

# LASER<sup>®</sup>

## CO2 Combustion Leak Detector

### Instructions



### Precautions

- Wear hand and eye protection.
- Be very careful when working with hot, pressurised cooling systems; there is a high risk of serious scalding.
- If vehicle cooling system is hot, do not attempt to remove the header tank cap or radiator cap.
- Use proper ventilation and do not breathe in exhaust fumes.
- Dismantle, clean and dry detector components after every use.
- Keep leak detector set clean and in good condition; do not use leak detector if damaged.
- Always refer to the manufacturer's service or diagnostic instructions to establish the correct procedure. These instructions are provided as a guide only.



**Safety First. Be Protected.**



### Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: **+44 (0) 1926 818186**. Normal wear and tear are excluded as are consumable items and abuse.

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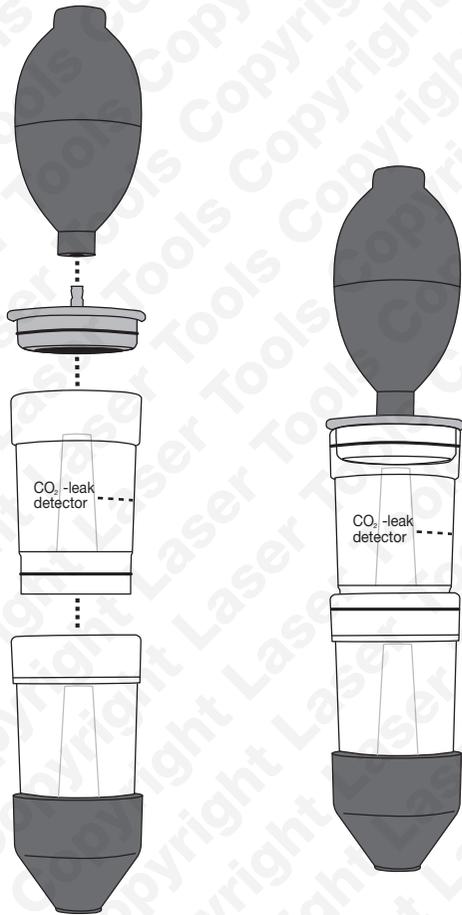
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## CO2 Combustion Leak Detector

This tool is used to diagnose blown head gaskets or cracked cylinder heads by checking for the presence of CO<sub>2</sub> gas in the cooling system. The process of combustion produces (amongst other gases) 13-14% CO<sub>2</sub> in the exhaust and the leakage of this gas into the cooling system is easily detected.

If combustion gases are present the colour of the indicator test fluid changes from blue to green/yellow.

The test fluid is reusable (refer to instructions) but is also available separately as Laser Tools Part No. 5526.



## Instructions

1. Vehicle should be cold or cool. If vehicle cooling system is hot, do not attempt to remove the header tank cap or radiator cap. Wait until it cools down.
2. Assemble the leak detector; the upper chamber is a push fit into the lower chamber, twisting will aid assembly (refer to diagram).
3. The rubber cone allows the leak detector to be held in place on a header tank or radiator opening.
4. Fill the upper chamber of the leak detector with the supplied test fluid to the dotted line.
5. Wear thick, protective gloves and eye protection as there is a risk of escaping steam and hot water.
6. Remove the header tank cap or radiator cap (refer to 1. above). Turn on the engine and let the cooling system warm up.
7. When cooling system is near normal operating temperature place the tester on to the header tank or radiator opening and hold it down firmly so that it makes an effective seal against the opening.
8. As pressure builds into the lower chamber, you may see bubbles appearing in the blue test fluid; at this point pump the rubber bulb to draw the vapour into the upper chamber and through the test fluid.
9. If the fluid turns green/yellow this indicates the presence of CO<sub>2</sub> in the coolant and the need to investigate further.
10. Remove the leak detector from the opening and turn the engine off.
11. Replace the header tank or radiator cap.
12. Dismantle the upper chamber from the lower chamber by twisting them apart. Pump the rubber bulb several times to draw fresh air through the test fluid. When it has returned to its original blue colour it can be returned to the container and used again.

