

AT4300 MASTER ENGINE TIMING TOOL SET - FORD

ALWAYS REFER TO A REPUTABLE WORKSHOP MANUAL FOR THE SPECIFIC VEHICLE TO BE SERVICED TO OBTAIN DETAILED STEP BY STEP INSTRUCTIONS COVERING THE CORRECT USE OF THESE TOOLS

WARNING - INCORRECT OR OUT OF PHASE TIMING CAN RESULT IN MECHANICAL CONTACT BETWEEN THE VALVE HEAD AND THE PISTON CROWN CAUSING SERIOUS DAMAGE TO THE ENGINE. No responsibility can be accepted for any damage arising from the incorrect use of these specialised tools.

The following general guidelines outline some of the general safety precautions and standard workshop practices applicable to engine timing procedures when replacing an engine timing belt / chain

ALLOW THE ENGINE TO REACH THE AMBIENT TEMPERATURE OF THE WORKSHOP BEFORE WORKING ON THE ENGINE.

DO NOT USE TIMING PINS TO LOCK THE ENGINE WHEN UNDOING OR TIGHTENING PULLEY BOLTS - refer to your workshop manual for detailed procedures for each specific vehicle.

ALWAYS turn engine in the normal direction of rotation (clockwise) unless otherwise stated in your workshop manual.

DO NOT turn the camshaft, crankshaft, or diesel injector pump when the timing belt has been removed.

DO NOT turn the crankshaft from the camshaft or other drive sprockets via the timing belt.

REMOVING spark plugs or glow plugs will make it easier to turn the engine over manually.

MARK DIRECTION of rotation if timing belt is to be re-fitted. Always refit so that the original direction of rotation is maintained.

ALWAYS check diesel injection pump / ignition timing after replacing the engine timing belt.

AFTER USE REMOVE ALL SETTING PINS / LOCKING PLATE. TURN THE ENGINE OVER TWICE BY HAND TO COMPLETE A FULL CYCLE. RE-GAIN ENGINE SETTING POSITION (USUALLY TOP DEAD CENTRE) RE-INSERT SETTING TOOLS TO RE-CHECK THAT THE ALIGNMENT IS CORRECT.

REMOVE SETTING TOOLS AND CHECK TO ENSURE THERE IS NO OBSTRUCTION BY TURNING THE ENGINE OVER TWICE BY HAND TO COMPLETE A FULL CYCLE.

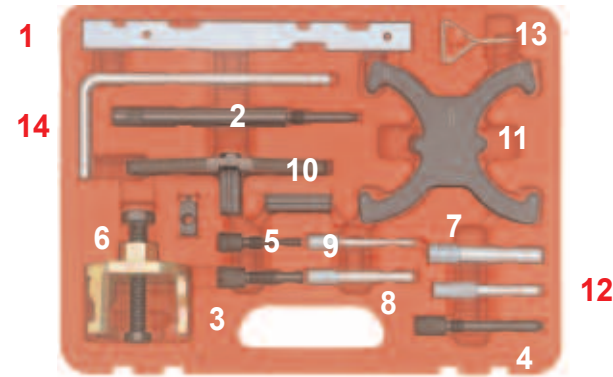
Fiesta Focus Fusion C-Max / Cougar Puma Mondeo / Galaxy S-Max / Courier Tourneo & Transit Connect

Petrol and diesel engines – as used in popular models :

Petrol : 1.25 1.4 1.6 1.7 1.8 2.0 Zetec DOHC / 1.6 Ti-VCT 16v (HXDA HXJA PNBA)

Diesel : 1.4 & 1.6 TDCi / 1.8 D / TD / TDCi / Di / 2.0 TDCi (AZWA G6DA/B/C QXWA)

Also suitable for Citroen / Peugeot Mazda & Volvo models that use these engines



CONTENTS :

- | | |
|------------------------------|--|
| 1 - CAMSHAFT ALIGNMENT PLATE | 8 - CAM SPROCKET PIN 7.9 MM |
| 2 - CRANKSHAFT TDC PIN | 9 - CRANK / PUMP PIN 4.9 MM |
| 3 - CRANKSHAFT TIMING PIN | 10 - FLYWHEEL LOCKING TOOL
WITH TWO ADDITIONAL BLOCKS |
| 4 - CRANKSHAFT TIMING PIN | 11 - VCT SETTING TOOL |
| 5 - CRANKSHAFT TIMING PIN | 12 - CAMSHAFT TIMING PIN 7.9 MM |
| 6 - CAMSHAFT SPROCKET PULLER | 13 - TENSIONER PULLEY PIN |
| 7 - FLYWHEEL PIN 11.5 MM | 14 - FLYWHEEL TIMING PIN 7.9 MM |

AT4300 MASTER ENGINE TIMING TOOL SET - FORD

ALWAYS REFER TO A REPUTABLE WORKSHOP MANUAL FOR THE SPECIFIC VEHICLE TO BE SERVICED TO OBTAIN DETAILED STEP BY STEP INSTRUCTIONS COVERING THE CORRECT USE OF THESE TOOLS

Fiesta Focus Fusion C-Max / Cougar Puma Mondeo / Galaxy S-Max / Courier Tourneo & Transit Connect *Also suitable for some Citroen / Peugeot Mazda & Volvo models*

Petrol : 1.25 1.4 1.6 1.7 1.8 2.0 / 1.6 Ti-VCT 16v Zetec DOHC

Diesel : 1.4 & 1.6 TDCi / 1.8 D / TD / TDCi / Di / 2.0 TDCi

Petrol : 1.25 1.4 1.6 1.7 1.8 2.0 16v DOHC Duratec / Zetec

Fiesta 1.25 / 1.4 16v - DHA DHB DHC DHD

Puma 1.4 / 1.6 / 1.7 16v - FHD FHF L1W MHA MHB

Mazda 1.25 16v - DHA

Mazda 6 DOHC 1.8/ 2.0/ 2.3 - L8 LF

Focus / C-MAX 1.8 / 2.0 - QQDA/B/C CSDA/B

Fiesta 2.0 ST150 - N4JB

Mondeo 1.8 / 2.0 - CCB B CGBA/B CHBA/B CJBA/B

Volvo C30 S40 S80 V50 V70 1.8 / 2.0

- B4184S11 B4184S8 B4204S3 B4204S4

Camshaft Alignment Plate 1 - 21-162B 303-367 303-376

Crankshaft Timing Pin 3 - 21-259 303-748

Crankshaft Timing Pin 5 - 21-210 303-507

Fiesta 1.25 / 1.4 16v SNJA STJA SPJA (belt) - 2009 on

Flywheel Locking Tool 10 - 21-168 303-393

Required as part of new procedure for timing belt replacement

Mondeo 1.6/ 1.8 / 2.0 16v L1F L1J L1L / RKA/B/J / NGA

Connect 1.8 EYPA EYPC Cougar 2.0 EDBA/B/C/D

Cougar / Focus 1.8 / 2.0 16v

EYDB/C/D/E/F/G/H/J Eddb/C/D/F

Mondeo 1.6/ 1.8 / 2.0 16v L1L/N/Q RKF/H/J/K NGB/C/D

Focus 2.0 RS / ST170 HMDA ALDA

Mazda 2.0 Tribute 2.0 YF

Camshaft Alignment Plate 1 - 21-162B 303-367 303-376

Crankshaft Timing Pin 4 - 21-163 303-620

Escort / Orion 1.6i / 1.8i 16v L1E L1G L1H L1K

Fiesta 1.6i / XR2i / RS1800 RDA RDB RKC RQB RQC

Mondeo 1.6/ 1.8 / 2.0 16v L1F L1J L1L NGA RKA RKB RKJ

Camshaft Alignment Plate 1 - 21-162B 303-367 303-376



Fiesta - Focus - Focus C-Max - Fusion - C-Max - also for Citroen Mazda Peugeot Volvo models

Diesel : 1.4 TDCi (belt) - F6JA/JB/JC/JD

1.6 TDCi (belt) - G8DA/B HHDA/B HHJA/B

Flywheel Pin 11.5 mm 7 - 21-262 303-734

Cam Sprocket Pin 7.9 mm 8 - 21-263 303-735

Crank / Pump Timing Pin 4.9 mm 9 - 21-260 303-732

Fiesta Focus 1.8TDi - Endura RTK RTJ

Fiesta Courier 1.8TD - RTN RTQ RTP C9DC

Focus C-Max Connect 1.8TDCi

KKDA HPCA/B P7PA P9PA R2PA R3PA RWPA BHPA

Galaxy S-Max Mondeo 1.8 TDCi FFBA QYBA FFWA QYWA

Focus C-Max Galaxy S-Max 2.0 TDCi AZWA G6DA/B/C

Diesel : 1.8 TDi / TDdi / TDCi - 2.0 TDCi Duratorq

Camshaft Alignment Plate 1 - 21-162B 303-367 303-376

Crankshaft Timing Pin 2 - 21-104 303-193

Camshaft Sprocket Puller 6 - 21-229 303-651

Flywheel Locking Tool 10 - 21-168 303-393

Flywheel Timing Pin 14 - 303-1059

Focus C-Max Mondeo 1.6 Ti-CVT 16v 2003 on

Duratec HXDA HXJA PNBA RHBA (belt)

Camshaft Alignment Plate 1 - 21-162B 303-367 303-376

Crankshaft TDC Pin 3 - 303-748 21-259

Flywheel Locking Tool 10 - 21-168 303-393

VCT Setting Plate 11 - 303-1097

Camshaft Timing Pin 7.9mm 12 - 303-735 21-263

Tensioner Pulley Locking Pin 13 - 303-1054

Flywheel Timing Pin 14 - 303-1059