

# 1003778

tarmac rally - race

Audi AEB, AWT turbo engines

I-4cyl 1.8L 20v DOHC (DTH/DTH)



**intake**                      **exhaust**

**camshaft data:**

lash ramp	: 0.20mm	0.30mm
duration @ 0.1mm	: 283°	257°
duration @ 1.0mm	: 240°	221°
valve lift	: 10.25mm	10.50mm
cam lift	:	
lobe angle	: 110°	120°
timing @ 1.0mm	: 10° / 50°	51° / -10°
valve lift @ TDC	: 2.15mm	0.60mm

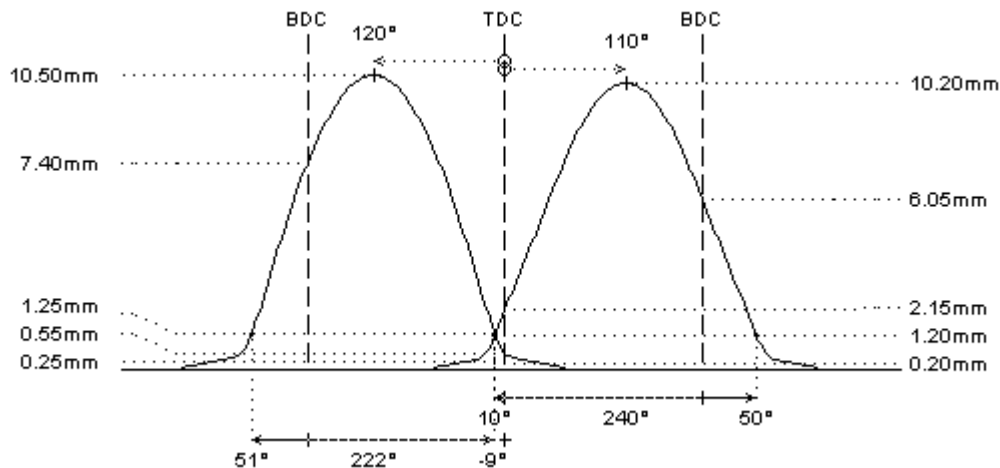
**parts setup:**

cam wheels :	:	:
follower	: <b>CC016</b>	: <b>CC019</b>
valve lash	: <b>TS101</b>	: <b>TS101</b>
valve	: O.E.M.	: O.E.M.
valve locks	: O.E.M.	: O.E.M.
upper retainer	: O.E.M.	: O.E.M.
lower retainer	: O.E.M.	: O.E.M.
exterior spring	: <b>PAC-S90013</b>	: <b>PAC-E92009</b>
interior spring	:	: <b>PAC-I99861</b>

fitted load / length	: 23kg @ 34.5mm	: 36kg @ 31.1mm
max. load / lift	: 69kg @ 12.0mm	: 98kg @ 12.0mm

**REMARKS :**

# check distance between valve seal and retainer to be at least 0.6mm at full lift



**REMARKS :**

- # - steel billet camshafts
- supplied with **adjustable chain sprockets** to optimize intake cam timing
  
- # valve clearance is to be adjusted using mechanical lash caps. these can have different shapes according the application:
  - plates available in different diameters and thickness
  - cups for different valve stem diameters. these center on either tappet or valve stem
  - other specific shapes available on request
  
- # 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