

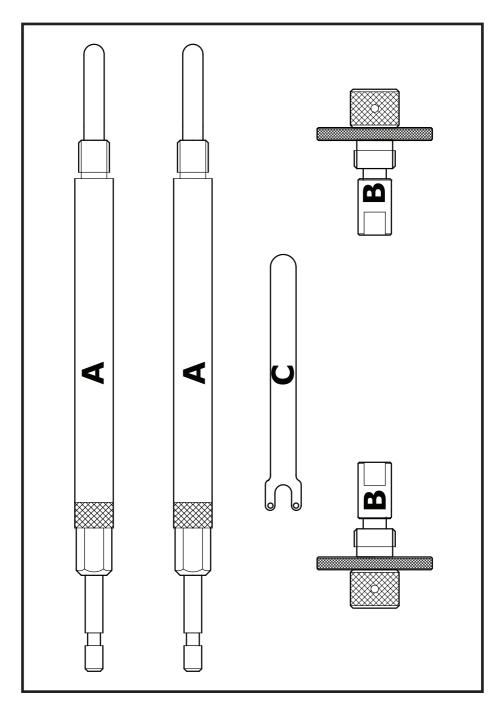
# Engine timing tools

Fiat 1.2 | 16v

### K 10536

## www.kamasatools.com

### Pack Layout



### **Component identity**

Part No.	OEM Ref	Description
A 23171-01	1 860 992000	Piston Height Adaptor (2)
B 23171-02	1 860 985000	Camshaft Locking Tools (2)
C 23171-07	1 860 987000	Tension Adjustment Wrench

#### **Applications**

Manufac- turer	Model	Туре	Engine Code	Year
Vauxhall/Opel	500	1.2	169A4.000	2007
	Brava	1.2	182B2.000   188A5.000	
	Bravo	1.2	182B2.000   188A5.000	1995-02
	Grande Punto	1.2	199A4.000	
	Idea	1.2	188A5.000	
	Idea	1.2   16V	188A5.000	
	Marea	1.2	182B2.000	
	Marea Weekend l Marengo	1.2	182B2.000	
	Palio Weekend	1.2   16V	188A5.000	
	Punto	1.2	176B9.000	1993-99
	Punto/ Punto Classic	1.2   16V	188A5.000	1999
	Stilo	1.2	188A5.000	
Lancia	Ypsilon	1.2   16V	176B9.000   188A5.000	1996-03

# **Engine Timing Tools**

For use on the latest 1.2 16v Fiat engines including Bravo/Brava/Punto/ Stilo with engine codes 176 B9 000, 182 B2.000 and 188 A5.000. Follow the manufacturer's specifications and safely remove all the parts necessary prior to using the tools.

Screw the piston height adaptors into the spark-plug ports of cylinders one and two.

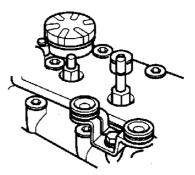
Slowly turn the crankshaft until the notches (**A**) on the centre rod aligns on each adaptor stem **Important**-The dowel pin on the crankshaft must remain opposite the crankshaft position sensor.

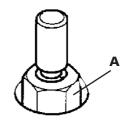
If necessary re-fit the crankshaft pulley.

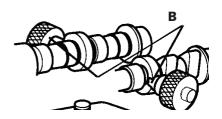
Remove the two blanking plugs from the camshaft casing and press the centre pin of the camshaft tool into the alignment slot of the camshaft (**B**).

Secure in place with the threaded hand wheel. It may be necessary to remove the tools and turn the crankshaft one revolution until the tools correctly engage.

After fitting the new timing belt, the tensioner pulley must be turned to the maximum position by using the wrench (C).









#### **Safety Precautions**

- If the engine has been identified as an Interference engine, damage to the engine will occur if the timing belt has been damaged. A compresion 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 has been removed
- To make turning the engine easier, remove the spark plugs
- 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
- Check the ignition timing after the belt has been replaced.
- 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 Warning Incorrect or out of phase engine timing can result in damage to the valves. It is always recommended to turn the engine slowly, by hand, and to re-check the camshaft and crankshaft timing positions.

