

## UNI-LOCK SPROCKET LOCKING TOOL

### 1. INTRODUCTION & APPLICATIONS

#### 1.1. INTRODUCTION

The VS780 Uni-Lock provides that helpful 'extra hand' often needed to hold the camshaft sprocket on its timing mark whilst fitting the belt around crank gear, injection pump sprocket, belt tensioner etc.

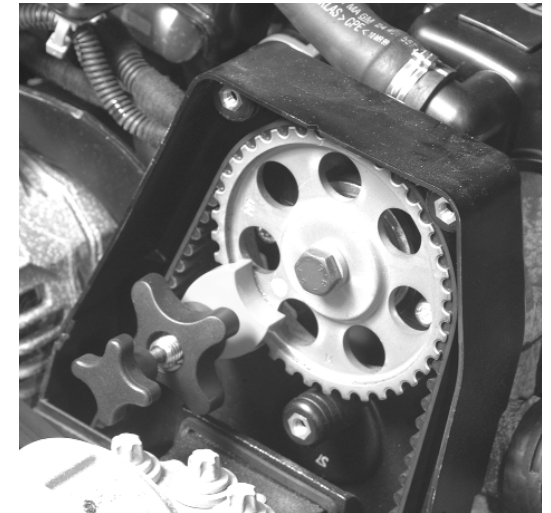
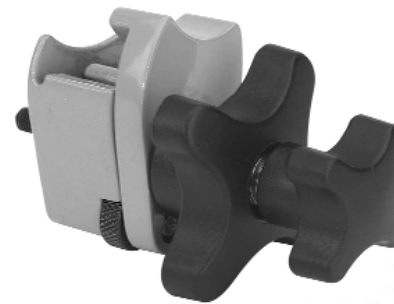
A time-saving aid, particularly useful when aligning timing belt marks on 'V' engines and engine configurations where cam sprockets are far apart.

The compact design of the Uni-Lock ensures wide application coverage on single camshaft and two cam 'V' engines even where space is limited in the engine compartment.

#### 1.2. APPLICATIONS

Single camshaft engines and two cam 'V' engines - retains sprocket position during timing belt replacement. Also suitable for 'locking' injection pump sprockets on certain diesel engine applications.

For use on sprockets 20mm to 35mm wide.



### 2. SAFETY INSTRUCTIONS

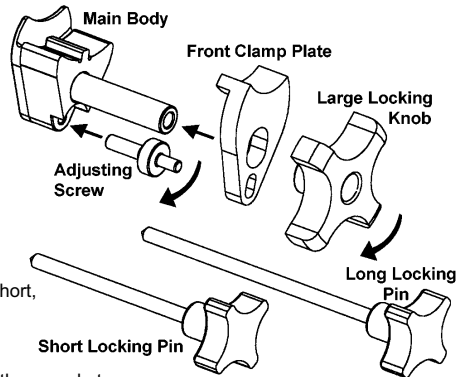
- WARNING!** Ensure that Health and Safety, local authority and general workshop practice regulations are adhered to when using tools.
- DO NOT** use tools if damaged.
- Maintain tools in good and clean condition for best and safest performance.
- Ensure that ignition key is removed, to prevent inadvertent engine cranking.
- If the vehicle to be worked on is raised, ensure that it is adequately supported with axle stands or ramps and chocks.
- Wear approved eye protection. A full range of personal safety equipment is available from your Sealey dealer.
- Wear suitable clothing to avoid snagging. Do not wear jewellery and tie back long hair.
- Account for all tools, locking bolts, pins and parts being used and do not leave them on or near the engine.
- IMPORTANT:** Always refer to the vehicle manufacturer's service instructions, or a proprietary manual, to establish the current procedure and data. These instructions are provided as a guide only.

### 3. INSTRUCTIONS

#### 3.1. Clamp Assembly

Loosely assemble the Uni-Lock parts, as detailed below, to make the Clamp Assembly - see diagram on right.

- 3.1.1. Screw the Adjusting Screw into the Main Body.
- 3.1.2. Slide the Front Clamp Plate over the threaded part of the Main Body and ensure that the Adjusting Screw locates into the Front Clamp Plate lower slot.
- 3.1.3. Screw the Large Locking Knob onto the threaded part of the Main Body, **DO NOT FULLY TIGHTEN** at this stage - loosely assemble only.



#### 3.2. Locking/Contact Pins

Uni-Lock is supplied with two Locking/Contact Pins - one short, one long.

The Locking/Contact Pin is screwed through the Clamp Assembly. The Pin selected must be long enough to make a good firm contact with the engine casing in order to lock the sprocket. Screw the Pin into the Clamp Assembly to a position where it slightly protrudes from the back of the Assembly. The Clamp Assembly must be attached to the sprocket before fully engaging the Locking/Contact Pin with the engine casing.

Note: The Locking Pin is usually screwed through the Clamp Assembly before it is attached to the sprocket but, if required, the Clamp Assembly can be attached and the Locking Pin screwed in afterwards.

**ALWAYS KEEP LOCKING PINS WELL LUBRICATED**

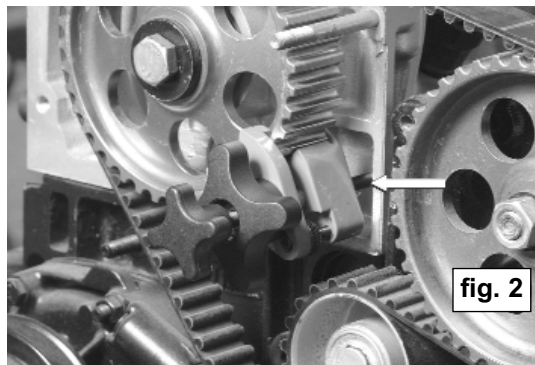
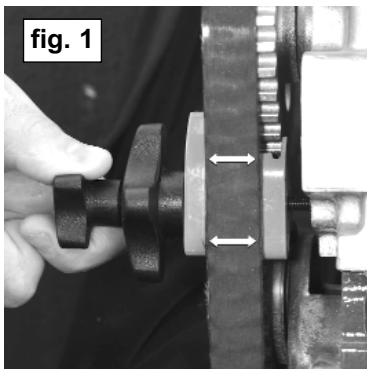


#### 3.3. Attaching the Uni-Lock

- 3.3.1. Align the sprocket to the timing marks or adjust to chosen position.
- 3.3.2. Attach the loosely assembled Uni-Lock to the sprocket by placing the Main Body at the rear of the sprocket and locating it into the teeth of the sprocket.
- 3.3.3. Locate the Front Clamp Plate onto the front face of the sprocket.
- 3.3.4. Use the Adjusting Screw to ensure that the Main Body and Front Clamp Plate are parallel to each other when clamped on the sprocket, see fig. 1.

**IMPORTANT:** It is essential that the Main Body and Front Clamp Plate are **PARALLEL** to each other when assembled on the sprocket in order to achieve an effective 'clamp'. Screw out the Adjusting Screw to adjust and support the lower part of the Front Clamp Plate and ensure that the Plate is parallel to the Main Body on the sprocket.

**WARNING!** If Main Body and Front Clamp Plate are not mounted parallel they will not clamp the sprocket securely and this could result in damage to the tool.

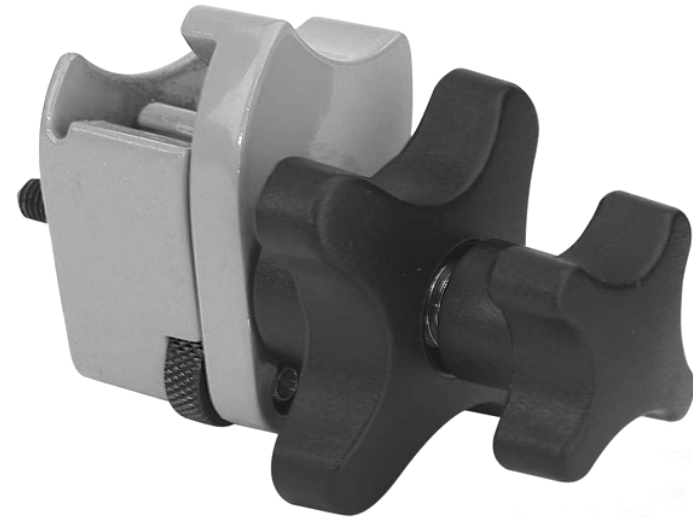


- 3.3.5. Clamp the Assembly onto the sprocket by screwing down the Large Locking Knob.
- 3.3.6. Screw the Locking/Contact Pin into and through the Clamp Assembly until the end of the Locking Pin makes firm contact with the engine casing/belt cover, thereby holding the Clamp Assembly and sprocket in position, see fig. 2.

- 3.3.7. The sprocket is now held in position by the Uni-Lock and the replacement belt can be fitted.
- Note: Ensure that all timing marks are correctly aligned when fitting the new belt and that the belt is taut between sprockets. Any belt alignment marks must be correctly located on the sprocket marks.

**WARNING!** The Uni-Lock should be removed before attempting to tension the belt.

**IMPORTANT:** Engine Locking Tools, including the Uni-Lock, must **NOT** be used for counter-holding sprockets whilst releasing or tightening the sprocket centre bolt. Locking Tools are for retention of timing position only. Use an appropriate Sprocket Holding Tool.



**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 equipment.

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

**INFORMATION:** For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.



Sole UK Distributor,  
Sealey Group, Bury St. Edmunds, Suffolk.



[www.sealey.co.uk](http://www.sealey.co.uk)



01284 757500



01284 703534



[sales@sealey.co.uk](mailto:sales@sealey.co.uk)