functions correctly. If the engine preheater is only used occasionally, the protective switch only needs to be checked once a month. If you use the engine preheater regularly, we recommend testing the protective switch on a weekly basis.

- Open the box.
- Press the ⇒ fig. 49 ③ (TEST) button until the protective switch is activated. 0-OFF appears in the display ④. The protective switch is not operational.
- Pull the lever ④ up until it engages. I-ON appears in the display ④. The protective switch is functional.
- Close the box.

⚠ WARNING

- Only use the cable provided.
- Always remove the connector cable before starting the engine.
- The cables and the protective switch must never come into contact with water.

⚠ WARNING (continued)

- Always connect the cable to a grounded 230V power outlet that is protected from water.
- Check the cable for damage each time it is used. If a cable is damaged, replace it with an identical one. ⚠

Towing

Front towing eye

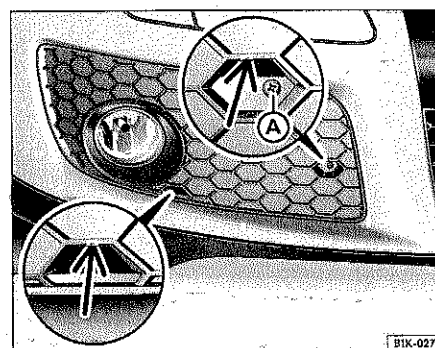


Fig. 50 In the right front bumper: removing the cover.

The towing eye and tools are stored in the tool kit in the luggage compartment ⇒ page 91, fig. 27. Use a lug wrench or other suitable tool to install the towing eye into its mounting bracket. Make sure it is installed all the way and that it is secure.

Removing the cover

- Remove the screwdriver ⇒ page 91, fig. 27 ① from the tool kit in the luggage compartment.
- Remove the Philips head screw ⇒ fig. 50 ④
- Reach into the opening (arrows) with your finger and pull the cover forward to remove it.

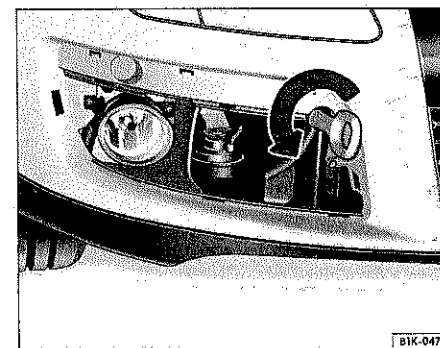


Fig. 51 The front right section of the vehicle: screwing in the towing eye.

- Put the cover and the screw in a safe place in the vehicle.

Installing the towing eye

- Remove the towing eye ⇒ page 91, fig. 27 ③ and the lug wrench ⇒ page 91, fig. 27 ⑥ from the tool kit in the luggage compartment.
- Screw the towing eye into the threaded hole as far as it will go, in the direction shown ⇒ fig. 51 (arrow). Use the lug wrench or other suitable tool to tighten the towing eye ⇒ ①.
- When towing operations are complete, unscrew the towing eye clockwise and install the cover.

- If necessary, clean the towing eye, the lug wrench and the screwdriver and place them back in the tool kit.

The towing eye must always be carried in the vehicle.

Follow instructions and tips for towing
⇒ page 115, “General notes”.

Rear towing eye

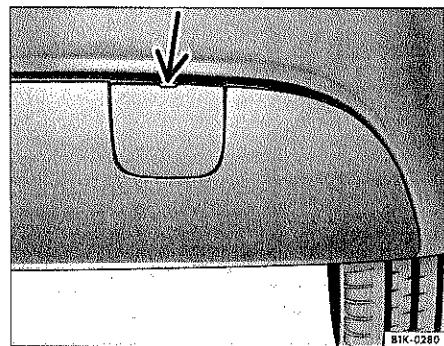


Fig. 52 Rear bumper, right side: removing the cover.

The threaded hole for the towing eye is in the rear bumper on the right side. Use a lug wrench or other suitable tool to install the towing eye into its mounting bracket. Make sure it you install it all the way and that it is secure.

Removing the cover

- Remove the screwdriver ① from the tool kit in the luggage compartment ⇒ page 91, fig. 27.
- Insert the flat blade of the screwdriver into the slot between the cover and the bumper ⇒ fig. 52 (arrow).
- Pry the cover off carefully to the rear. It may be necessary to use additional force. Leave the cover hanging on the vehicle.

! Note

- Make sure the towing eye is installed all the way into the mounting bracket and that it is secure. If not, it could be pulled out while your vehicle is being towed.
- Do not damage the vehicle paint when removing and installing the cover. ◀

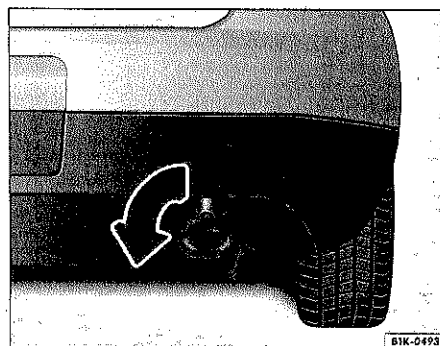


Fig. 53 Rear bumper, right side: mounting the towing eye.

Installing the towing eye

- Remove the towing eye ⇒ page 91, fig. 27 ③ and the lug wrench ⑥ from the tool kit in the luggage compartment.
- Screw the towing eye as far as it will go into the threaded hole. Use the grip of the screwdriver to tighten the towing eye ⇒ fig. 53.
- Screw the towing eye into the threaded hole as far as it will go, in the direction shown ⇒ fig. 53 (arrow). Use the lug wrench or other suitable tool to tighten the towing eye ⇒ ①.
- When towing operations are complete, unscrew the towing eye clockwise and install the cover.
- Return the towing eye, the lug wrench and the screwdriver to the tool kit. ▶

Vehicles equipped with a trailer hitch cannot use a tow-bar to tow another vehicle. Instead, use a tow-rope.

Follow directions for towing ⇒ page 115, “General notes”.

! Note

- Make sure the towing eye is installed all the way into the mounting bracket and that it is secure. If not, it could be pulled out while your vehicle is being towed.
- Do not damage the vehicle paint when removing and installing the cover. ◀

General notes

Whenever possible, tow with the front (drive) wheels off ground.

Always observe the following instructions if you must use a tow-rope:

Notes for the driver of the towing vehicle

- Switch on the emergency flashers.
- Drive very slowly at first to take up the slack in the tow-rope. Then press the accelerator slowly and increase speed gradually.
- Remember that the brake booster and power steering are not working in the vehicle being towed. Brake earlier and more gently than you would normally ⇒ ⚠.
- Do not drive faster than 30 mph (50 km/h) or tow for more than 30 miles (50 km).

Notes for the driver of the vehicle being towed

- Switch on the emergency flashers.
- Shift the transmission into neutral N.
- Make sure that the tow-rope stays tight at all times ⇒ ⚠.
- Remember that the brake booster and power steering are not working on the vehicle being towed. The steering wheel will be harder to turn. You will need to press harder on the brake pedal when you need to slow down or stop.

Tow-rope or tow-bar

It is easier and safer to tow a vehicle with a tow-bar. Use a tow-rope only if you do not have a tow-bar. Vehicles equipped with a trailer hitch cannot use a tow-bar to tow another vehicle.

A tow-rope should be able to stretch slightly to reduce the jerking on both vehicles when the towing vehicle speeds up or the towed vehicle has to slow down or stop. Use a tow-rope made of synthetic fiber or similar elastic material.

Attach the tow-rope or the tow-bar only to the towing eyes provided with the vehicle.

Driving style

Towing requires some experience, especially when using a tow-rope. Both drivers must be familiar with the techniques required for towing. Inexperienced drivers should not try to tow another vehicle.

Do not pull too hard with the towing vehicle, and avoid jerking the tow-rope. When towing on an unpaved road, there is always a risk of overloading and damaging the attachment points.

On the vehicle being towed, the ignition must be switched on to keep the steering wheel from locking. Also make sure that the turn signals, horn, windshield wipers and windshield washers work properly.

Remember that the power steering and the brake booster do not work when the engine is not running. The steering wheel will be harder to turn. You will need to press harder on the brake pedal when you need to slow down or stop.

Towing a vehicle with a DSG® automatic transmission

- Shift the vehicle into neutral N. ▶

- Do not drive faster than 30 mph (50 km/h).
- Do not tow your vehicle farther than 30 miles (50 km).
- If they are to be towed by a breakdown truck, the front wheels off all vehicles must be raised off the ground ⇒ ①.

Tow starting

For technical reasons, it is **not** possible to tow-start or push-start your vehicle.

Use jumper cables instead ⇒ page 109.

⚠ WARNING

Towing a vehicle changes the way your vehicle handles and brakes. To help reduce the risk of a crash and serious personal injury, note the following:

- The driver of the vehicle that is being towed:
 - Will have to press the brake pedal considerably harder than normal because the brake booster is not active. Always be alert not to rear-end the towing vehicle.
 - Will have to use considerably more force to turn the steering wheel, because the power steering is not working.

⚠ WARNING (continued)

- The driver of the vehicle that is towing:
 - Must accelerate gradually and gently avoid jerking movements.
 - Must brake earlier and more gently than you would normally.

ⓘ Note

- Unburned fuel can get into the catalytic converters and damage them during towing ⇒ page 11, "Catalytic converter".
- Always read and heed the notes on towing vehicles in the owner's manual of the other vehicle.

💡 Tips

- For technical reasons, it is not possible to tow start a vehicle with an automatic transmission.
- If transmission has lost transmission fluid, the vehicle must be towed with the front (drive) wheels off the ground.
- If a vehicle with a DSG® automatic transmission has to be towed more than 30 miles (50 km), it must be professionally towed with the drive wheels raised off the ground.
- Inexperienced drivers must not tow another vehicle. ◀

When can your vehicle not be towed?

Your vehicle may not be towed under the following conditions:

- If the transmission malfunctions and there is no transmission fluid, or if the transmission fluid has leaked out of the transmission.
- If you have to tow farther than 30 miles (50 km).
- If the front and rear wheels cannot turn.

In these cases the vehicle must be towed with front (drive) wheels off the ground transported using a flatbed truck or trailer.

⚠ WARNING

If you still tow your vehicle under these conditions, you could cause an accident or cause

⚠ WARNING (continued)

damage to the vehicle. This will not be covered by your New Vehicle Limited Warranty.

ⓘ Note

- If the vehicle has to be towed more than 30 miles (50 km), it must be moved with the drive wheels off the ground.
- If there is little or no oil in the transmission because of damage to your vehicle, it must be moved with drive wheels off the ground.
- Do not tow your vehicle behind a recreational vehicle or trailer for more than 30 miles (50 km). The automatic transmission can be severely damaged, even if the selector lever is in the Neutral N position. ◀

Lifting the vehicle

Vehicle lift points

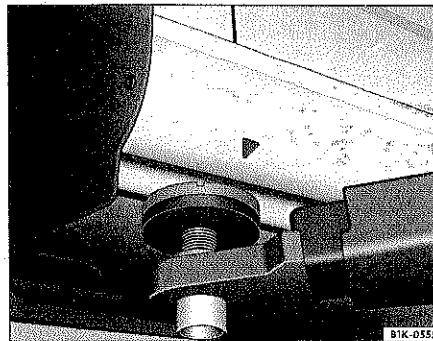


Fig. 54 Front lift point for workshop lift or floor jack.

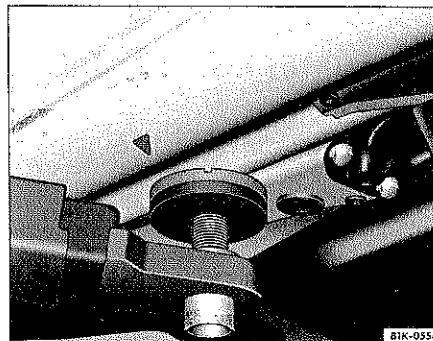


Fig. 55 Rear lift point for workshop lift or floor jack.

Your vehicle may only be lifted by a floor jack or workshop lift using the lift points shown ⇒ fig. 54 and ⇒ fig. 55. Lifting the vehicle from a point other than that shown above can result in serious damage to the vehicle ⇒ ① and cause serious personal injury ⇒ ⚠.

Using the vehicle jack to lift the vehicle ⇒ page 97, "Raising the vehicle".

⚠ WARNING

Improperly lifting your vehicle with a floor jack can cause the vehicle to fall off the floor jack and cause serious personal injury:

- Always read and heed the operating instructions from the floor jack manufacturer and legal regulations if necessary before using the floor jack to lift the vehicle.
- Never allow anyone to stay in the vehicle when it is being lifted or when it is off the ground.
- Always lift your vehicle only at the designated lift points shown in the illustrations ⇒ fig. 54 and ⇒ fig. 55. Not using the designated lift points can cause the vehicle to fall off the floor jack when heavy parts such as the engine or transmission are removed.
- Ensure that the vehicle's lift points lie as flat as possible and centered on the carrier plates of the floor jack.

⚠ WARNING (continued)

- Never start the engine when you have raised the vehicle on the floor jack. The engine vibrations and vehicle movements could knock the vehicle off the floor jack.
- If you must work under a vehicle raised on a floor jack, always make sure that the vehicle is safely supported on safety stands intended for that purpose that are strong enough to support the weight of the vehicle.
- Never use the floor jack as an ascending aid.
- Always make sure that the weight of the vehicle is not heavier than the lifting capacity of the floor jack and safety stands being used.

ⓘ Note

To prevent any damage to the vehicle, always observe the following:

- Before driving the vehicle onto the floor jack, ensure that there is adequate space between the low-lying vehicle parts and the floor jack.
- No persons or objects may be on the floor jack.
- Never lift the vehicle on the engine oil pan, transmission, rear or front axle.
- To prevent damage to the underbody when lifting the vehicle, rubber pads must be used. In ▶