# Leak Detection
# Using Labino Ultra Violet Lights



Use Labino Ultra Violet Lamps to detect leakage not visible to the human eye and identify leakage at an early stage.

## Leak detection using fluorescent tracer additive

In order to detect fluid leaks and their sources quickly, UV (365nm) lights are used together with UV fluorescent tracer additives. This method is used by most manufacturers of petrol and diesel vehicle engines, earth moving equipment and fork lift trucks. Leakage is detected the following way. The UV fluorescent additive is mixed with a fluid system, e.g. water, oils, fuels, coolants and refrigerants, and then the equipment is operated as normal to allow the fluorescent additive to circulate throughout. If the leak occurs, the UV fluorescent tracer will run with the fluid and remain at the site of the leak. After that, all external surfaces such as pipework, joints, connectors, gasket seals and coils are inspected with the UV light. The leak and its flow path will glow bright yellow/green under the UV.

## Leak detection using LabinOil

LabinOil is a florescent dye and should be used with petroleum based lubricants. The fluorescence in the LabinOil is activated by irradiating with UV-light. Labino UVG2 Spotlight Torch is a powerful LED light source used together with LabinOil.

You do not need to clean the engine before or after the engine leakage test, nor do you have to empty the engine oil. You add the dye into the engine oil, start the engine to make the dye mix with the oil and circulate in the engine. Illuminate using the Labino UVG2 Spotlight to identify leakage. No special training is required when using the LabinOil kit.

## Xenon Light for High intensity in Day light

SuperXenon is a high intensity light, perfect for out dorrs inspection in broad day light. The lamp offers a 50 watt bulb, together with a Midlight reflector you will get a very good coverage. SuperXenon is available with pistol handel and top handle, as well as battery or AC operated.

## BigBeam for Large Coverage

BigBeam offers a wide beam for large coverage and hands free inspection. You can inspect several parts at the same time without interruption. You can mount the BigBeam in several ways. Either with a mounting bracket on the wall or ceiling, or a friction arm to mount from a table or floor.

## MidBeam 2.0 for light weight Hand Held Inspection

MidBeam 2.0 is a small handheld lamp with excellent coverage for its size. The lamp is available as battery or mains (AC) operation. If a hands free inspection is required the lamp can easily be mounted on a friction arm or on a flexible arm.

## UV Torch Lights and Head light

Labino offers a wide range of torches and Headlights. The most popular for Leak Detection are UVG2 Spotlight and UVG4 Headlight Spotlight. The high intensity makes it possible to detect leakage in day light.

| Model | UV Intensity at 38 cm (15'') | Beam coverage at 38 cm (>1200 µW/cm²) | Installation |
|---|---|---|---|
| SuperXenon 50 watt MPXL 135 Series Spotlight | >60 000 µW/cm²<br>>45 000 µW/cm² | ≈ 140 mm (5.5'')<br>≈ 125 mm (4.9'') | Handheld or fixed installations using a mounting yoke or friction arm. |
| BigBeam Helios Midlight | >8000 µW/cm² | ≈ 275 mm (10.8'') | Handheld or fixed installations using a mounting yoke or friction arm. |
| MidBeam 2.0 Zeus | >5 000 µW/cm² | ≈ 200 mm (7.9'') | Handheld or fixed installation using a flexible arm or a friction arm. |
| Torch Light UVG2 & UVG4 Spotlight | >25 000 µW/cm² | ≈ 30 mm (1.2'') | Handheld. Tripod is available. |

**Labino Distributor:**

www.labino.com