LASER®

Part No. 3388

Instructions

MADE IN SHEFFIELD

Engine Timing Tool Kit for Renault



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Components



Ref.	Code	OEM Ref.	Description
Α	C037	MOT 1489	Crankshaft Locking Pin
В	C099	MOT 1054	TDC Timing Pin
С	C120	MOT 1496	Camshaft Setting Tool
D	C402	MOT 1750	Mounting Bracket

NOTE: Some K4J/K4M engines may also require Laser 3579 Camshaft Pulley Alignment Tool Some F4P/F4R engines may also require Laser 5165 Camshaft Pulley Alignment Tool

Applications - Renault

Marque	, Model, Year		Engine	Codes			
X	Avantime Clio II / Clio Campus / Clio	2000 - 2003 1998 - 2010	1,4 16V K4J 700 K4J 710 K4J 711 K4J 712 K4J 713	1,6 16V K4M 690 K4M 700 K4M 701 K4M 704 K4M 706	K4M 764 K4M 766 K4M 768 K4M 776 K4M 782	1,8 16V F4P 720 F4P 722 F4P 760 F4P 770 F4P 771 E4P 772	2,0 Turbo F4Rt 720 F4Rt 722 F4Rt 760 F4Rt 761 F4Rt 762 E4Rt 763
	Storia Clio III / Clio Collection	2005 - 2013					
	Symbol Espace /	2001 - 2008	K4J 715 K4J 730	K4M 709 K4M 710	K4M 790 K4M 791	F4P 773 F4P 774	F4Rt 764 F4Rt 765
	Grand Espace Espace /Grand Espace IV	2002 - 2010	K4J 732 K4J 740 K4J 750	K4M 711 K4M 712 K4M 714	K4M 792 K4M 794 K4M 800	F4P 775 2,0 F4R 700	F4Rt 766 F4Rt 767 F4Rt 774
	Fluence	2009 - 2016	K4J 770	K4M 716	K4M 801	F4R 701	F4Rt 776
	Kangoo	2001 - 2009	K4J 780	K4M 718 K4M 720	K4M 802	F4R 712 F4R 713	F4Rt 784
	Kangoo II / Be Bop	2008 - 2013		K4M 724	K4M 812	F4R 714	F4Rt 787
	Kangoo / Grand Kangoo II	2008 - 2013		K4M 732	K4M 824	F4R 720	F4Rt 795
Renault	Laguna / II / III	1998 - 2013		K4M 736	K4M 831	F4R 730	F4Rt 797
	Logan / MCV	2005 - 2011		K4M 740	K4M 834	F4R 732	F4Rt 800
	Megane / II / III	1999 - 2017		K4M 742	K4M 835	F4R 736	F4Rt 802
	Megane Scenic	1999 - 2000		K4W 743	K4IVI 030	F4R 730	F4Rt 811
	Modus / Grand Modus	2004 - 2013		K4M 745	K4M 839	F4R 741	F4Rt 813
	Scenic	1999 - 2003		K4M 748	K4M 848	F4R 746	F4Rt 867
	Scenic / Grand Scenic II / III	2003 - 2015		K4M 750 K4M 752	K4M 854 K4M 856	F4R 747 F4R 770	F4Rt 870 F4Rt 872
	Symbol	2008 - 2013		K4M 753	K4M 858	F4R 771	F4Rt 874
	Thalia	2001 - 2013		K4M 754	K4M 862	F4R 780	F4Rt 886
	Trafic II	2001 - 2011		K4M 760	K4M 864	F4R 790	F4Rt 887
	Twingo II	2008 - 2014		K4M 762	114101 000	F4R 792	F4Rt 897
	Vel Satis	2000 - 2010				F4R 820	
	Wind	2010 - 2014				F4R 830 F4R 832	

Applications continue on pg.4

Applications Cont. - Dacia & Nissan

Marque, Model, Year			Engine Codes		
Dacia	Duster Logan / MCV Logan Sandero	2010 - 2015 2005 - 2013 2013 - 2015 2008 - 2013	1,6 K4M 606 K4M 696 K4M 616 K4M 697 K4M 642 K4M 842 K4M 646 K4M 896 K4M 690 K4M 690		
Nissan	Kubistar Primastar	2003 - 2009 2002 - 2011	1,6 2,0 K4M 752 F4R 720 K4M 753 F4R 722 F4R 820		

Always refer to the website for most up to date applications: www.lasertools.co.uk/product/3388

Instructions

The following instructions are for guidance only. Please refer to OEM derived data such as the vehicle manufacturers' own data or Autodata.

The use of this engine timing tool kit is purely down to the user's discretion and The Tool Connection Ltd. cannot be held responsible for any damage caused whatsoever.



Instructions

Removal

- 1. Raise and safely support the front of the car.
- 2. Remove the engine top cover, right hand splash guard and auxilliary drive belt.
- 3. Safely support the engine.
- 4. Remove the right hand side engine mounting, blanking plugs from rear of camshafts, blanking plug from cylinder block.
- 5. Lock flywheel and slacken the crankshaft pulley bolt.
- Rotate crankshaft clockwise to the setting position ensuring that the grooves in the camshaft align. The grooves are positioned below the upper face of the cylinder head. (Fig 1.)
- Insert the Crankshaft Timing Pin (A) to locate against the crankshaft web. (Fig 2.)
- 8. Fit the Camshaft Setting Bar (C) to rear of the camshafts. (Fig 3) Some engines require the additional Mounting Bracket (D)(Fig. 3a)
- 9. Remove the crankshaft pulley bolt, crankshaft pulley and timing belt covers.
- 10. Slacken the tensioner nut.
- 11. Move the tensioner pulley away from the timing belt.







Fig. 3a

Instructions

Installation

- 1. Check that the Crankshaft Timing Pin is still correctly fitted and contacting the crankshaft web.
- 2. Check that the Camshaft Setting Bar is still correctly fitted and the grooves in the camshaft are aligned
- 3. Fit guide pulley and tighten to 45Nm.
- 4. Fit the tensioner pulley and finger tighten, ensuring that the lug on rear of the pulley is located in the groove in the cylinder head.
- 5. Remove and de-grease the crankshaft sprocket and the mating end of the crankshaft.

Note:

Double check crank position by ensuring the crankshaft key is at 12 0 Clock

- 6. Fit the new timing belt in an anti-clockwise direction, starting at the crankshaft sprocket. Check that the belt is taut on the non-tensioned side.
- 7. Refit the crankshaft pulley using a new bolt, leaving 2-3 mm. clearance between bolt face and pulley.
- Slacken the tensioner nut and using a 6 mm. hexagon key, turn the tensioner pulley clockwise until the pointer is at the right hand stop. The moveable pointer should be 7-8 mm. past the fixed pointer.
- 9. Lightly tighten the tensioner nut to 7 Nm.

- 10. Lock the flywheel and increase the tensioner nut tightness to 20 Nm,
- 11. Remove both timing tools.
- With the flywheel locked tighten the crankshaft pulley bolt by 120-150°. Use Angular Torque Gauge 2245.
- 13. Rotate the crankshaft two full turns clockwise back to the setting position.
- 14. Re fit the Crankshaft Timing Pin to correctly contact the crankshaft web and check that the Camshaft Setting Bar can be easily fitted.
- 15. Hold the tensioner pulley using the 6 mm. hexagon key and slacken the tensioner nut.
- 16. Turn the tensioner pulley anticlockwise until the pointers align and tighten the tensioner nut to 27 Nm.
- 17. Remove both timing tools and refit the blanking plug.
- 18. Fit new blanking plugs to the rear of the camshafts.
- 19. Reinstall the remaining parts in reverse order of removal.

Instructions

Instruction 1.8 | 2.0 16v

- 20. The proceedures for removing and installing timing belts on these engines is similar to those detailed above, but the Crankshaft Timing Pin is different. Use part (B) This Pin must be fitted into the slot in the crankshaft web. (Fig. 4)
- 21. This Pin must NOT be fitted into the balance hole.
- 22. Double check crank position by ensuring the crankshaft key way is aligned centrally between the casting lugs on the front of the engine. (Approximately 1 0 Clock position)

Fig. 4

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Safety Warnings - please read

- If the engine has been identified as an Interference engine, damage to the engine will occur if the timing belt has been damaged. A compression check of all the cylinders should be taken before the cylinder head (s) are removed.
- Do not turn crankshaft or camshaft when the timing belt/chain has been removed.
- To make turning the engine easier, remove the spark plugs/glow plugs or injectors.
- Observe all tightening torques.
- Do not turn the engine using the camshaft or any other sprocket.
- Disconnect the battery earth lead (check Radio code is available).

- Do not use cleaning fluids on belts, sprockets or rollers.
- Some toothed timing belts are not interchangeable. Check the replacement belt has the correct tooth profile.
- Always mark the belt with the direction of running before removal.
- Do not lever or force the belt onto its sprockets.
- Do not use timing pins to lock the engine when slackening or tightening the crankshaft pulley bolts.
- ALWAYS REFER TO A REPUTABLE MANUFACTURERS WORKSHOP MANUAL.

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If applicable, the applications database and any instructional information provided has been designed to offer general guidance for a particular tool'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 tools and information prior to their use.



Guarantee

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recycle

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