

## 8 & 10MM GLOW PLUG HEATER ELEMENT REMOVAL SET MODEL NO: VS315

# 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.



instructions

#### 1. SAFETY

- U WARNING! Ensure Health and Safety, local authority and general workshop practice regulations are adhered to when using tools.
- **× DO NOT** use tools if damaged.

protection

- DO NOT attempt to start engine or move vehicle whilst tools are fitted and work is in progress.
- ✓ Maintain tools in good and clean condition for best and safest performance.
- Wear approved eye protection. A full range of personal safety equipment is available from your Sealey stockist.
- ✓ Wear suitable clothing to avoid snagging. **DO NOT** wear jewellery and tie back long hair.
- Ensure any disconnected fuel pipes are plugged to avoid spillage.
- Account for all tools and parts being used, DO NOT leave them in or near the engine. Return all parts to the case and store this in a safe, dry, childproof location.

**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.

□ WARNING! The warnings referred to in this guide cannot cover all possible conditions and situations that may occur. It must be understood that common sense and caution are factors which cannot be built into this product, but must be applied by the operator.

### 2. INTRODUCTION

For removing the heater element that can break off during glow plug removal. Saves time not having to remove the cylinder head. Works by drilling/tapping a thread into the broken element so the supplied glow plug adaptors can be used to extract. Supplied with seven drilling/tapping guides and five glow plug extraction adaptors with either a M8 or M10 thread.

KEY

### 3. CONTENTS



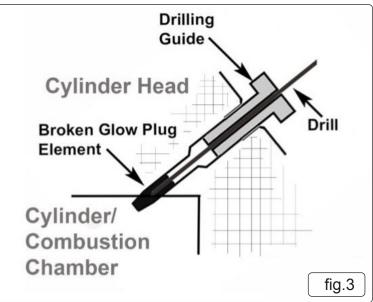
1 Drilling Guides: M8 x 1, M10 x 1, M10 x 1.25mm
2
3 Drills: Ø 2.5, 3.3mm
4
5 Extraction Adaptors: M8 x 1, M10 x 1, M10 x 1.25mm
6 Threaded Rods: M3 x 0.5, M4 x 0.7mm
7

#### 4. INSTRUCTIONS

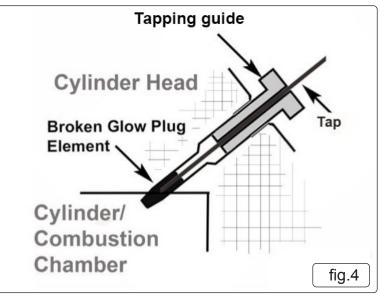
- 4.1. With reference to the replacement glow plug, find the matching drilling guide and screw into the glow plug port.
- **4.2.** Determine the length of the broken portion as in fig.2.



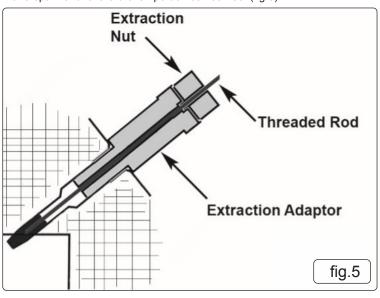
**4.3.** Place the appropriate drill (2.5mm for M8, 3.3mm for M10) in a drill and, using the drill guide (fig 1.1), drill into the broken glow plug element to a depth of approximately 10mm if the broken stub is long enough (fig 3).



**4.4.** Select the appropriate tap and cut a thread into the broken glow plug element ensuring the tap is turned back frequently to clear swarf away from the cutter. (fig.4). Ensure a good quality cutting fluid such as Sealey SCSCF400 is used when cutting the thread.



- **4.5.** Once a thread has been formed into the broken glow plug element, remove the tap and tap guide.
- 4.6. Screw in the appropriate extraction adaptor. Select the appropriate threaded rod and screw into the broken glow plug element.4.7. Run the correct extractor nut down the threaded rod until it makes contact with the extraction adaptor. Turn the extractor nut gently
- with a spanner until the broken portion comes free. (fig.5).



- **4.8.** Unscrew the extraction adaptor carefully and remove it, along with the threaded rod and glow plug element. As the glow plug element reaches the top of the port, brush or blow away any swarf to reduce the risk of debris entering the aperture.
- **4.9.** Examine the glow plug element and the aperture to ensure that no debris is in the glow plug port before fitting the replacement glow plug.

