User Guide and Parts List
UV & ELECTRONIC LEAK DETECTOR KIT

Dye Injection Instructions:

Disposable Cartridge Type Injector (2 oz)

Mini Disposable Cartridge Type Injector (1 oz)

PLEASE USE CAUTION!!

- When injecting dye into a pressurized system, ALWAYS wear safety glasses and gloves!
- Never breathe refrigerant vapor!
- Never use the UV light without wearing the UV glasses!

A. Purging air from the hose assembly

It is important to eliminate any air in the hose before injecting dye into the A/C system. (This process is necessary only once for the setup).

Purging Disposable Cartridge Type Injector

Hold the cartridge (2) upward while unscrewing the cap. Snap the hose assembly (3) onto the cartridge, and coupler (4) or (4A) to the hose assembly.

While holding the assembly upward, attach the handle (1) to the bottom of the cartridge by turning it clockwise. Continue turning while dye enters the hose and pushes the air up. Use a pen to press the depressor of the coupler (4) to release the air if necessary. Repeat this process as needed until dye appears at the coupler's end.

Purging Refillable Cartridge Type Injector

Hold the dye injector (1) upward while unscrewing the cap/hose assembly (2B). Turn the handle of dye injector (1) counter clockwise all the way before filling. Fill the injector with dye. Replace cap/hose (2B), tightening securely and attach coupler (4) to the hose assembly.

While holding the assembly upward, start turning the handle (1) clockwise. Continue turning as dye enters the hose and pushes the air up. Use a pen to press the depressor of the coupler (4) to release the air if necessary. Repeat this process as needed until dye appears at the coupler's end.

B. Injection

1. Turn the A/C system and engine off!!

2. Connect injector to the low side service port of A/C system. Hold body of injector. Use (1) stirring line on handle end as a guide. Turn handle clockwise to inject 1 application of dye. (Approximately 1 to 1 1/4 turn(s) for Concentrated Dye)

3. Disconnect injector from the system and clean any excess dye left around the service port.

Dye Application Chart

<table>
<thead>
<tr>
<th>AUTOMOTIVE</th>
<th>1 Application per system (for a system using up to 10 oz. [300 ml] of lubricant)</th>
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<tbody>
<tr>
<td>HVAC/R</td>
<td>1 Application per system (for a system using up to 7 lbs. [3.2 kg] of refrigerant)</td>
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</table>

Leak Detection Using a UV Lamp:

A. Turn Engine and A/C system on.
B. Allow dye to circulate throughout system.
C. WEAR PROTECTIVE GLASSES!!
D. Turn lamp on. Search for a bright green/yellow glow where the system is leaking. Clean the area around leak after repair.

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**ELECTRONIC LEAK DETECTION**

**WORKS BLUE LIGHT**

**BATTERY INSTALLATION**
Hold the leak detector handle horizontally. To remove the battery door, loosen the screw on top of the door and pull the door away from the unit. Load the two “C” cell batteries into the compartment with the positive (+) end up. Reinstall the battery door.

**BATTERY TEST**
Turning the unit ON will automatically run the battery function test and display the battery condition on the unit’s LED display.

**GOOD/GREEN**
**LOW/YELLOW**
**REPLACE/RED**

**OPERATING PROCEDURES**

**SENSITIVITY LEVEL**
Offers six sensitivity levels (1-6). The highest sensitivity will detect a 1/10 oz leak per year. Turn ON the unit, it will default to Level 5. Level 1 is the recommended setting to begin inspection. To view the sensitivity level on the LED display, press either the UP (+) or DOWN (-) arrow. The LED display will illuminate for approximately two seconds. (One red LED for every sensitivity level). One illuminated red LED in the lowest sensitivity setting and six illuminated red LEDs are the highest.

**LOW SENSITIVITY LEVELS**

![Sensitivity Levels](image)

The sensitivity level can be increased by the UP (+) arrow and decreased by the DOWN (-) arrow. Pressing the selected arrow once will adjust the sensitivity to the next level. Pressing and holding the arrow will continue to move the setting until the arrow is released.

**DETECTION LEVELS**

Offers 15 levels of detection. As the unit approaches the leak source and the refrigerant concentration increases, the audible alarm will increase in speed and the LED display will progress through a series of three colors: Red, Yellow, and Green. The LED will display 5 levels of detection in each color range.

- **Low**
- **Medium**
- **High**

The detection level will depend on the level of the sensitivity setting. The same size leak will display higher detection levels in higher sensitivity settings and lower detection levels in lower sensitivity settings.

**SELECT FUNCTION**
The primary use for the reset function is to clear the leak source. When the unit detects a leak and goes into full alarm, press the reset button. Resetting will ignore any leaks at that level and only detect leaks of higher concentration.

**UV/BLUE LIGHT**
The UV/Blue Light can be used to help detect leaks in systems containing, Ultra Violet Dye. The light can be activated by pressing the UV Light button. This function will operate with the unit ON or OFF.

**WEAR SPECIAL UV PROTECTIVE GLASSES!**

**IMPORTANT LEAK DETECTION TIPS**

- A. Make sure the air conditioning/ refrigeration system is turned OFF before inspection. A sufficient amount of refrigerant must be present in the system. A minimum gauge pressure of 50 PSI at ambient temperature of 80°F and above with the system OFF is required for efficient leak detection.
- B. For the best leak detection results, the probe should be moved across the leak detection area at the rate of 1” - 2” per second (25 - 50mm per second) and hold 1/4” (15mm) away from the surface. An increase in the alarm rate will indicate a leak. To confirm the correct leak location, blow shop air around the suspected leak area, move the probe into fresh air, reset and re-inspect.
- C. When inspecting in contaminated or high humidity areas, erratic alarming may occur. For best results in these areas, allow the unit to adjust to the existing environment before inspecting. Pressing the reset button will adjust the unit to an existing environment.

**SENSING BY PROBE**
The sensor tip performs at full potential for approximately 20 hours. If the tip wanes, it will require replacement. Signs of a worn tip are erratic and irregular alarm response in clean air environments. Before replacing the tip, make sure that it is free of grease, moisture, dust and dirt. Remove any of these materials, use compressed air or alcohol. Make sure the sensor tip is completely dry before using.

**UV/BLUE LIGHT REPLACING**
To remove, pull the LED straight out of the socket fixture. To install, press the LED into the socket fixture with the long terminal to the outside.

**LOW SENSITIVITY Tester**
When the unit starts to display an erratic or irregular alarm response, check or change the sensor tip or the battery (to check the battery, refer to battery test procedure).

**WARRANTY**
This product is warranted for a period of one year from the date of purchase to the original purchaser. A repair or replacement will be made at no charge with proof of purchase. Damage caused by tampering or improper use will void warranty. This warranty does not cover batteries, sensor tips, LED bulbs, or other materials that wear out during normal use. **BEFORE RETURNING THE UNIT** **PLEASE REPLACE OR CLEAN THE SENSOR TIP AND CHECK BATTERIES**. This warranty is given in lieu of any other warranty, express or implied, including, without limitation, any implied warranty of merchantability or fitness for a particular use.

**MAINTENANCE**
- Pressurized systems can leak
- Wear safety shield (Vise and Byrlande)
- 3D ING broom with refrigerant parts
- Keep self and tools close of moving parts
- Pressurized leaks and breathing
- Improper may cause injury
- Wear UV safety glasses (Vise and Byrlande)

**PANTONE 186 CVC**

**DESIGN CERTIFIED BY MET LABORATORIES INC. TO MEET SAE J1427 FOR R134A, R12 AND R22.**

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