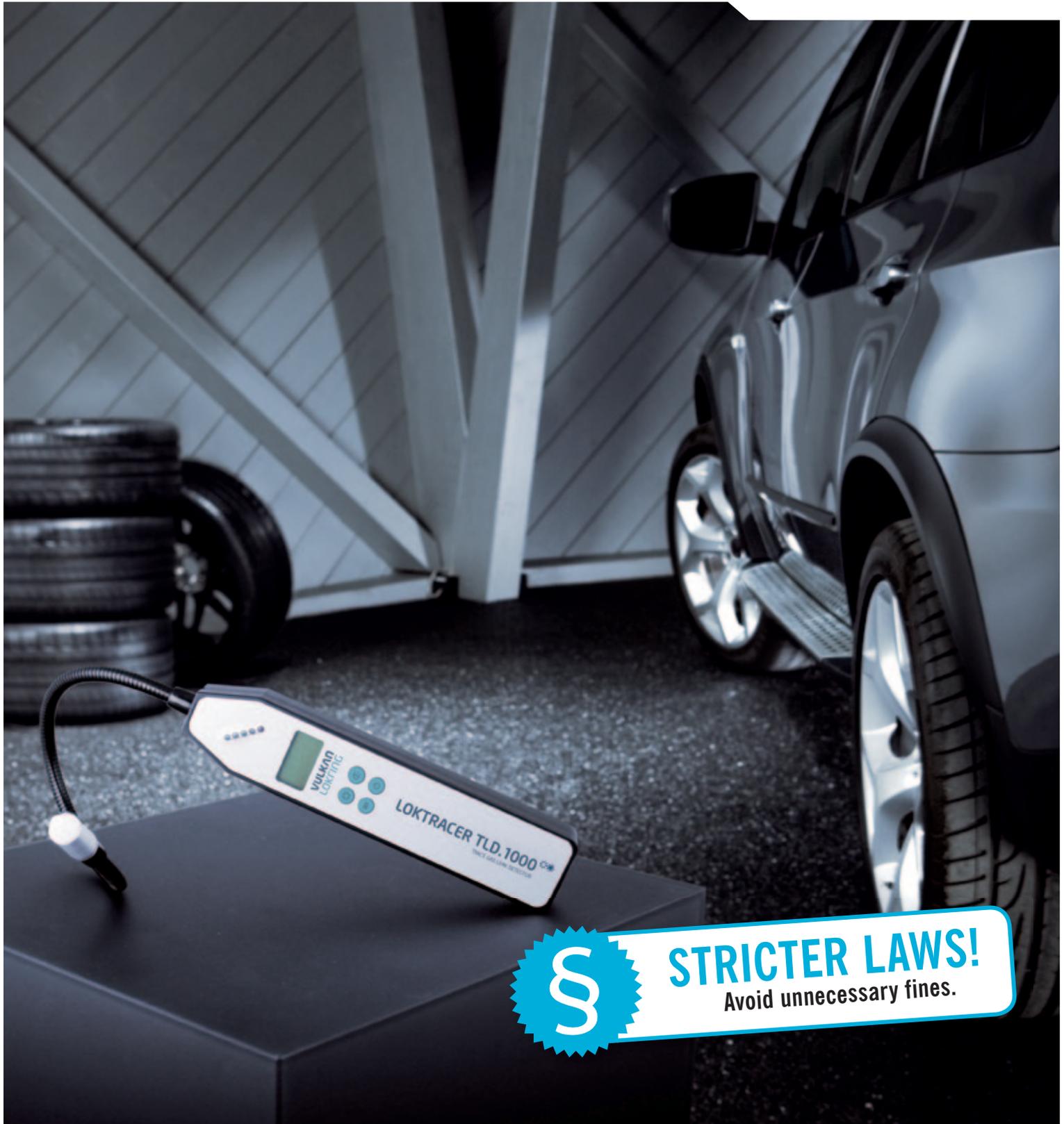


LOKTRACE

FIND THE LEAK!

Trace gas leak detection



 **STRICTER LAWS!**
Avoid unnecessary fines.

LEAK DETECTION - GREATEST CHALLENGE IN A/C SERVICING

WHAT SERVICE TECHNICIANS EXPECT FROM A LEAK DETECTION METHOD

Whenever we talked to service technicians in air-conditioning service garages about their work, it always became apparent that leak detection is one of the greatest challenges in air-conditioning servicing. The following requirements on leak detection methods were mainly described as important, particularly with a view to stricter legislation:

➔ COMPLIANCE WITH LEGAL REGULATIONS

R134a is harmful to the environment and must not be charged into a leaking air-conditioning system.

➔ RELIABILITY

If a leak is indicated, this must mean that there really is a leak at this spot.

➔ DIRECT IMPLEMENTATION

Customers should not have to come back into the garage a second time.

➔ DETECTING SMALLER LEAKS

The method should not only be able to be used for large leaks, but detect the smallest of leaks too.

➔ EASY CHECKING OF THE EVAPORATOR

This saves complex work and thus time.

CONVENTIONAL LEAK DETECTION METHODS

We found that garages often use several leak detection methods, since none of the conventional methods meet all service technicians' expectations.

➔ UV DYE

has to be distributed in the air-conditioning system first. This means customers have to return to the garage. The evaporator in the vehicle air-conditioning system is very difficult to check. Since UV dyes are oil-based, small leaks cannot be traced, and this leak detection method must not be used when the air-conditioning system is empty.

➔ ELECTRONIC REFRIGERANT LEAK DETECTORS

react to external gases such as oil or petrol vapours that can be in the engine compartment. This makes leak detection extremely unreliable. This leak detection method must not be used when the air-conditioning system is empty either.

➔ NITROGEN AND BUBBLE SPRAY

do not find small leaks due to the size of the nitrogen molecules. Checking the evaporator is very difficult too.

LOKTRACE

THE LEAK DETECTION SYSTEM

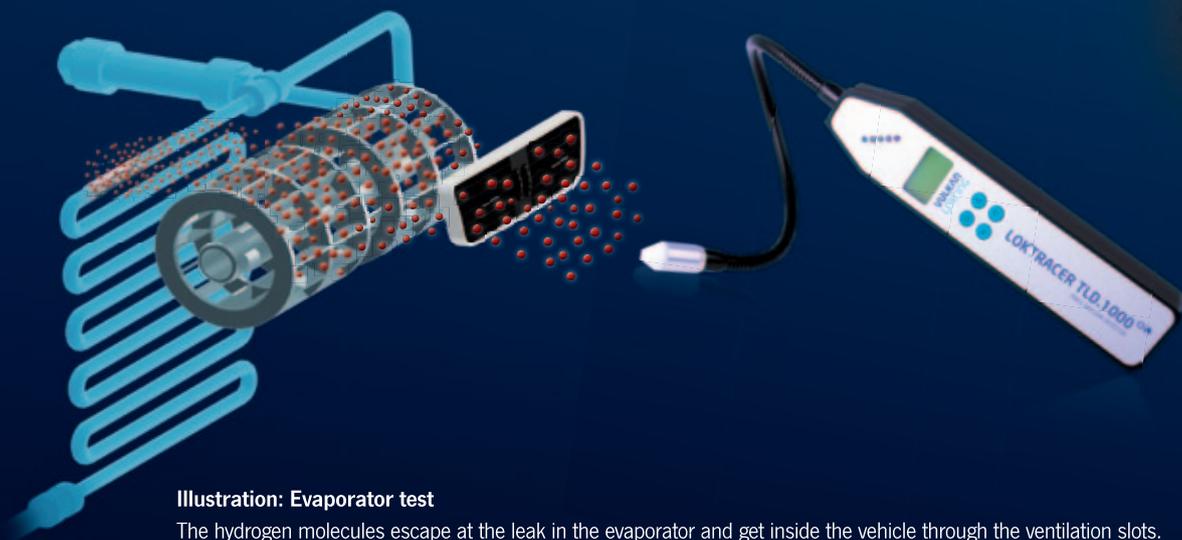
Trace gas leak detection has been used successfully by the industry for years. We have developed this method further especially for servicing vehicle air-conditioning systems.

LOKTRACE gas, which is made up of nitrogen and hydrogen, is filled into the air-conditioning system for leak detection. LOKTRACE gas is not flammable, non-toxic, non-corrosive and not harmful to the environment. The hydrogen share is used as the trace gas.

Hydrogen molecules are the smallest naturally occurring particles and escape from even minimum leaks. With the aid of the hydrogen leak detector LOKTRACER TLD.1000, even the smallest of leaks can be traced.

LOKTRACER TLD.1000 reacts almost exclusively to hydrogen. Which in its turn means leak detection is extremely reliable. The evaporator can be checked over easily through the ventilation slots in the central console.

LOKTRACE is the first method that meets all the requirements on a leak detection system for vehicle air-conditioning systems and transforms the leak detection “guessing game” into a process that guarantees results.



LOKTRACE COMPARED TO CONVENTIONAL LEAK DETECTION METHODS

	Compliance with legal regulations	Direct implementation	Detecting smaller leaks	Reliability	Easy checking of the evaporator
LOKTRACE	✓	✓	✓	✓	✓
UV dye	✗	✗	✗	✓	✗
Electronic refrigerant leak detectors	✗	✓	✓	✗	✓
Nitrogen and bubble spray	✓	✓	✗	✓	✗



Illustration: Leak detection in the engine compartment

Hydrogen is lighter than air. The air-conditioning pipes and hoses can be checked conveniently from above.

STRICTER LAWS

HAVE YOU HEARD?

Numerous repair facilities are uncertain how to react to leak detection following changes in legislation. R134a is extremely harmful to the environment, and for this reason it must not be charged into a leaking air-conditioning system. Previous legislation already covered this case.

World wide, legislation has become stricter through SAE Standard JJ2791, EC guideline 2006/40/EC and directive 307/2008. An air-conditioning system that has lost a disproportionately large amount of refrigerant may only be refilled if it can be guaranteed that it is no longer leaking.

Service technicians who violate these regulations now may face large fines.





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LOKTOOL: LOKTRACER TLD.1000 | Trace gas leak detector



LOKTOOL trace gas leak detector

- Exclusive „search mode“ for smallest of leaks
- No cross-sensitivity to external gases
- Step-by-step convergence on large leaks (zero setting)
- Automatic self-regulation of the sensor
- With suction pump
- Display shows the concentration of hydrogen
- Acoustic and optical alarm

Article no.	Article name	Description
L13005244	LOKTRACER TLD.1000	Trace gas leak detector

Technical data

Time until ready to operate	< 60 sec
Reaction time	1 to 2 sec
Operating time	approx. 3 hours

LOKSET: LOKTRACE KA 1000 | Trace gas leak detection set



LOKSET trace gas leak detection set*

- LOKTRACER TLD.1000 trace gas leak detector
- Cylinder trolley
- Pressure reducer with W21.8-14 LH thread
- Manifold gauge
- Quick couplers (HP and LP)
- Service hoses
- Dust cover

*LOKTRACE gas cylinder not included in the scope of supply.

Article no.	Article name	Description
L13005184	LOKTRACE KA 1000 W21.8-14	Trace gas leak detection set

LOKBOX: TG-AUTO-1000 | Trace gas leak detection set



LOKBOX trace gas leak detection set

- LOKTRACER TLD.1000 trace gas leak detector
- Pressure reducer
- Manifold gauge
- Quick couplers (HP and LP)
- Service hoses
- Plastic case
- 2 litre trace gas cylinder*

*only included in the scope of supply of LOKBOX TG-AUTO-500-2L (L13005106)

Article no.	Article name	Description
L13005185	LOKBOX TG-AUTO-1000	Set without trace gas cylinder
L13005245	LOKBOX TG-AUTO-1000-2L	Set with 2L trace gas cylinder
L14004039	LOKPLUS TGR2	2L trace gas refill