



Product Information



AST4388A

Diesel & Petrol Engine Setting/Locking Tool Kit



IMPORTANT: Always refer to the vehicle manufacturer's service instructions, or proprietary manual, to establish the current procedures and data. Product Information Sets detail applications and use of the tools with any general instructions provided as a guide only.

Applications:

**CITROËN / PEUGEOT Diesel (TUD/XUD) and
Petrol (TU/XU) engines in**

CITROËN

AX	BX	ZX
Visa	Saxo	Xsara
Xantia	XM	Synergie/Evasion
Berlingo	C15	Dispatch/Jumpy
Relay/Jumper		

FIAT

Ulysse	Scudo	Ducato
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FSO

Caro

LDV

200	Pilot
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NISSAN

Micra

PEUGEOT

106	205	206
305	306	307
309	405	406
605	806	Partner
Expert	Boxer	J5/Talbot Express

ROVER

Metro	115	218/418
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TATA

Loadbeta

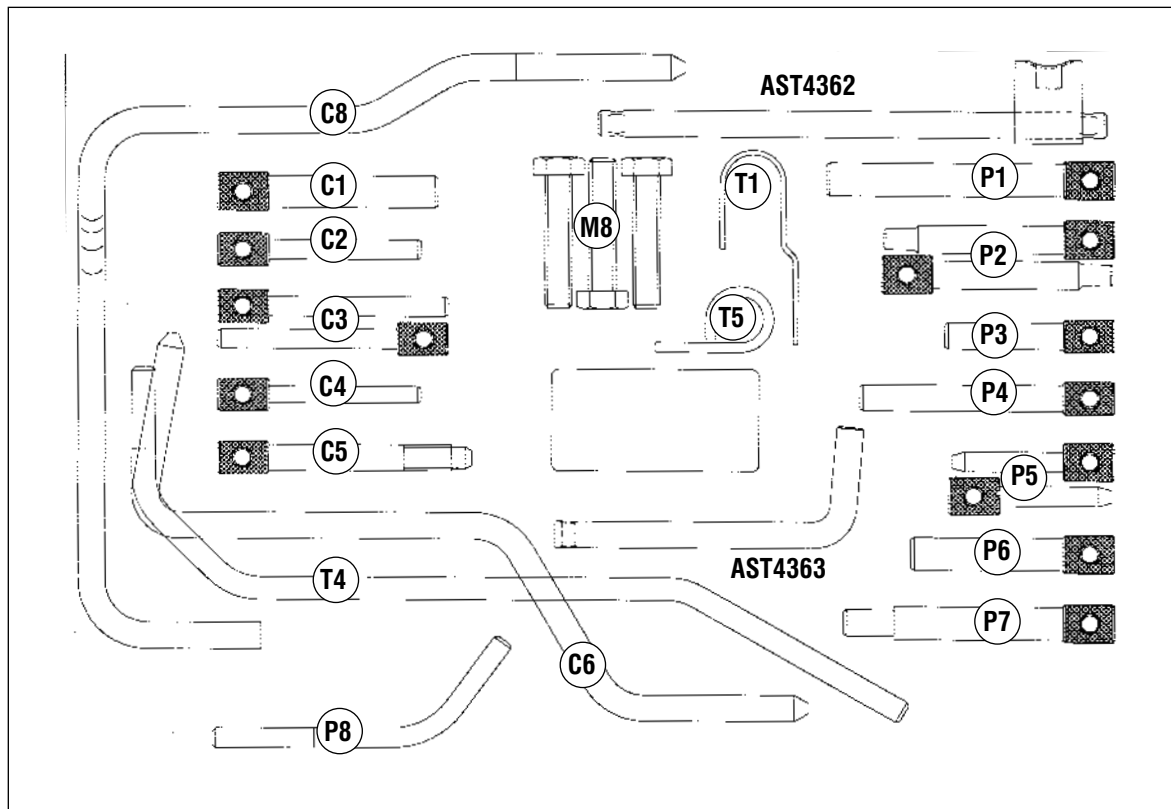
TUD/XUD Diesel engines and TU/XU Petrol engines

*Refer to the Application chart on the following page(s) for
specific model information*

Additional AST Tools required - see Application Charts

AST4394	Sprocket Holding Tool
AST3398	} Flywheel Holding Tools (Crank Pulley removal)
AST4358	
AST4359	
AST4306	
AST4377	Injection Pump Sprocket Remover
AST4373	'EPIC' Injection Pump Timing Pin





Kit contents/spares

- AST4360C1** Injection Pump Locking Pin
- AST4360C2** Injection Pump Locking Pin
- AST4360C3** Balance Shaft Locking Pins (Pair)
- AST4360C4** Injection Pump Locking Pin
- AST4360C5** Camshaft Locking Pin
- AST4360C6** Flywheel TDC Locking Pin
- AST4360C8** Flywheel TDC Locking Pin

AST4360M8 Locking Bolts (3 off)

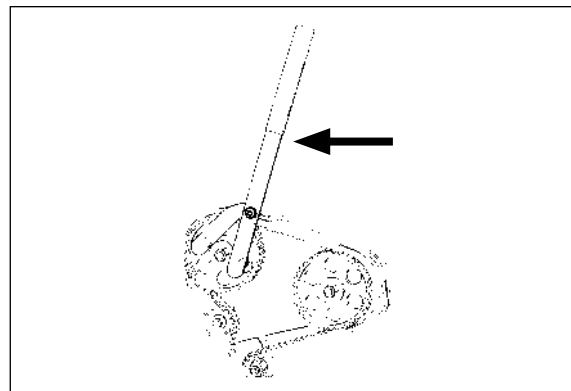
- AST4360P1** Crank/Cam Locking Pin
- AST4360P2** Camshaft Locking Pins (Pair)
- AST4360P3** Camshaft Locking Pin
- AST4360P4** Crank/Cam Locking Pin
- AST4360P5** Camshaft Locking Pins (Pair)
- AST4360P6** Crank/Cam Locking Pin
- AST4360P7** Crankshaft Locking Pin
- AST4360P8** Short Flywheel Locking Pin

Tensioner Adjustment Tools

- AST4360T1** Retaining Pin (Roller)
- AST4360T4** Tensioner Tool (Dynamic Roller)
- AST4360T5** Retaining Pin
- AST4362** Tensioner Adjuster
- AST4363** Tensioner Adjuster

AST4388/84 Case + Insert

WARNING: Locking Pins must NOT be used to counter-hold the crank or camshaft for removing/releasing pulleys or sprockets. They are for retention of engine timing position only. Use appropriate Flywheel Holding Tool for crankshaft or AST4394 Holding Tool to counter-hold sprockets.



AST4394 Sprocket Holding Tool - Additional tool - not included in kit.

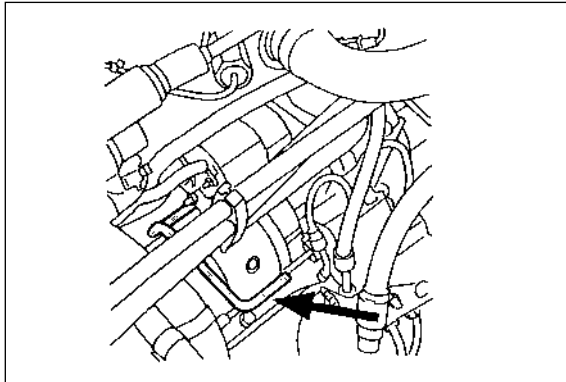




The huge range of PSA TU/XU petrol and TUD/XUD diesel engines require a comprehensive selection of setting/locking pins and tensioner tools for timing belt replacement/renewal and AST4388A provides these tools in one kit.

Both petrol and diesel applications are covered including the 1.6, 1.8 and 2.0 twin cam engines and direct injection engines.

In addition to the essential 'difficult access' flywheel pins, specific dimensional pairs and single application pins are included, as well as a range of tensioner locking and adjusting tools.



AST4360C6, AST4360C8, AST4360P8 Flywheel TDC Locking Pins (‘Difficult Access’ Pins)

This series of 3 ‘shaped’ locking pins are designed to provide access to the flywheel datum hole enabling the engine to be locked at TDC.

Often, access to the datum hole is restricted by a component ie. starter motor etc. and therefore the specific pin shapes are essential to overcome difficult access.

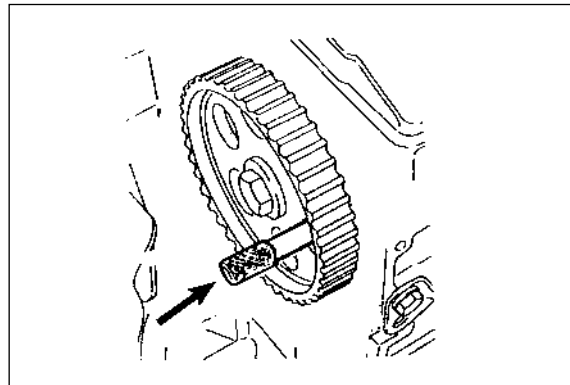
For XUD7, XUD9AU/9TE, XUD11, DJ/DK	Use AST4360C6
For XUD7, 9A, 9TE, 9BTE, 11BTE	Use AST4360C8
For TUD3/5 diesel and TU1/3/5/9 petrol	Use AST4360P8

NOTE: Engine types are fitted over a number of models. For engine references to vehicle model - refer to Application Charts.

AST4360C1, AST4360C2, AST4360C3, AST4360C4, AST4360C5, AST4360M8 AST4360P1, AST4360P3, AST4360P4, AST4360P6, AST4360P7 Locking Pins - Camshaft, Injection Pump, Crankshaft, Balance Shafts

IMPORTANT: Locking Pins must NOT be used to hold the crankshaft whilst releasing or tightening the pulley bolt. Locking Pins are for retention of timing position only.

Use appropriate Flywheel Holding tool - see “Additional AST Tools required” and Application Charts.



Citroen/Peugeot engines have access holes through pulleys/sprockets and fixed datum holes on the engine to allow the camshaft, injection pump and crank to be ‘locked’ in their timed positions by use of correctly sized locking pins - refer to Application Charts.

IMPORTANT: To ensure accuracy of the timing position and access to the datum hole, it is essential to use the correct pins to suit each application.

Tensioner Adjustment Tools

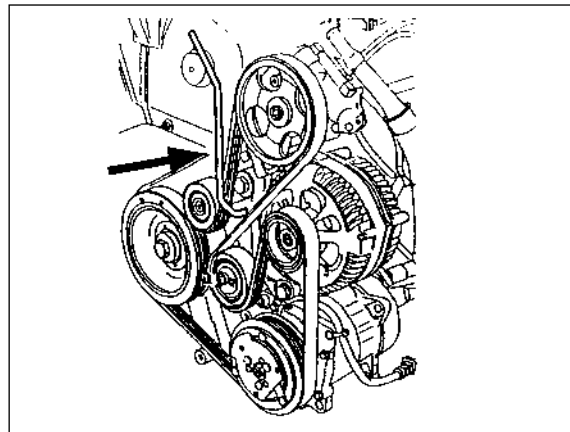
AST4360T1, AST4360T4 and AST4360T5

Retaining Tools

AST4362 and AST4363 Tensioner Adjusters

AST4360T1 Retaining Pin is required when removing/replacing the timing belt on the **DJ5TED Di** engines.

It is necessary to compress the automatic roller tensioner and lock it using **AST4360T1 Retaining Pin**.



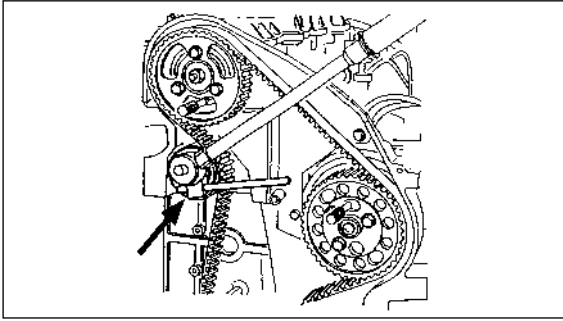
AST4360T4 Tensioner Tool (Dynamic Roller) is essential for use on the Auxiliary Belt tensioner, when air conditioning/power steering is installed.

AST4360T5 Retaining Pin is used on later **XU7JP4 (LFY)** 1.8 16v. engines to retain dynamic tensioner.





Tensioner Adjustment Tools - continued



AST4362 and AST4363 are specialised wrenches for adjusting the timing belt tensioners.

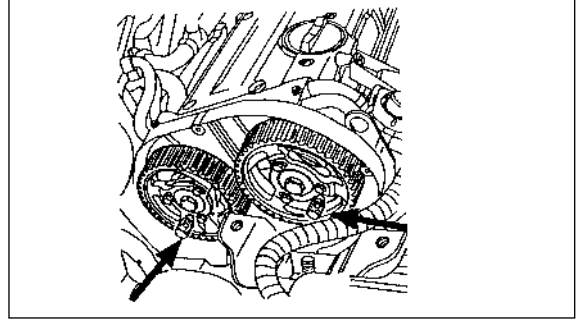
AST4362 provides access onto the square drive on belt tensioners on XUD11/DK/DJ engines.

AST4363 carries out the similar function on TUD3, TUD5 diesels and TU1/2/3/9 and TU5J4 petrol engines.

On early TU1/2/3/9 engines (-94), AST4363 can also be used with an appropriate weight to establish timing belt tension.

For DJ5TED direct Inj. engine	Use AST4360T1
For XUD9/XUD11 engines (Aux. Belt Dyn. Roller)	Use AST4360T4
For XUD11/DK/DJ engines	Use AST4362
For TUD3/5 diesel and TU1/2/3/9 & TU5J4 petrol	Use AST4363
For XU7JP4 (LFY) petrol	Use AST4360T5

Twin Cam Engine Timing Tools



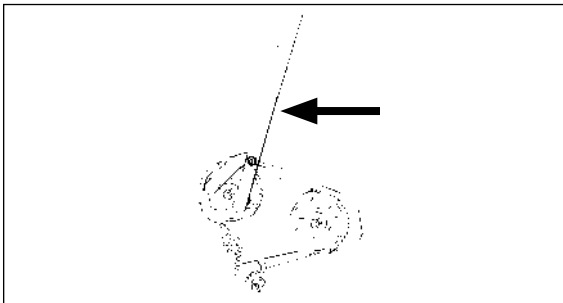
AST4360P2, AST4360P3, AST4360P4 and AST4360P5 Locking Pins

There are a number of Citroën/Peugeot 16v twin cam engines and these use locking pins to retain the engine timing position during belt renewal. These pins enter through access holes in each of the camshaft sprockets into fixed datum holes behind.

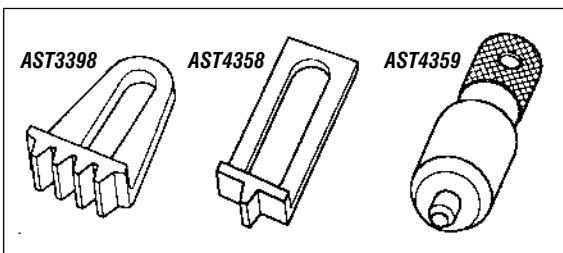
NOTE: Later engine cam sprockets have slotted bolt holes to allow movement as part of assembly/tensioning procedure.

For XU9J4(D6C)/ XU10J4(RFY) 2.0 16v	Use AST4360P2(Pair) + AST4360P4 for Crank
For TU5J4/LE 1.6 16v	Use AST4360P3 + P4 + AST4360P8 for Flywheel
For XU7JP4(LFY) / XU10J4 (RFV/R6E/RFS) 1.8/2.0 16v	Use AST4360P5 (Pair) + AST4360P4 for Crank

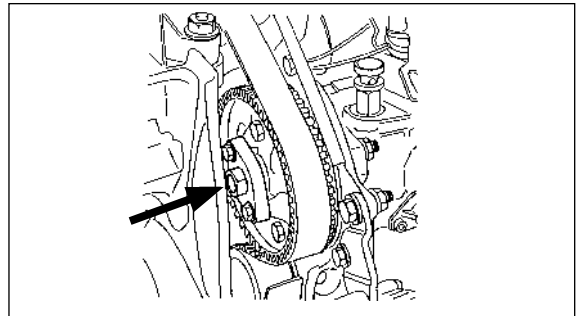
Additional AST Tools required - not included in AST4388A Kit - see Application Charts for models/application details



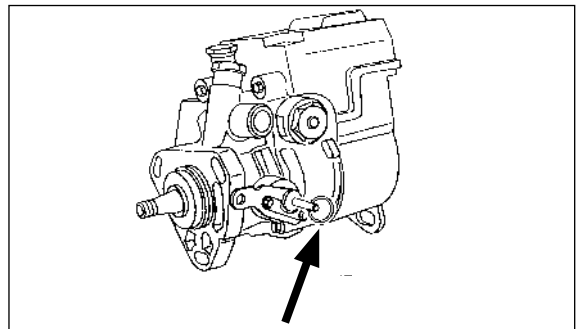
AST4394 Sprocket Holding Tool



Citroën/Peugeot - Flywheel Holding Tools (Crank Pulley removal)



AST4377 Injection Pump Remover



AST4373 'EPIC' Injection Pump Timing Pin

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