

Air-conditioning system nitrogen set

General points

The air-conditioning system can become damaged following compressor damage or on account of old dryers. Equally, if the air-conditioning system is open for a longer period, e.g. after an accident, lots of moisture can penetrate. In such cases, the air-conditioning system must be flushed and dried.

Nitrogen is an excellent drying medium. This Technical Information describes how to use the air-conditioning system nitrogen set 150 8PE 351 310-111.

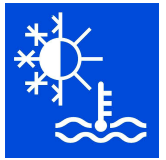
Application

Areas of application for the air-conditioning system nitrogen set 150

- For drying the system
- Leak test

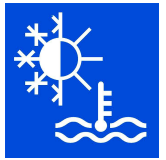
The set comprises a nitrogen pressure reducer, a universal flushing adapter and a hose. A cylinder cart is available as an accessory (8PE 351 226-011).





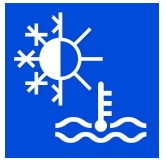
1. The pressure reducer is screwed to the nitrogen cylinder (tighten the union nut carefully to prevent damage to the thread). Depending on the country, an adapter may have to be used.
2. Loosen the pressure reducer adjusting screw until no more spring pressure can be felt. The pressure is now set to "0".
3. Connect the yellow pressure hose to the pressure reducer. Only tighten the union nut by hand.
4. Connect the universal flushing adapter to the other end of the pressure hose. This may only be tightened by hand, too.
5. Select the suitable taper for the connection opening of the component to be dried on the flushing adapter. There are two different taper diameters available. The diameter can be changed by removing the taper from the flushing adapter and turning it.





6. Fasten the adapter to the component. To do this, press the rubber taper into the cable opening, hook the fastening hoop into place and fix using the clamping screw.
7. Check that the other component opening is not sealed.
8. Open the valve on the nitrogen cylinder.
9. Turn the adjusting screw on the pressure reducer slowly against the spring pressure until the low-pressure manometer indicates around 12 bar.
10. Open the shut-off valve in the yellow pressure hose. The nitrogen now flows through the component. If the pressure drops too much at the manometer, pressure can be readjusted. **Note:** With blocked components, make sure that the maximum pressure does not exceed **12 bar**.
11. The component should be flooded with nitrogen in both directions until all the moisture has been removed.





Leak test

The air-conditioning system nitrogen set 150 can be used together with the adapter set 8PE 351 226-831



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or the individual parts 8PE 351 216-111 and 8PE 351 216-011 to carry out a leak test.



Nitrogen is filled into the faulty, evacuated air-conditioning circuit with the aid of the special low-pressure connection. Thanks to slow and even filling, the function of the low-pressure switch can be tested at the same time. Stop pressure increase at **max. 12 bar**.

If the leak spot is large enough, the nitrogen can be heard escaping and the spot can be diagnosed quickly. In the case of more minor leaks, a drop in pressure can be established after a longer operating time. In these cases, please use leak detection spray 8PE 351 226-061.



Note

The air-conditioning system nitrogen set 150 is a relatively simple tool. It still requires regular maintenance, however, to guarantee that all the pressurised components are OK. The pressure hose, rubber taper and screw-type connections have to be checked for damage. The thread of the adjusting screw at the pressure reducer has to be lubricated with copper paste or a high-pressure grease.

