

# Connection Set for Air Brake Bleeding Device





Illustration similar, may vary depending on model

Read and follow the operating instructions and safety information prior to initial operation.

Technical changes reserved!

Illustrations, functional steps, and technical data may deviate insignificantly due to continuous further developments.

Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.





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# Introduction

Thank you for choosing to purchase this quality product. To minimise the risk of injury, we ask you to always take some basic safety precautions when using this product. Please read this operating manual carefully and make sure that you understand it.

Keep these operation instructions in a safe place.

#### Intended use

The adaptor kit is used to remove or change the brake liquid of brake systems of most vehicles types and models. It can also be used to remove trapped air. For this purpose, other parts and components are needed that are not included in the scope of del

# Safety instructions

General safety instructions



# **ATTENTION!** When using the device, always respect fundamental safety instructions to reduce the danger of injuries and to avoid damages of the device.

- Thoroughly read all instructions before using the tool!
- The device is not intended for use by persons (including children) with impaired or limited physical, sensory, and mental abilities or lack of experience and/or real knowledge, unless they are supervised by a person responsible for their safety or follow the instructions made by this person on how to correctly use the device.
- Children should be supervised to ensure that they do not play with the device. Children must not clean or maintain the device.

# Work area safety

- Keep your working area clean, tidy, and well illuminated. A tidy working area can prevent accidents.
- Consider the conditions of the working area. Do not use electric tools or devices in humid or wet areas. Do note expose the device to rain. Do not use electrically driven tools or devices near flammable gases or liquids.
- Keep children at a distance. Children must not enter the working area. They must not touch machines, tools, power cables.
- Store tools and devices that you do not use in a safe place. Store tools that are not used in a dry place to avoid rust. Lock up tools and keep them out of children's reach.
- Use the correct tool for the job to do. Do not use too small a tool for a job that would require a large industrial tool. This tool is designed for specific applications. It works better and safer when it is used in the performance range intended for it. Do not modify the tool and do not use it for applications that it has not been designed for.

# Personal safety

- Wear suitable clothing. Do not wear loose clothing or jewellery, as these can be caught by machines. It is recommended to wear protective, electrically non-conductive clothing and non-slip shoes or safety shoes while working. Wear hair protection if you have long hair.
- Wear safety glasses and use ear protection





• Do not lean too far forward. Make sure to have a safe stand and do not reach out over running machines.

# Safety of handling tools and machines

- Maintain tools carefully. Check cables and hoses regularly, replace them if damaged or have them repaired by a qualified technician. Always keep handles clean, dry, and free of grease and oil.
- Remove adjustment tools. Before use, check whether the key and setting tools are removed from the device or the machine.
- Avoid unintentional starting. Make sure that there is no air pressure when the device is turned off and before hoses are connected.
- Stay vigilant. Fully concentrate on what you are doing and work with foresight. Do not use any tools, machines, or devices when you are tired.
- Do not use the device when being under the influence of alcohol, drugs, or medicine. If you are taking prescription medicine, carefully read the information leaflet to know possible side effects or restrictions for the operation of devices or machines. If you are unsure, do not operate this device.
- Before using this device, first check it for possible damage, only a device in perfect condition can work as intended. Any damaged parts should be replaced by a qualified technician.
- Only use identical spare parts for maintenance. The warranty becomes void if any other parts are used. Only use accessories intended for use with the device. Suitable accessories are available from the supplier of the device.
- **Pacemaker safety note:** People wearing a cardiac pacemaker should consult their doctor before operating this device.
- **Maintenance:** For your safety, **maintenance and repair work** should be carried out regularly, but only by a qualified technician.

**Note!** The operating characteristics of this device may vary depending on the air pressure and the capacity of the connected compressor.

# Special safety instructions for the brake bleeding device

**Attention!** Only qualified persons are allowed to operate the brake bleeding device. Read and understand all safety instructions before operation.

- Wear safety glasses.
- Do not smoke in the work area.
- Only use the brake bleeding device in a well-ventilated area.
- In case of leakage, immediately interrupt the air pressure supply, fix the problem, and replace the defective hose if necessary.
- In case of leakage, immediately and carefully remove spilled liquids.
- Do not exceed the specified air pressure, this could lead to damage.
- Do not use detergents within this system.
- In case of leakage have a suitable collecting container ready.
- In case of fire have an ABC fire extinguisher ready.
- Before using the brake bleeding device, make sure that the gearshift lever on the vehicle is set to "P" (for automatic transmission) or "neutral" (for manual transmission). Apply the handbrake firmly and lock the wheels.
- Only use brake fluid with the brake bleeding device. Do not try to use it with other liquids. Contamination could lead to failure of the braking system.
- Follow local guidelines for the proper disposal of brake fluids. In any case, dispose of brake fluids in an environmentally responsible way.
- Never use pressurised air to remove brake dust from the callipers. Only use a suitable brake cleaner for this purpose.

# Caution!

• Hot brakes may cause severe burns.

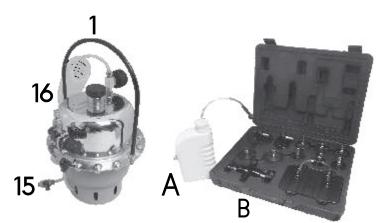




- Some brake pads contain asbestos, so you should wear a suitable respiratory protection. Avoid any contact with vehicle paint. Brake fluids cause paint damage.
- The warnings, notes, and instructions in these operating instructions cannot cover all possible operations and situations. Always use common sense and caution.

# Unpacking

On unpacking, make sure that all parts listed below are included. If any parts are missing or damaged, immediately contact the supplier.



N⁰	Name	Letter	Name
1	Handle*	Α	Collecting container*
15	SP20 quick coupling*	В	Adapter kit
16	Liquid hose*		

\* Parts 1, 15, 16, and A are not included. These parts are only depicted for clarification purposes. The accessory kit can be used together with an appropriate tank and collecting container. The parts seen on the two following photographs are included in the scope of delivery:





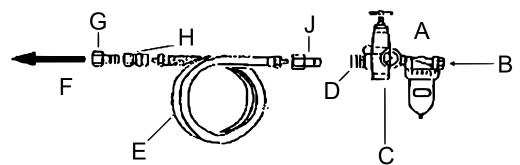




# Preparation

- Always work in a well-ventilated area.
- Switch off the engine and apply the handbrake.
- Remove the wheels and look for the drain connection on the brake cylinders, referring to the manufacturer's manual.
- Switch on the compressed air compressor (not supplied) and place the compressed air hose directly next to the brake bleeding device. The compressor should have a moisture filter.

Air line

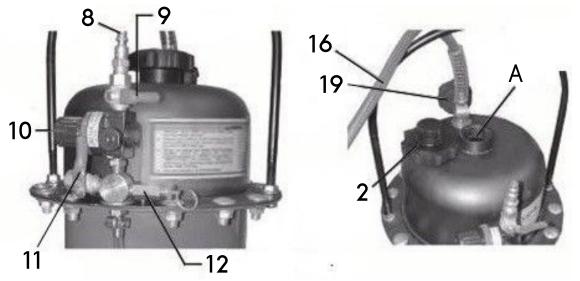


Letter	Name/explanation	Letter	Name/explanation
Α	Filter	F	Connection to the quick coupling <b>(8)</b> on the brake bleeding device
В	From compressor	G	Quick coupling
С	Regulator	Н	Quick connector
D	Quick connector	J	Quick coupling
E	Air hose		





# Main parts



Nº	Name	Nº/letter	Name/explanation
2	Tank cap	12	Relief valve
8	Air hose quick connector	16	Liquid hose
9	Air connection ball valve	19	Pressure gauge
10	Air pressure adjustment valve	Α	Add brake fluid here.
11	Air release ball valve		

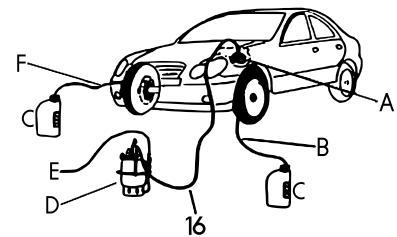
# Bleeding the brake and topping up brake fluid

ATTENTION! NEVER run the car engine in a closed room. Carbon monoxide poisoning hazard!

- 1. Place the brake fluid device next to the car and unscrew the tank cap (2).
- 2. Open the hood and locate the brake master cylinder tank.
- 3. Remove the lid of the master cylinder tank.
- 4. Find the appropriate adapter in the adapter kit; it should have the form of the lid of the master cylinder tank and be equipped with a connection port for the liquid hose (16). In some case, a universal adaptor (E1, F1, or F2) needs to be used if no other adaptor can be applied. Use the mounting loop cables and other parts included.
- 5. Place the adapter on the master brake cylinder tank and fix it in place.
- 6. Fill in the desired amount of brake fluid (see manufacturer's manual for your car). Then screw the cover (2) back on.
- 7. Connect the fluid hose (16) to the adapter using the quick coupling (15). Make sure that the ball valve (9) is closed.
- 8. Open the drain screw behind on the left and right of the rear brake cylinders, attach a transparent plastic hose (not supplied) to the drain openings, and connect the other end to the collecting tank.
- 9. Connect the air hose (not supplied) with the quick coupling (8) to the brake bleeding device.
- 10. Turn the ball valve (9) to ON (vertical) position. The tank is now under pressure.
- 11. Pull out the air pressure adjustment button (10) and set a tank pressure of between 1.4 to 2.7 bar (0.14 to 0.27 MPa) with the button under the air pressure gauge (19).







Letter	Name	Letter/№	Name
Α	Master brake cylinder	D	Brake bleeder
B, F	Transparent plastic hose (not supplied)	E	Air pressure line of compressor
С	Collecting container	16	Liquid hose

**ATTENTION!** Never exceed 2.7 bar (0.27 MPa) to prevent a risk of damaging the device, accessories, or hoses.

- 12. Slowly open the ball valve (9). The brake fluid replacement process begins. Check all connections for leaks. If a leak is detected, turn the ball valve (9) to the OFF (horizontal) position and fix the problem.
- 13. While changing the fluid, depress the brake pedal abruptly and slowly release it again. Repeat this process several times.
- 14. When the collecting containers are full or when the colour of the emerging liquid changes from dark to light, the process is complete.
- 15. Remove the collecting container or the transparent plastic hose from the master brake cylinder. Screw the original lid onto the drain opening again.
- 16. Follow local guidelines for the proper disposal of brake fluids. In any case, dispose of brake fluids in an environmentally responsible way.
- 17. Repeat steps 8 to 15 on the front brake cylinders.
- 18. After finishing the works on the front brake cylinders, the ball valve (9) of the main cylinder is set to OFF (horizontal) and the liquid hose (16) is removed from the lid of the master brake cylinder.

# Vehicles with ABS braking systems

Repeat all steps of "Bleeding the brake and topping up brake fluid" section with the following exceptions:

- 1. Bleed each wheel individually.
- 2. Set the gear lever to "P" or "neutral" and let it run during this process. When the process is complete, switch off the engine again.
- 3. Repeat this process on each individual brake.

# Final steps

- 1. Refit the cover on the master brake cylinder.
- 2. Remove the air hose (8) from the brake bleeding device.
- 3. Open the ball valve (9), and pull on the air release valve (12) to release the pressure.
- 4. Properly dispose off old liquids collected.





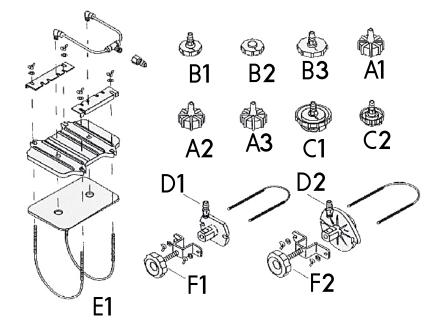
**Attention!** Before starting the vehicle again, press the brake pedal several times until the pedal feels firm. Check the brakes for possible damage/leaks. Test the brakes at low speeds before driving the vehicle under normal conditions.

# Maintenance

**Caution:** Before carrying out maintenance work, ensure that the brake bleeding device is not under pressure.

- 1. Wipe up any spilled brake fluid.
- 2. Wipe parts of the brake bleeding device with a cloth.
- 3. Store the device in a clean, dry place.

# List of adapters



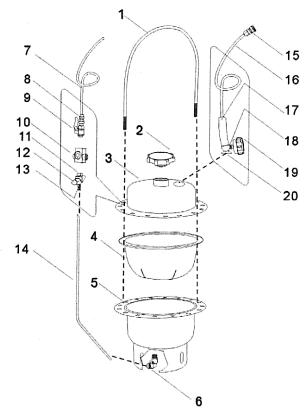
# PLEASE READ THE FOLLOWING CAREFULLY!

The manufacturer and/or distributor has presented the parts diagrams for reference only. Neither the manufacturer nor the distributor gives any hints to the buyer that the buyer is qualified to carry out any repairs on the product. On the contrary, the manufacturer or distributor explicitly states that all repairs and every part replacement must only be carried out by qualified technicians and **NOT** by the customer. The buyer bears all risks and consequences for carrying out repairs or parts replacement or modifications on the original product on his own.





# Exploded view and parts list



N⁰	Name	Qty.	N⁰	Name	Qty.
1	Handle	1	11	Hitch	2
2	Tank cap	1	12	Safety valve	1
3	Upper handle of tank	1	13	Hitch	1
4	Rubber membrane	1	14	Hose	1
5	Lower handle of tank	1	15	Quick coupling	1
6	Connection PL802L	1	16	Hose	1
7	Air connection point	1	17	Strain relief	1
8	Quick coupling	1	18	Hitch	1
9	Ball valve ¼″	3	19	Pressure display	1
10	Pressure adjustment valve	1	20	Gauge coupling	1

**Note!** Some parts are listed and shown for illustration purposes only and are not available as individual replacement parts. The tank is not included in the scope of delivery. It is shown for clarification purposes.

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