



INSTRUCTIONS FOR:

# AIR CONDITIONING LEAK DETECTION KIT

MODEL NO: **VS600.V2**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to the instruction manual



Wear eye protection



Wear respiratory protection



Wear protective gloves



Wear protective clothing

## 1. SAFETY

- WARNING!** Ensure that Health and Safety, local authority and general workshop practice regulations are adhered to when using this air conditioning leak detection kit.
- WARNING!** The leak detection fluid is an irritant if it contacts skin or eyes. A safety data sheet covering the leak detection fluid VS60012 and VS60033 is obtainable via your local Sealey Dealer.
- ✗ **DO NOT** use this kit if damaged, leaking at connections or hose and if you are not wearing the protection shown above. A full range of safety PPE is available from your local Sealey Dealer.
- ✗ **WARNING! DO NOT look into the UV lamp, even if wearing the UV goggles.**
- ✗ **DO NOT point the UV lamp at yourself, other people or animals.**
- ✓ Maintain the items in the kit in good and clean condition for best and safest performance.
- ✓ Account for all kit items during use and **DO NOT** place any on or near the engine.
- ✓ On completion of the work, replace all the kit items back in the carry case and store in a cool, dry, childproof area.
  
- WARNING! The warnings, cautions and instructions in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be applied by the operator.**

**IMPORTANT:** These instructions are provided as a guide only. Always refer to the vehicle manufacturer's service instructions, or a proprietary manual to establish the current procedure and data.

## 2. INTRODUCTION

Find leaking hoses and joints in vehicle R134A air conditioning systems fast. Supplied with rugged 12V ultraviolet lamp and dye injector system for use in conjunction with any air conditioning recharge/recycle station. Includes ten single doses of fluorescing dye and UV enhancing spectacles for use in normal workshop lighting conditions. Supplied with hose adaptors, comprehensive operating instructions and carry-case.

## 3. SPECIFICATION

Model No: ..... **VS600.V2**  
 Temperature: ..... 10°C to 45°C  
 Humidity: ..... 20 to 90%  
 Lamp Type: ..... dichroic UV lamp  
 Power Rating: ..... 50W  
 Power Supply: ..... 12V DC  
 Supply Cable Length: ..... 3metres

## 4. CONTENTS

ITEM	DESCRIPTION
1	12V UV Lamp/cable/battery clips
2	Reservoir/injector valve
3	Rotating Connector 6/4
4	Rotating Connector 4/6
5	UV Dye (x10)
6	UV Goggles



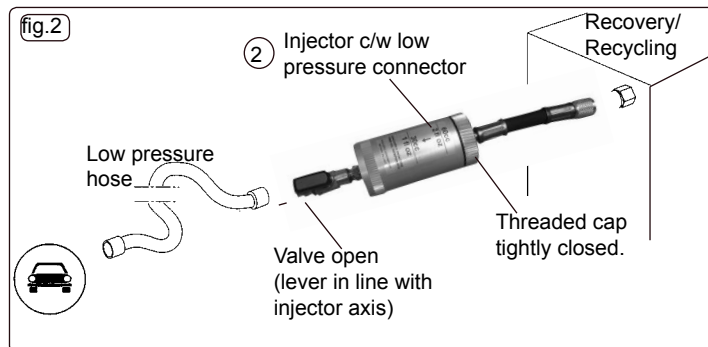
fig.1

## 5. OPERATION

### 5.1. Installation Refer to fig.1

The dye reservoir assembly (2) is designed to be used with air conditioning coolant recovery/recycling equipment. Connectors provided allow for permanent connection, see fig.1. Supplied with the kit are two connectors (3 & 4) enabling connection to types R134A and R12 recovery/recycling systems.


- 5.1.1. Evacuate the pipes on the recovery/recycling equipment and disconnect the low pressure hose located on the recovery/recycling equipment.
- 5.1.2. Connect the kit hose (2) to the low pressure connector on the recovery/recycling equipment.
- 5.1.3. Connect a low pressure hose from the injector equipment to the vehicle.
- 5.1.4. Check that the injector valve of the dye reservoir assembly (2) is open and the injector threaded cap is tightly closed.
- 5.1.5. Evacuate the recovery/recycling equipment.



### 5.2. Dye Injection - A/C system under vacuum or low pressure Refer to fig.2

- 5.2.1. Recover the remaining coolant and set the system under vacuum.
- 5.2.2. Close the injector valve (2) and unscrew the threaded cap. Ensure the cap seal ring is fitted and undamaged.
- 5.2.3. Pour one bottle of dye (5) into the reservoir and then screw the cap back on, firmly.
- 5.2.4. Open the injector valve that is between the equipment and the car.
- 5.2.5. Start the recovery/recycling equipment loading function. The air conditioning system will be charged with coolant and dye.
- 5.2.6. When the required system loading level is reached stop the recovery/recycling equipment, leaving the injector valve open.

### 5.3. Dye Injection - A/C system under pressure refer to fig.2

- 5.3.1. It requires a minimum of approximately 450g of coolant to flow through the injector to ensure that all the dye is transferred to the A/C system. Therefore recover this amount, or more, from the system.
- 5.3.2. Close the injector valve.
- 5.3.3. **Warning! The injector is pressurised.** Remove the threaded cap  slowly and with care.
- 5.3.4. Pour one bottle of dye (5) into the reservoir and then screw the threaded cap back on, firmly.
- 5.3.5. Open the injector valve that is between the equipment and the car.
- 5.3.6. Start the recovery/recycling equipment loading function. The air conditioning system will be charged with coolant and dye.
- 5.3.7. When the required system loading level is reached stop the recovery/recycling equipment leaving the injector open.

### 5.4. Dye Injection with a manometric unit Refer to fig.3

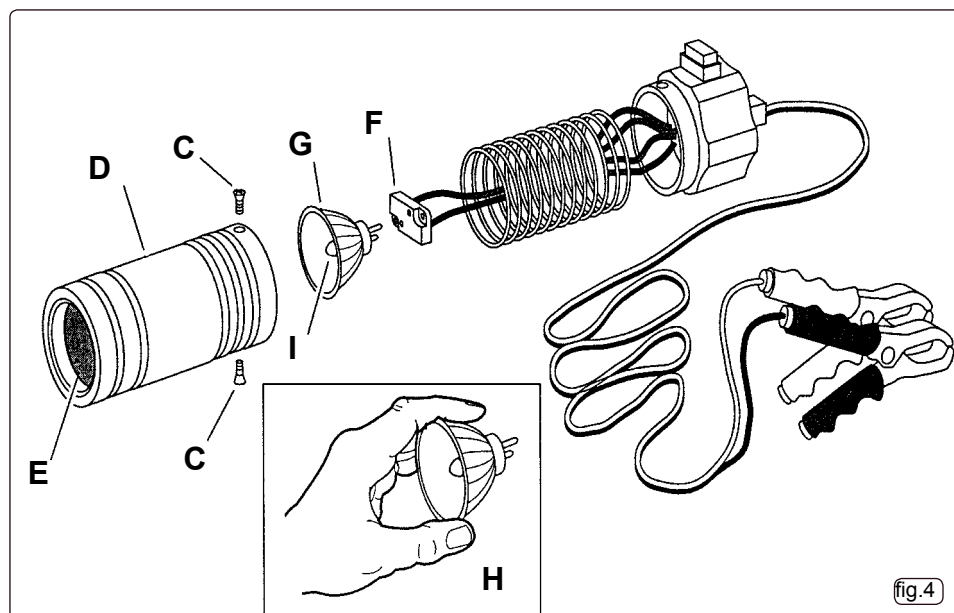
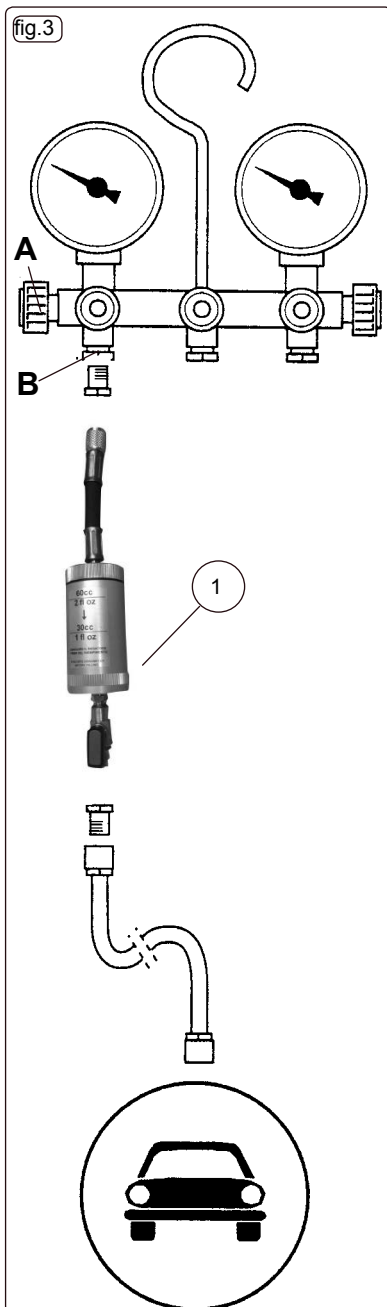
The dye injector can also be used with a manometric charging system, as shown in fig. 3.

- 5.4.1. Connect a low pressure hose from the recovery/recycling equipment to the low pressure fitting (A).
- 5.4.2. Follow the instructions as for use with the recovery/recycling equipment.
- 5.4.3. To start the coolant flow open the low pressure valve (B) of the manometric unit.

### 5.5. Leak detection

**Note: Leaks will be more apparent if the UV inspection is carried out in low ambient light.**

- 5.5.1. Run the air conditioning for at least 10 minutes to distribute the dye throughout the system and then turn off the engine.
- 5.5.2. Connect the UV lamp to the vehicle battery terminals, or other suitable 12 volt supply, noting that correct polarity (red clamp to positive terminal) is important.
- 5.5.3. **Wearing the UV safety goggles**, point the UV lamp at the area to be inspected and then press the switch to turn it on. Switch off the lamp while redirecting it to the next area of interest. **Warning! The lamp gets hot during use. DO NOT touch the lens, DO NOT place the lamp near inflammable material and DO NOT return the lamp to the case until it has cooled.** Leaks will become apparent as the dye will fluoresce under the UV light.



## 6. MAINTENANCE

### 6.1. Bulb replacement (fig. 4)

- 6.1.1. Remove the two body screws (C) and pull apart the lamp body, taking care not to damage the lens (E).
- 6.1.2. Disconnect the bulb (I) from the socket (F).
- 6.1.3. Fit the new bulb to the socket, ensuring that you **DO NOT** touch the bulb glass (I). Always hold the bulb by the outer edge (H). Touching the glass will shorten the life of the bulb.
- 6.1.4. Reassemble the lamp and refit the two body screws (C).



**Environmental Protection**

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, dispose of the product according to local regulations.



**WEEE Regulations**

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

**NOTE:** It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

**IMPORTANT:** No liability is accepted for incorrect use of this product.

**WARRANTY:** Guarantee is 12 months from purchase date, proof of which will be required for any claim.

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