

2291017

turbo conversion

Ford ST170, VVT

I-4cyl 2.0L 16v DOHC (DTx/DTx)



intake

exhaust

camshaft data:

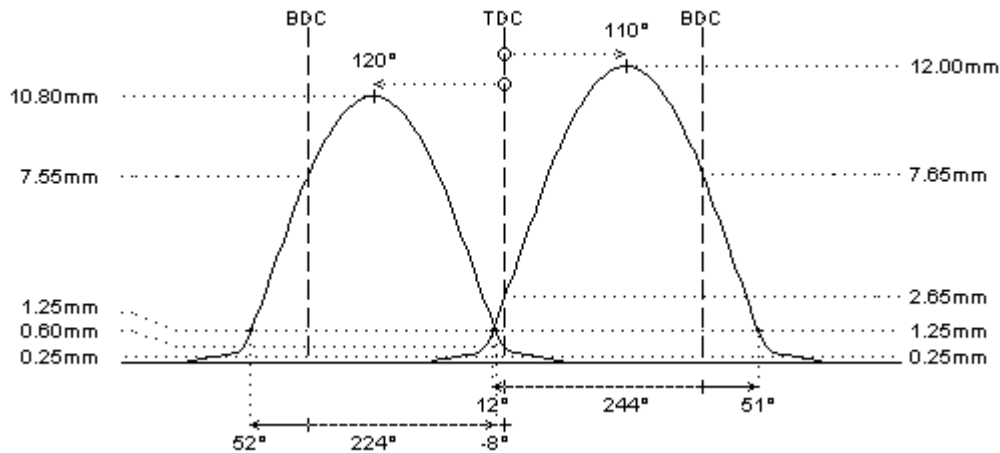
lash ramp	: 0.25mm	0.25mm
duration @ 0.1mm	: 277°	262°
duration @ 1.0mm	: 243°	224°
valve lift	: 12.00mm	10.80mm
cam lift	: 12.00mm	10.80mm
lobe angle	: 110°	120°
timing @ 1.0mm	: 11° / 52°	52° / -8°
valve lift @ TDC	: 2.65mm	0.55mm

parts setup:

cam wheels :	:	:
follower	: O.E.M.	: O.E.M.
valve lash	: O.E.M.	: O.E.M.
valve	: O.E.M.	: O.E.M.
valve locks	: O.E.M.	: O.E.M.
upper retainer	: 99391/s	: 99391/s
lower retainer	: O.E.M.	: O.E.M.
exterior spring	: PAC-S90015	: PAC-S90015
interior spring	:	:

fitted load / length	: 27kg @ 38.8mm	: 27kg @ 38.8mm
max. load / lift	: 74kg @ 12.5mm	: 74kg @ 12.5mm

REMARKS :



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- # Cat Cams offers two versions for the intake camshaft:
1/ intake camshaft with for use with vanos system (like original intake): 22910xx
2/ intake camshaft with for use with fixed pulley (like original exhaust): 23010xx
--> The intake camshaft for use without vanos is slightly different from the exhaust camshaft. It is possible to use the original intake camshaft seal.
Please indicate the type of intake camshaft when ordering

- # In the factory valve setup, the valve clearance is set by cam followers of individual lengths.

Cat Cams offers two options to adjust the valve clearance:

- 1/ camshafts with factory cam base diameter of 38.2mm: use O.E.M. tappets with appropriate inner stud length to adjust the clearance. It may be required to replace the cam followers to obtain the correct valve clearance.
- 2/ camshafts with reduced cam base diameter to 35.0mm: use lash caps (dia. 6mm) with appropriate thickness to adjust the clearance
- -> Please indicate the cam base diameter when ordering.

- # FOR COMPETITION APPLICATIONS ONLY. Following details must be verified:
 - the camshafts must turn smooth in the cylinderhead, provide free travel by machining where needed
 - distance between valve seal and retainer at full lift must be 0.6mm at least
 - minimum valve spring travel of 1.0mm at full lift must be provided
 - distance between valve and piston 1.0mm (pref. 1.5mm). check 5-15° before TDC on exhaust, and after TDC on intake
- # ONLY for use in competition engines with independent engine management (throttle position sensor) or

carburetors

for TURBO conversion (atmospheric to turbo)