



# 1. TITLE PAGE

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## 1.1 INTRODUCTION:

**USER GUIDE FOR: Duratorq Engine Timing Kit**

**Stock No: 27092**

**Part No: ETK172**

## 1.2 REVISIONS:

**Date first published June 2018.**

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As our user manuals are continually updated, users should make sure that they use the very latest version.

**Downloads are available from:** <http://drapertools.com>

Draper Tools Limited  
Hursley Road  
Chandler's Ford  
Eastleigh  
Hampshire  
SO53 1YF  
UK

**Website:** [drapertools.com](http://drapertools.com)

**Product Helpline:** +44 (0) 23 8049 4344

**General Fax:** +44 (0) 23 8026 0784

## 1.3 UNDERSTANDING THIS GUIDES SAFETY CONTENT:

**WARNING!** – Information that draws attention to the risk of injury or death.

**CAUTION!** – Information that draws attention to the risk of damage to the product or surroundings.

## 1.4 COPYRIGHT © NOTICE:

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## 3. GUARANTEE

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### 3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact:

**Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.**

**Telephone Sales Desk: (023) 8049 4333** or:

**Product Helpline (023) 8049 4344.**

A proof of purchase must be provided.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is 90 days from the date of purchase. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

**Draper Tools Limited.**

## 4. GENERAL PRODUCT INFORMATION

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This product is designed to be used correctly and with care for the purpose for which it is intended. No liability is accepted by Draper Tools Limited for incorrect use or application of any of our products, and Draper Tools Limited cannot be held responsible for any damage to personnel, property or equipment when using this product. Incorrect use will also invalidate any warranty.

The applications database and any instructional information provided has been designed to offer general guidance for a particular product's use and while all attention is given to the accuracy of the data, no project should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognised authority such as Autodata.

It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the product and information prior to use.

## 5. HEALTH AND SAFETY INFORMATION

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### GENERAL SAFETY INSTRUCTIONS

**Warning:** Please read all safety warnings and all details carefully. Failure to follow the warnings may result in serious injury or major component damage.

**Important:** Draper Tools recommends that this product should not be modified or used for any application other than that for which it was designed.

**Save all warnings and instructions for future reference.**

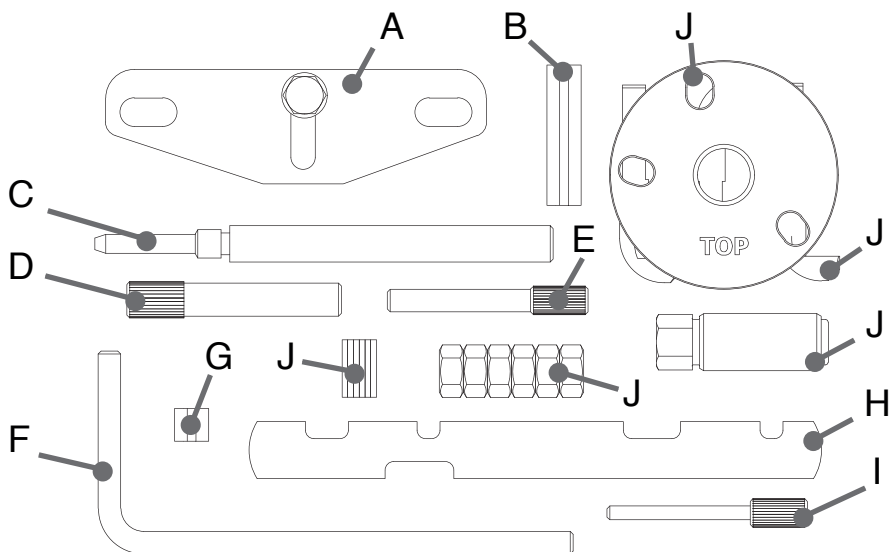
#### 1) Personal safety

- a) Stay alert, watch what you are doing and use common sense when using this product. Do not use this product while you are tired or under the influence of drugs, alcohol or any medication. A moment of inattention while using this product may result in serious personal injury.
- b) Use personal protective equipment as necessary.
- c) Check and remove any part of the product before turning/testing the engine. A part left attached to a rotating part of the engine may result in personal injury or major component damage.
- d) Carefully clean the tool components after every use.
- f) Keep the tool components safe and tidy.
- g) Do not use this product for any purpose other than for which it is designed.

**Warning!** Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.

If any of the packaging is to be thrown away, make sure it is disposed of correctly; according to local regulations.

## 6. CONTENTS



ITEM	DESCRIPTION	OEM	STOCK No.
A	Flywheel Locking Tool	303-734	30963
B	Tooth Block Item 2	303-393-01	30965
C	Crankshaft TDC Setting Pin	303-193	30966
D	Flywheel Locking Pin	303-734	31092
E	Camshaft Alignment Pin	303-735	31210
F	Crankshaft Timing Pin	303-1059	31247
G	Short Tooth Block	303-393-02	31250
H	Camshaft Alignment Strap	303-376B	31303
I	2x Crankshaft/Fuel Pump Alignment Tool	303-732	31395
J	Camshaft Pulley Puller	303-651	31472

## 7. APPLICATION

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The **27092** has been developed as a **duratorq engine timing kit** for the vehicles listed below. Allows the user to lock the engine in the 'timed' position so that the camshaft drive belt can be replaced or the timing of the engine checked.

### **Used on the following Vehicles:**

**Ford Fiesta 2002 - 2011 TDCi**

**Ford Fusion 2002 - 2011 ECOnetic**

**Ford C-MAX 2007 - 2010 Turbo**

**Ford Focus 1998 - 2011 TDdi**

**Ford Focus C-MAX 2003 - 2007**

**Ford Courier 2000 - 2002**

**Ford Tourneo Connect 2002 - 2013**

**Ford Transit Connect 2002 - 2013**

**Ford Mondeo 2007 - 2010**

**Ford Galaxy 2006 - 2010**

**Ford S-MAX 2006 - 2010**

**Ford Kuga 2008 - 2010**

**Mazda 2 2002 - 2010**

### **Engine Codes:**

**1.4cc**

**F6JA, F6JB, F6JC, F6JD**

**1.6cc**

**HHJA, HHJB, G8DA, G8DB, HHDA, HHDB, HHJD**

**1.8cc**

**RTN/RTQ, RTP, C9DC, BHDA/B, BHPA, C9DA/B, F9DA/B, FFBA,**

**FFDA, FFWA, HCPA, HCPB, KKDA, P7PA, P9PA, QYWA, R2PA,**

**R3PA, RWPA, QYBA**

**2.0cc**

**AZBA, AZWA, G6DA, G6DB, G6DC, G6DD, G6DE, G6DF, QXWA,**

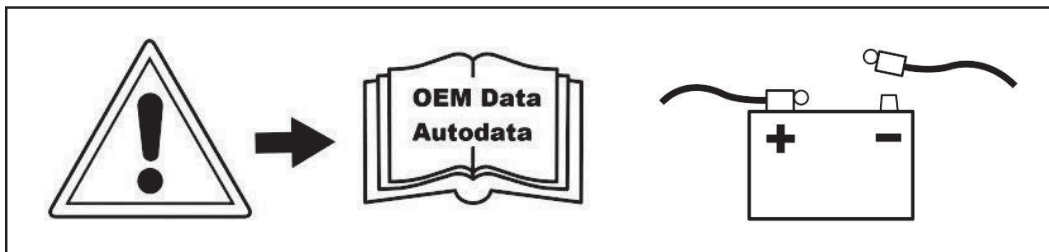
**QXWB, QXBA**



## 8. PREPARATION

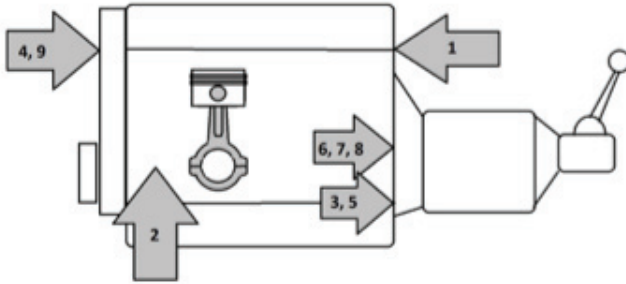
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The following is for guidance only. Please refer to OEM derived data such as the vehicle manufacturer's own data or Autodata. The use of this product is purely down to the user's discretion and Draper Tools Limited cannot be held responsible for any damage caused what so ever.



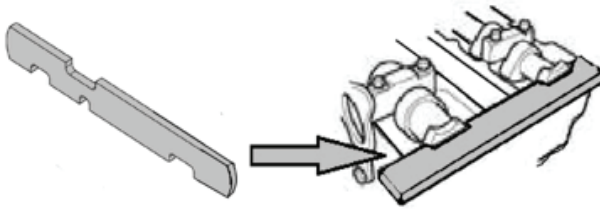
## 9. PROCEDURE AND APPLICATION GUIDE

Depending on manufacture and model, some engine components do change. Please check with Autodata or the manufacturer's data before use.



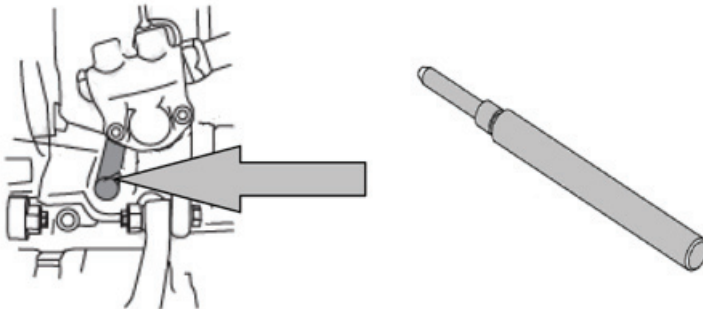
### **Component 1 = Camshaft Alignment Strap**

Component 1 is used to lock both the camshafts in their timed position independently of the camshaft pulleys.



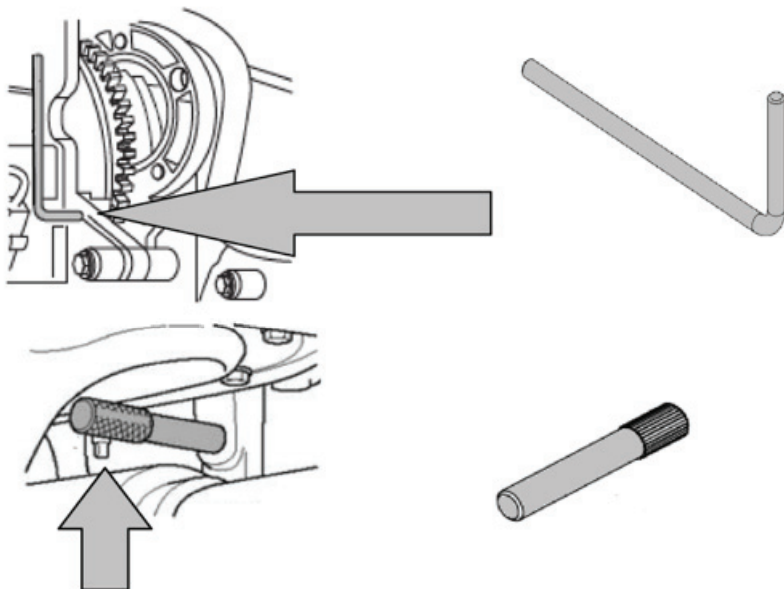
### **Component 2 = CRANKSHAFT ALIGNMENT PIN**

Turn the crankshaft to just before TDC and insert component 2. Turn the crankshaft until it contacts component 2.

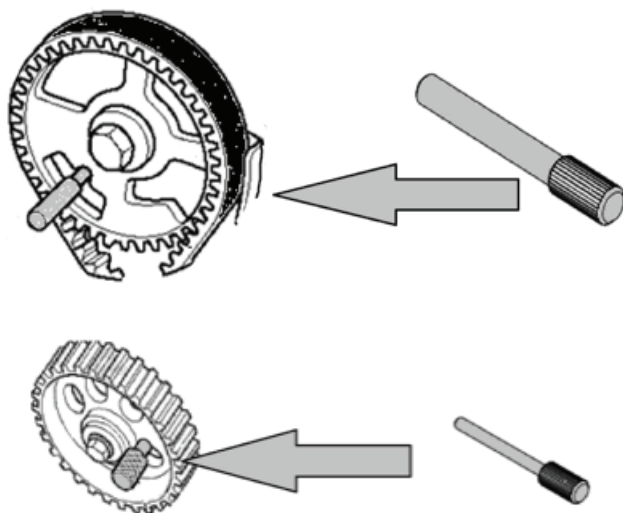


## 9. PROCEDURE AND APPLICATION GUIDE

### Component 3 & 5 = Crankshaft Timing Pin

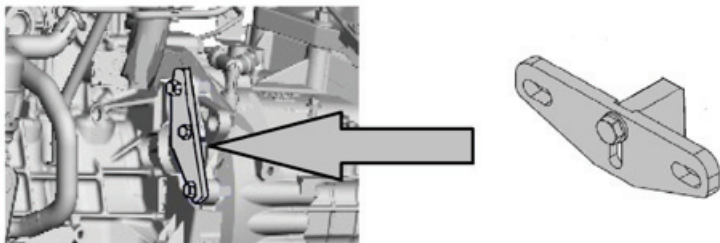


### Component 4 & 9 = Camshaft Alignment Pins

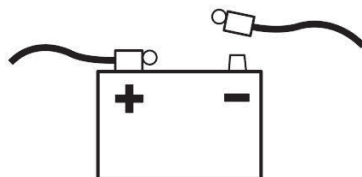


### Components 6, 7 & 8 = Flywheel Locking Tool

Components 6, 7 & 8 are used together to hold the flywheel in place of the starter motor to allow tightening and loosening of the front crankshaft pulley.



Please note images are for guidance only and subject to change.



# 10. EXPLANATION OF SYMBOLS

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## 10.1 EXPLANATION OF SYMBOLS



Read the guide.



Refer to website.





## CONTACTS

Draper Tools Limited, Hursley Road,  
Chandler's Ford, Eastleigh, Hampshire. SO53 1YF. U.K.

Helpline: (023) 8049 4344

Sales Desk: (023) 8049 4333

Internet: [drapertools.com](http://drapertools.com)

E-mail: [sales@drapertools.com](mailto:sales@drapertools.com)

General Enquiries: (023) 8026 6355

Service/Warranty Repair Agent:

For aftersales servicing or warranty repairs, please contact the  
Draper Tools Helpline for details of an agent in your local area.

YOUR DRAPER STOCKIST

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